PROXY STATEMENT/PROSPECTUS

A REORGANIZATION IS PROPOSED—YOUR VOTE IS VERY IMPORTANT

Dear Fellow Shareholder:

On behalf of the board of directors, we are pleased to invite you to the 2013 Annual Meeting of Shareholders of ADA-ES, Inc. (the "Annual Meeting"). The Annual Meeting will be held at 9:00 a.m. (local time) on June 13, 2013 at the Company's offices located at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129.

At the Annual Meeting, in addition to electing nine directors, you will be asked to consider and vote on a proposal to reorganize our Company into a holding company pursuant to which our present Company will become a subsidiary of a Delaware corporation named Advanced Emissions Solutions, Inc., which we refer to in this proxy statement/prospectus as "ADES" and you will become a stockholder of this Delaware holding company. We refer to this proposal in the proxy statement/prospectus as the "reorganization proposal." You will also be asked to vote on three additional proposals. The first is to ratify the Audit Committee's selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2013. The second is an advisory vote on the frequency upon which the Company will seek an advisory vote to approve the Company's compensation paid to named executive officers of ADA-ES. The third is an advisory vote to approve the Company's compensation paid to named executive officers of ADA-ES for the fiscal year ended December 31, 2012.

Upon completion of the reorganization, Advanced Emissions Solutions, Inc. will, in effect, replace our present Company as the publicly held corporation. Advanced Emissions Solutions, Inc. and its subsidiaries will conduct all of the operations we currently conduct. Implementing the holding company structure will provide us with strategic, operational and financing flexibility and incorporating the holding company in Delaware will allow us to take advantage of the flexibility, predictability and responsiveness that Delaware corporate law provides.

In the reorganization, your existing shares of ADA-ES common stock will be converted automatically into shares of ADES common stock. You will own the same number of shares of ADES common stock as you own of ADA-ES common stock at the time of conversion, and your shares will represent the same ownership percentage of ADES as you have of ADA-ES. In addition, the reorganization generally will be tax-free for ADA-ES shareholders. Your rights as a stockholder of ADES will be similar to your rights as a shareholder of ADA-ES, including rights as to voting and dividends, except as described herein.

We expect the shares of ADES common stock to trade under the ticker symbol "ADES" on the NASDAQ Capital Market, which is the same symbol that ADA-ES is currently traded under. On March 22, 2013, the last trading day before the announcement of the reorganization proposal, the closing price per ADA-ES share was $26.33. On April 24, 2013, the most recent trading day for which prices were available, the closing price per ADA-ES share was $26.09.

President's Letter and
Annual Report for the
Fiscal Year Ended December 31, 2012

ADA-ES: Advancing Cleaner Energy

April 25, 2013

Dear Fellow Shareholders:

Overview

2012 was a year of significant achievements in each of our businesses; along with unexpected delays in expanding our Refined Coal (RC) business. However, I am confident that ADA-ES, Inc. ("ADA" or "we") is very well positioned to capitalize on multiple opportunities, and that the prospects for the Company are stronger than at any time in our history.

In April 2012, the Mercury and Air Toxics Standard (MATS) took effect and our utility customers began their extended procurement processes to get orders placed for equipment to meet the rule by 2015. By year-end 2012, our Emission Control equipment backlog had grown to $25.3 million, up from $736,000 at year-end 2011, and included a fleet wide award for Activated Carbon Injection (ACI) systems from a major domestic utility and multiple awards for Dry Sorbent Injection (DSI) and ACI systems. Further wins have followed in early 2013. In Refined Coal, we began the full-time operation of six additional RC facilities, two of which use our M-45™ technology, and we achieved qualifying emissions for pulverized coal boilers with our new M-45-PC™ technology. Our RC facilities produced a total of 15.3 million tons of RC in 2012, up from 5.8 million tons in 2011. During 2012, we leased two RC facilities, one to an existing RC investor and another to a new RC investor. The other four operating RC facilities were retained and operated by Clean Coal Solutions, LLC ("CCS" or the "Clean Coal JV"), which generated $38.6 million in tax credits that can be used to offset future tax liabilities. Although we made progress in our RC business in 2012, closings of additional deals with power companies and investment partners for our RC facilities were delayed in the second half of the year for various reasons, including: permitting, regulatory approval, corporate financial restructuring of related third parties, change in plant ownership, changes in and retirements of personnel involved in the negotiations and uncertainties in the tax credit community. These issues are being resolved and we are encouraged by progress made in our RC business thus far in 2013, which we expect will accelerate into 2014 and beyond.

2012 Review

Refined Coal

Refined Coal segment revenues in 2012 were $194.9 million, consisting of $36.9 million in revenues from leasing four RC facilities and $157.9 million related to the sale of coal for the RC facilities operated by the Clean Coal JV. Gross profit for the segment was $15.7 million or 8% of total revenues compared to $20 million and 50% in 2011 reflecting the higher tonnage treated by RC facilities retained by the Clean Coal JV. The reduction in margin was not due to decreased profitability of the business but to the accounting treatment for certain transactions. When the Clean Coal JV operates an RC facility and retains the tax credits, it incurs the cost of raw coal purchases and operating expenses of the RC facility and records the sale of the coal to the utility. Excluding the costs of coal sales and raw coal purchases of $157.9 million and retained tonnage operating expense of $20.4 million, segment gross margin was $36.1 million, or 98% of adjusted Refined Coal segment revenues of $37 million. For financial reporting purposes we consolidate all of

the revenues and operating income recognized by the Clean Coal JV and then deduct the net portion attributable to our JV partners below the operating income line in our consolidated financial statements.

In February of 2013 we finalized a contract with a new RC investor for one of the RC facilities that was operated by the Clean Coal JV and we expect a sixth RC facility that CCS is operating to be leased to an existing RC investor in the near future. When an RC facility that is operated by CCS is sold or leased to an RC investor, it generates an upfront payment from the RC investor, provides ongoing lease/ownership payments, and immediately ends the operating expenses incurred by CCS while it operated the facilities on its own. We believe these transactions will improve our reported results in the second quarter and have a significant impact in the second half of 2013.

We have 20 additional RC facilities that have met the IRS “Placed in Service” definition and qualify for an escalating tax credit ($6.59 for 2013), but are not yet in full-time operation. Eight of these facilities are committed to sites and are in various stages of negotiations with RC investors and utilities—a complex set of transactions with multiple parties that can take six months or longer to complete. We expect the bulk of these facilities to be leased or sold to RC investors in the second half of 2013 with a closing for a few facilities delayed until 2014 due to financial restructuring of the power plants where the RC facilities are located.

The final 12 RC facilities are being marketed with our new M-45-PC™ technology, which allows the RC facilities to be used at power plants that use pulverized coal (PC). This technology, which was certified as eligible for the Section 45 tax credit in late 2012, greatly expands the addressable market for the remaining RC facilities to include many boilers that each burn more than five million tons of coal per year. Earlier this year we successfully completed full-scale testing at three power plants and believe that the first RC facilities using M-45-PC™ technology could be put into full-time operation later this year.

By the end of 2014, we expect to have all of our RC facilities leased or sold to RC investors, with the exception of those facilities that CCS will operate and retain the tax credits to offset any tax liabilities.

Emission Control

Emission Control (EC) revenues were $14.6M, up 47% from 2011, and our EC segment backlog at year-end 2012 stood at $25.3 million, up from $736,000 in 2011 as utilities accelerated their purchase of equipment to help them meet the MATS compliance deadline in 2015. We believe that the MATS and other emission control regulations could generate a total market in excess of $1 billion for ACI and DSI systems, and we are targeting to achieve a combined market share of about 35%, which is our historic market share for ACI systems.

We have taken a number of steps to prepare for this market, including the August 2012 acquisition of the assets of Bulk Conveyor Specialist, Inc., a leading provider of DSI systems. In addition, we have grown our engineering capabilities and have put in place arrangements with various suppliers and component manufactures to meet the growing market demand. Since 2011 we have won more than $60 million in DSI and ACI awards and are working on potential ACI and DSI projects with a combined value of over $180 million. We are confident that the preparations taken in 2012, along with the expected sizeable cash inflows from our Refined Coal segment, give us the capacity and flexibility to help our customers meet the MATS timelines.

In addition to the $1 billion market for ACI and DSI systems, we anticipate that a $1-$2 billion annual market will develop for the chemicals needed to capture mercury on a continuous basis. ADA will compete in this market with our pre-combustion additive technology including a product sometimes referred to as “Enhanced Coal.” We believe our technology provides a benefit to the customer of up to $4 per ton of coal burned when used on Western coals by eliminating or minimizing the amount of activated carbon (AC) needed to achieve compliance and reducing its negative impacts on fly ash sales. U.S. power plants consume up to 600 million tons of Western coal per year. One of the advantages of our technology is that it does not use bromine. The power industry is beginning to experience and report corrosion issues in their plants that they attribute to the addition of bromine used to enhance the capture of mercury. Thus, we have found the industry open to considering a new pre-combustion additive technology such as ours, which avoids what could be very expensive plant repairs associated with the use of competing products.

We provide pre-combustion additive technology through two channels. We have licensed the technology to Arch Coal, Inc. to apply to its Powder River Basin coals at the mines resulting in lower mercury emissions when that coal is burned. We will also be applying our technology at individual plants that source their coal from multiple providers. This year we are planning several demonstrations of the technology both at the mine and at specific power plants. As well, we were recently awarded the first of what we believe will be a family of patents designed to protect this technology both in the U.S. and abroad.

CO2 Capture

CO2 Capture revenues were $3 million in 2012 as the Company continues its work on Phase II of a Department of Energy (DOE) funded $20.5 million, 51 month project. We had DOE contracts, including anticipated industry cost share, in progress totaling approximately $12.7 million as of December 31, 2012. We expect to recognize approximately $9.7 million from these contracts in 2013 and the balance in 2014. We began construction of a pilot of our full-scale process design in mid-2012 with construction estimated to be completed in late 2013 and testing planned for 2014. We are considering different potential future commercial markets for carbon capture technology including producing CO_2 for use in enhanced oil recovery (EOR).

Financial Overview

Total revenues in 2012 rose 299% to $212.5 million from $53.3 million in 2011 with improving performance in all three of our business segments. Excluding coal purchases and sales of $157.9 million in 2012 and $20 million in 2011, revenues increased $21.3 million, or 64%, from 2011.

2012 consolidated gross margin was $20 million or 9% of revenues compared to $24.4 million or 46% of revenues in 2011. The 2012 gross margin, excluding coal sales and purchases of $157.9 million and operating costs for retained tons of $20.4 million, was 74% of revenues compared to a gross margin in 2011 of 80%, excluding coal sales and purchases of $20 million and operating costs for retained tons of $2.3 million.

Cash and cash equivalents were $9.7 million at year-end 2012, but did not include more than $20 million received from RC investors from sale and lease transactions in the first quarter of 2013.

Conclusion and 2013 Outlook

So in conclusion, we are beginning to see very good progress in our two major business segments, Refined Coal and Emissions Control, as we focus on executing on opportunities that we expect will create significant revenue growth and cash flows for ADA over the next three years. We are also positioning ourselves for continued long-term success and are developing technologies for future markets.

We have a solid financial platform upon which to expand our operations and a dedicated group of stakeholders who remain committed to our cause.

On behalf of the Board of Directors, management and employees, I thank you for your continuing support and look forward to reporting on our progress.

Sincerely,

Michael D. Durham, Ph.D., MBA
President & CEO

EXECUTIVE OFFICERS

Michael D. Durham
President and Chief Executive Officer

C. Jean Bustard
Chief Operating Officer

Jonathan Lagarenne
Executive Vice President

Graham O. Mattison
Vice President of Investor Relations

Richard L. Miller
Vice President Business Development

Mark H. McKinnies
Senior Vice President, Chief Financial Officer and Secretary

Sharon M. Sjostrom
Chief Technology Officer

Christine B. Amrhein
Vice President and General Counsel

Cameron E. Martin
Vice President Emission Control Systems

Richard J. Schlager
Vice President of Administration

BOARD OF DIRECTORS

Robert N. Caruso (3,7)
Managing Partner
B/3 Management Resources, LLC
President
Design Net Engineering, LLC
Vice President
IngeniumCare, LLC

Kim B. Clarke (6,7)
Senior Vice President and Chief Administrative Officer
Key Energy Services, Inc.

Michael D. Durham
President and Chief Executive Officer
ADA-ES, Inc.

Alan Bradley Gabbard (5,6)
Director, President and Chief Financial Officer
Recovery Energy, Inc.

Derek C. Johnson (5,7)
President
Visual Merchandising, Inc.
Director
Qualmark Corporation, Inc.

Ronald B. Johnson (5,6)
President and owner
Twin-Kem International, Inc.
President
ExecuVest, Inc.

W. Phillip Marcum (1,6,7)
Principal
MG Advisors, LLC
Chairman of the Board
Applied Natural Gas Fuels, Inc.
Director
Key Energy Services, Inc.
Recovery Energy, Inc.

Mark H. McKinnies
Senior Vice President, Chief Financial Officer and Secretary
ADA-ES, Inc.

Robert E. Shanklin (7)
Vice President of Coal Technology
Arch Coal, Inc.

Jeffrey C. Smith (4,6)
Retired
Law Office of Jeffrey C. Smith

Richard J. Swanson (2,6)
Advisor and performance coach

1 - Chairman of the Board of Directors
2 - Chairman of the Audit Committee
3 - Chairman of the Compensation Committee
4 - Chairman of the Nominating and Governance Committee
5 - Member of the Audit Committee
6 - Member of the Compensation Committee
7 - Member of the Nominating and Governance Committee

SHAREHOLDER INFORMATION

Shareholder Correspondence:
ADA-ES, Inc.
Attention: Corporate Secretary
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, CO 80129

Transfer Agent:

Computershare
350 Indiana St, Suite 750
Golden, CO 80401

INVESTOR RELATIONS

Security analysts, investment professionals and shareholders can find investor relations information on the Internet at **www.adaes.com**.

Written inquiries should be directed to:
ADA-ES, Inc.
Attention: Vice President of Investor Relations
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, CO 80129

Telephone: (303) 734-1727

MARKET INFORMATION FOR COMMON STOCK

ADA-ES, Inc. common stock is listed on the Nasdaq Capital Market under the symbol "ADES."

ANNUAL MEETING OF SHAREHOLDERS

The annual meeting will be held at 9:00 a.m. (local time) on June 13, 2013 at the Company's offices, located at 9135 South Ridgeline Boulevard, Suite 200 in Highlands Ranch, Colorado. A notice of the meeting, together with a form of Proxy, a Proxy Statement, and the Annual Report will be mailed or will otherwise be available to shareholders on or about April 29, 2013, at which time proxies will be solicited by the Board of Directors.

Availability of Proxy Statement and Form 10-K:

The Proxy Statement and the Form 10-K are available on the Internet at www.adaes.com. Additional copies of the Proxy Statement or the Annual Report may be obtained without charge by written request to the Investor Relations Department as listed above.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

For the Fiscal Year ended December 31, 2012:
EKS&H LLLP
7979 E. Tufts Ave, Suite 400
Denver, CO 80237-2843

For the Fiscal Year ending December 31, 2013:
KPMG LLP
1225 17th Street, Suite 800
Denver, CO 80202-3499

NON-INCORPORATION OF FORM 10-K "WRAP"

ADA-ES, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2012, as filed with the SEC, is included within this Annual Report. Other than the Form 10-K, all other portions of this Annual Report are not "filed" with the SEC and should not be deemed so.

CERTIFICATIONS

The most recent certifications by our Chief Executive Officer and Chief Financial Officer pursuant to sections 302 and 906 of the Sarbanes-Oxley Act of 2002 are filed as exhibits to our Form 10-K.

United States
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2012

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number: 000-50216

ADA-ES, Inc.
(Name of registrant as specified in its charter)

Colorado	**84-1457385**
(State of incorporation)	**(IRS Employer Identification No.)**

9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129
(Address of principal executive offices) (Zip Code)

(Registrant's telephone number, including area code): (303) 734-1727

Securities registered under Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, no par value	NASDAQ Capital Market

Securities registered under Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐	Smaller Reporting Company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act.) ☐ Yes ☒ No

The aggregate market value of the voting common stock held by non-affiliates as of June 30, 2012 was $229,487,000.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class	Outstanding at March 8, 2013
Common Stock, no par value	10,059,145

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Definitive Proxy Statement to be filed pursuant to Regulation 14A for ADA-ES, Inc.'s annual shareholder meeting for 2013 are incorporated by reference into Part III of this Form 10-K.

PART I

Item 1. Business

Abbreviations We Use in this Report

"The Company," "we," "us," or "our" refer to ADA-ES, Inc. ("ADA"), a Colorado corporation, and its consolidated subsidiaries.

Business Purpose and Strategy

Incorporated in Colorado in 1997, ADA is a leader in clean coal technologies and associated specialty chemicals, primarily serving the coal-fueled power plant industry. Our proprietary environmental technologies and specialty chemicals enable power and coal-fired plants to enhance existing air pollution control equipment, minimize mercury, CO_2 and other emissions, maximize capacity and improve operating efficiencies, to meet the challenges of existing and pending emission control regulations. ADA became a "stand-alone" public company through a "spin-off" from its parent company, Earth Sciences, Inc. in September 2003. We have four wholly-owned subsidiaries, which include Advanced Emissions Solutions, Inc., a Delaware corporation ("ADES"), and ADA Intellectual Property, LLC, a Colorado limited liability company ("ADA IP"), both of which had no operations during the year, BCSI, LLC, a Delaware limited liability company ("BCSI") and ADA Environmental Solutions, LLC, a Colorado limited liability company ("ADA-ES"). ADA holds a 42.5% controlling interest in Clean Coal Solutions, LLC, a Colorado limited liability company ("Clean Coal").

Our approach to technology development, implementation and commercialization involves taking technology to full-scale as quickly as we can, and testing and improving the technology under actual power plant operating conditions. The most significant benefit of this method is that we begin working early and closely with power companies to optimize the technology to meet their specific needs. For example, while some other companies develop mercury control in the isolation of a laboratory without feedback from users, we work on slip stream and full scale systems that are installed on plants, including several operated by the largest power companies in the United States and Canada. We assist electric power generating and other companies to remain competitive while meeting environmental regulations. Additionally, many of our proprietary patented technologies and services are intended and expected to provide a continual revenue stream for the Company.

Our major activities include:

- Development and marketing of our refined coal ("RC") technologies, including the lease or sale of RC facilities for control of nitrous oxides ("NOx") and mercury, which also qualifies for certain tax credits, through our Clean Coal joint venture with NexGen Refined Coal, LLC, an affiliate of NexGen Resources Corporation ("NexGen"), and with GSFS Investments I Corp. ("GSFS"), an affiliate of The Goldman Sachs Group, Inc. ("GS"),
- Development and sale of systems, field testing, chemicals and services primarily related to control of emissions of mercury, acid gases, sulfur dioxide ("SO_2") and particulate matter for coal and solid fuel fired boilers primarily used in electric generation,
- Research and development of carbon dioxide ("CO_2") capture technology through contracts supported by the Department of Energy ("DOE") and industry participants, and
- Development of a technology that allows coal to be burned with lower mercury emissions. This technology has been licensed to Arch Coal, Inc. ("Arch Coal") to enhance coal ("Enhanced Coal") mined by Arch Coal at mines and sites located in the Powder River Basin ("PRB").

Financial Information for Industry Segments

We have three reportable segments:

- Refined coal or "RC,"
- Emission control, or "EC," and
- CO_2 capture or "CC."

Financial information concerning these reportable segments can be found in the Financial Statements filed as a part of this Report, in Footnotes 1 "Summary of Nature of Operations and Significant Accounting Policies" and 16 "Business Segment Information" and that information is incorporated by reference here.

Our Business in Detail

Markets for Our Products and Services

The primary drivers for many of our EC products and services are environmental laws and regulations primarily impacting the electric power generation industry and other coal users. Environmental regulations, such as the 1990 Clean Air Act Amendments, the Mercury and Air Toxics Standards ("MATS") regulations, various Maximum-Achievable Control Technology ("MACT") standards including the Industrial Boiler MACT ("IBMACT") regulations, Cement MACT (as defined below) regulations, various state regulations and permitting requirements for coal-fired power plants are requiring electric power generators and others to reduce emissions of pollutants, such as particulate matter, SO_2, NO_x, mercury, and acid gases. We are a key supplier of mercury control equipment and services, which include activated carbon injection ("ACI") systems, to the EC market whose commercial equipment component first began in 2005 when several individual states began to require limits on mercury emissions. We also offer dry sorbent injection ("DSI") systems to control SO_2 and acid gases such as hydrogen chloride ("HCl") and sulfur trioxide ("SO_3").

We conduct research and development efforts in CO_2 capture and control from coal-fired boilers. In September 2010, we signed our second significant contract related to CO_2 capture with the DOE for a project that is expected to continue through the end of 2014.

Our RC segment generates revenues through the lease or sale of RC facilities that produce RC intended to qualify for production tax credits under Section 45 of the Internal Revenue Code ("Section 45 tax credits"), to third party investors, as well as operating RC facilities and keeping the tax credits for our own and our partners' accounts. To date, 28 RC facilities have been "placed-in-service" through Clean Coal, our RC joint venture. Unless Congress again extends the placed-in-service deadline for such facilities, which has expired, we do not expect to place any more RC facilities into service.

Our business is based upon providing technology for the approximately 1,200 coal-burning plants that currently produce roughly 40% of electricity in the U.S. in addition to steam for industrial processes and heating. A 2007 National Coal Council report estimated that United States coal reserves will be capable of serving demand for the next 250 years. Currently, the nation's existing coal-fired power plants emit approximately 48 tons of mercury per year, or approximately 50% of all human-caused mercury emissions in the U.S. Mercury, which is one of the most toxic substances known to humans, eventually finds its way into the water supply and into fish and, when ingested by humans, can cause severe neurological damage and even death, particularly in young children and developing fetuses. With enactment of the MATS rule, described in more detail below, regulations now exist that will require all of the existing fleet and all new coal-fired plants to control mercury emissions.

Whether operating in a regulated or unregulated environment, power generating companies face competitive challenges requiring constant control of capital spending and operating costs. These cost control drivers increase the need for cost-effective retrofit technologies that can be used to enhance existing plant equipment to meet the more stringent emission limits while burning less expensive coals.

We participate in the emissions control market for coal-fired boilers with:

- Low capital expenditure (“CAPEX”) mercury control technologies and systems, such as ACI systems, that effectively reduce mercury emissions over a broad range of plant configurations and coal types,
- Dry sorbent injection systems to reduce emissions of SO_2 and acid gases such as SO_3 and HCl,
- A proprietary flue gas chemical conditioner that improves the capture of particulate matter emissions by new or existing electrostatic precipitators (“ESPs”) and offers both technical and economic advantages over the hazardous chemicals that have been and continue to be in use,
- Through Clean Coal products, such as our CyClean™ , M-45™ and M-45-PC ™ technologies, our proprietary pre-combustion coal treatment processes that provide electric power generators control of NO_X and mercury emission control,
- Licenses of our proprietary technology, such as with Arch Coal, that allow Arch Coal to enhance certain of their coals resulting in reduced mercury emissions when the coal is burned, and
- Research and development of technologies such as those aimed at the capture of CO_2 emissions.

We have established ourselves as a leader in the mercury control market for electric power generators. Our systems and technologies have been demonstrated to be effective in mercury emissions control, even in difficult applications, and have also been shown to be cost effective and in many cases, actually reduce the costs associated with such control. The coal-fired power industry has been under increased scrutiny over environmental issues during the last several years, especially related to NO_X, SO_X, particulate matter, and mercury emissions, as well as the impact of CO_2 emissions on climate change. In response to concerns expressed by environmental groups and others, various state officials rejected or delayed a number of permits for new coal-fired plants in the past few years. These actions slowed the progress of new coal-fired plants. With new portfolio standards for increased use of renewable energy sources and potential requirements for reduction of greenhouse gases limiting the permitting of new coal-based plants, we believe the dependence on the existing fleet for base load power increases. To continue operating as environmental regulations become more stringent, these older plants will likely require the use of retrofit technologies to address conventional pollutants (such as SO_2, NO_X, and particulate matter) and now for pollutants such as mercury, acid gases, and emissions such as CO_2 or face closure. Therefore, the current trend toward cleaner energy has created growing markets for ADA’s existing and developing innovative technologies.

History of Relevant Environmental Legislation and Regulations

Mercury has been identified as a toxic substance and, pursuant to a court order, the U.S. Environmental Protection Agency (“EPA”) issued regulations for its control from power plants in March 2005, which was known as the “Clean Air Mercury Rule” or “CAMR.” CAMR was subject to significant challenges and was ultimately declared invalid. In April 2010, the U.S. District Court of Appeals of the District of Columbia approved the consent agreement reached between the EPA and a coalition of public health and environmental groups that sued in 2008 to force the agency to set tighter emission limits. That settlement required the EPA to issue a draft rule in March 2011 and a final rule requiring strict plant-specific controls for power plants’ toxic air pollutants no later than November 16, 2011. On March 16, 2011, the EPA issued the draft of the proposed MATS rule, a MACT-based hazardous pollutant regulation applicable to coal and oil fired electric utility steam generating units, which provides for among other provisions, control of mercury and volatile metals such as arsenic, selenium and control of acid gases such as HCl and other Hazardous Air Pollutants (“HAPs”). On October 28, 2011, the EPA, with approval of the environmental groups who were parties to the Court of Appeals consent, extended the deadline and the final rule was issued on December 16, 2011, and took effect on April 16, 2012. The EPA is reconsidering certain aspects of the MATS relating to new source standards due to various lawsuits. We believe these lawsuits and the EPA’s rulemaking will not impact our ongoing business, which is focused on existing sources of HAPs.

The MATS for existing HAP sources establishes standards for all HAPs emitted by coal and oil fired electric utility steam generating units ("EGU") with a capacity of 25 megawatts or greater. Units with lower generating capacities will instead fall under the IBMACT rule once it goes into effect in 2014. The standards are based upon the average of the best performing 12% of existing applicable power plants. The MATS provides the option to use facility-wide averaging of 90 days to meet the limit for mercury emissions, which is 1.2 pounds per trillion BTU (1.0 pound per trillion BTU if 90 day averaging is used). This emission limit corresponds to the capture of up to 80-90% of the mercury in the coal burned in electric power generation boilers as measured at the exhaust stack outlet for most coals having a greater than 8,500 BTU per pound heat rate. For plants burning lower rank coals such as lignite, the emission limit is 4.0 pounds per trillion BTU. The EPA estimates that there are approximately 1,200 coal-fired units and 300 oil-fired units affected by the MATS. Existing sources must comply with the MATS standards by April 16, 2015. An authorized State permitting authority has the ability to grant sources up to a one year extension, on a case by case basis, if such additional time is necessary for the installation of controls.

In addition to issuing standards covering electric power generators, the EPA has developed a MACT-based mercury emissions regulation for the Portland Cement Industry through amendments to the National Emission Standards for HAPs (the "Cement MACT"). The Cement MACT regulation was initially finalized on August 6, 2010. On May 11, 2011, the EPA denied requests to issue an administrative stay on the Cement MACT and denied in part and granted in part various petitions to reconsider the final revised Cement MACT. The EPA issued the final Cement MACT regulation on February 12, 2013. The standards for new kilns apply to facilities where construction, modification, or reconstruction commenced after May 6, 2009.

The Cement MACT requires cement plants to reduce HAPs by August 6, 2013 including 92% of mercury emissions and 83% of hydrocarbons emissions. This regulation could require ACI systems on up to 90 cement kilns in the U.S., which are owned by approximately 15 companies. We have been engaged in several testing programs for cement companies to define their emissions and evaluate how ACI equipment and sorbents will work in that industry. The tests were designed to evaluate the effectiveness of collecting mercury and organics from cement kiln exhaust gas streams. The EPA also issued a new IBMACT regulation for coal-fired boilers that provide mostly steam and/or electricity for small industrial and institutional power needs with no more than 25 megawatts of electricity sold to the grid per year. The final regulation was released on February 23, 2011 and issued on March 21, 2011, with compliance deadlines originally scheduled for early 2014. On December 23, 2011, the EPA issued proposed reconsiderations of certain aspects of the IBMACT, including clarification of applicability and implementation issues. The EPA finalized the rule on February 1, 2013.

The IBMACT rule could impact over 600 existing coal-fired industrial boilers, which have until 2014 to comply. The final emission limit of 5.7 pounds of mercury per trillion BTU for existing and 80 pounds per trillion BTU for new coal-fired industrial boilers on average requires no less than 50% capture of mercury from coal-fired boilers burning various coals. However, we believe the final IBMACT could significantly increase the market for DSI systems when considering the requirements to limit HCl emissions to levels of 0.022 pounds per million BTU.

The Clean Air Act requires that all emission control-related regulations be met within three years from the final date the new rule is posted in the Federal Register, with the potential extension of one year granted by individual states on a case by case basis. We believe that substantial long-term growth of the EC market for the electric power generation industry will most likely depend on how industry chooses to respond to the pending and new federal regulations. In general, all three of these regulations are less stringent than originally expected, meaning more flexibility for operators subject to the rules in choosing low CAPEX emissions control technologies and likely fewer forced plant retirements from having to install large CAPEX emission control equipment such as scrubbers and baghouses. We believe the MATS will create a large market for our emission control and RC products.

The Cross State Air Pollution Rule (the "CSAPR"), formerly known as the "Transport Rule", was finalized by the EPA on July 6, 2011. CSAPR was intended to replace the EPA's 2005 Clean Air Interstate Rule ("CAIR") and would have required 27 states in the Midwest and eastern half of the United States and the District of Columbia to significantly improve air quality by reducing power plant SO_2 and NOx emissions that contribute to ozone and fine particle pollution in other states. On December 30, 2011, the D.C. Circuit Court of Appeals issued a stay against implementation of the CSAPR in one of more than three dozen lawsuits challenging the CSAPR in order to hold a hearing on the issue of the potential for irreparable harm caused by the rule.

On August 21, 2012, in a 2-1 decision, the U.S. Court of Appeals for the D.C. Circuit issued a decision vacating the CSAPR, ruling that the EPA exceeded its statutory authority in promulgating the rule. The court said the Clean Air Act gives the EPA the authority to require upwind states to reduce "only their own significant contributions to a downwind state's nonattainment. Yet under CSAPR, upwind states may be required to reduce emissions by more than their own significant contributions to a downwind state's nonattainment." Furthermore, the court found that the Clean Air Act presents the states an initial opportunity to implement the required reductions, but under CSAPR, the EPA issued federal implementation plans ("FIPs") without first providing states with the opportunity to put together their own implementation plans. The court thus vacated CSAPR and the CSAPR FIPs and remanded the case to the EPA for action consistent with the decision. The court directed the EPA to continue administering the CAIR pending the promulgation of a valid replacement. On January 24, 2013, the court denied the EPA's petition for rehearing of the court's decision vacating the CSAPR.

ADA's total potential market may increase as a result of this ruling because CSAPR was driving many announced plant retirements. With CSAPR's proposed requirement to reduce SO_2 emissions delayed for several years, certain plants that would have been retired had the rule remained in effect could instead have extended lives and will need to control acid gas and mercury emissions by 2015 in order to comply with the MATS.

On December 15, 2009, the EPA issued an endangerment finding that triggered a Clean Air Act requirement that the agency regulate CO_2 emissions from stationary sources such as power plants. Industry and states have filed an extensive consolidated litigation before the U.S. Court of Appeals for the District of Columbia Circuit challenging numerous aspects of EPA's Greenhouse Gas ("GHG") rules. The court is considering arguments regarding the EPA's guidance memo on the timing of GHG regulations, such as when GHGs become a "regulated pollutant" under the Clean Air Act and thus if and when New Source Review and Prevention of Significant Deterioration regulations apply. On March 27, 2012, the EPA proposed its first new source performance standards for CO_2 emissions from new power plants as a result of a separate settlement with states and environmental groups in 2010.

Several power companies recognize the urgency of these issued and pending regulations, and as a result are contracting with us to evaluate mercury and acid gas emission control options at a number of their plants. Utilities need to know as soon as possible whether their existing EC components are sufficient to meet the new emissions standards when combined with the installation of low CAPEX systems such as ACI and DSI systems. If utilities need to upgrade their equipment with new large CAPEX equipment such as fabric filters or SO_2 scrubbers, they will need to quickly begin procurement of these systems due to long required lead times in their implementation. As a result we expect additional near-term ACI and DSI demonstration revenue and bidding on related ACI and DSI equipment as discussed below.

Refined Coal

In 2006, ADA established Clean Coal with an affiliate of NexGen to commercialize our patented RC technologies that reduce emissions of NO_X and mercury from certain coals in cyclone boilers. ADA licensed its CyClean technology, including the claims contained in certain patents, to Clean Coal upon formation of this joint venture. In July 2012, ADA licensed its M-45 technology (the "M-45 License") to Clean Coal in order to leverage Clean Coal's operating expertise and take advantage of the other synergies that can be obtained by Clean Coal having the ability to provide and use either the CyClean or M-45 technology. Clean Coal supplies

chemicals, additives, equipment and technical services to boiler users, but its primary purpose is to qualify RC for the Section 45 tax credits which amounted to $6.47 per ton of RC in 2012 and is expected to escalate annually through 2021.

Clean Coal placed two RC facilities in service prior to the initial placed-in-service deadline of January 1, 2010 and demonstrated the required emission reductions for its RC product to qualify for the Section 45 tax credits. In December 2010, the Tax Relief and Job Creation Act of 2010 extended the placed-in-service deadline for the Section 45 tax credits to January 1, 2012. In consideration of the extension, Clean Coal built and qualified an additional 26 RC facilities using a combination of the CyClean and M-45 technologies, which met the extended placed-in-service date.

Clean Coal generates revenues from leasing or selling RC facilities to third party investors and by generating tax credits by retaining and operating certain of the 28 RC facilities through their respective 10 year terms. Upon the expiration of the tax credits on December 31, 2021, we expect the leases of RC facilities to third party investors will terminate and Clean Coal will have the option to repurchase RC facilities previously sold to third party investors. Clean Coal may then lease or sell the RC facilities directly to the utilities that own and operate the power plants at which the RC facilities are located or operate the facilities on behalf of utility customers given the significant benefit of the mercury reductions such facilities provide. After December 31, 2021, Section 45 tax credits would no longer be available absent further extension by Congress.

We are in the process of increasing the number of potential third party investors that we are negotiating with to invest in RC facilities. As more of the RC facilities become operational and operate for longer periods, we believe the technical and tax credit-related risks will be reduced.

Our RC business opportunities do not depend upon any new environmental or tax regulations. The current ten year term of the tax credits does not require any additional approval by Congress to stay in place, which provides us with a high degree of confidence that the CyClean and M-45 technologies will generate long-term cash flows.

Emission Control

Activated Carbon Injection and Dry Sorbent Injection Systems

ACI systems are currently the most established and accepted technology to specifically control mercury emissions and have been widely deployed to meet the existing state and new plant regulations. Based on procurement activity in the second half of 2012 and 2013 to date demand for ACI systems has significantly increased as a result of the recently finalized MATS rule.

In addition to ACI systems for mercury control, we have developed and are providing commercial DSI systems that inject dry alkaline sorbents to control acid gases such as SO_3 and HCl. Our DSI technology is also used to control SO_2, one of six criteria air pollutants. The use of DSI for SO_3 reduction has also been shown to enhance the capture of mercury from bituminous coal-fired boilers. We conducted several full-scale tests of our DSI equipment over the past three years for the control of HCl, SO_2 and SO_3 on plants burning bituminous, PRB, and lignite coals.

In order to meet the expected demand in the ACI and DSI markets, on August 31, 2012, our newly formed, wholly owned subsidiary BCSI, LLC, acquired the assets of Bulk Conveyor Specialist Inc., a leading privately held fabricator and supplier of DSI systems and other material handling equipment, and Bulk Conveyor Services, Inc. (together, "Bulk Conveyor"). In order to integrate the acquisition, Aaron Prince, who previously served as Refined Coal Development Director for Clean Coal, became the General Manager of the new subsidiary. In addition, the former owner of Bulk Conveyor entered into an exclusive consulting agreement with BCSI. This acquisition provided us with the capacity, experience and resources to provide customers with additional solutions for emissions compliance and the addition of Bulk Conveyor's manufacturing facility also allowed us to expand our capacity for supplying ACI systems. Currently BCSI is executing a large fleet utility contract for several DSI systems for SO_3 control and has several outstanding proposals for additional systems.

Enhanced Coal and License to Arch Coal

Another ADA mercury-only coal treatment technology is in the initial stages of being marketed by the Company to meet mercury requirements currently existing in 19 states and the MATS requirements set to go into effect in 2015. Since 2004, we have been working with Arch Coal to explore certain unique characteristics of some types of coals mined by Arch Coal that allow the coal to be burned with lower mercury emissions. We believe that a technical breakthrough that involves the application of proprietary chemicals to Western coals such as PRB reduces emissions of mercury when this Enhanced Coal is burned at power plants. We believe our Enhanced Coal technology may provide a benefit to the customer of up to $4 per ton of coal burned when used on Western coals, of which U.S. power plants burn up to 600 million tons per year.

We provide Enhanced Coal through two channels – (1) through Arch Coal for use on PRB coal at the mine and (2) through direct coal treatment applied on-site at power plants. In June 2010, we entered into a Development and License Agreement (the "License Agreement") with Arch Coal giving them an exclusive, non-transferable license to use certain technology to produce Enhanced Coal by the application of ADA's proprietary coal treatment technology to Arch Coal's PRB mined coal. We expect that use of this Enhanced Coal will help utilities meet the mercury emissions requirements in the MATS. Pursuant to the License Agreement, we are providing development services to Arch Coal aimed at applying the technology to the PRB coal. In addition, if we develop improvements to the technology that are related to the reduction of certain emissions from the burning of PRB coal, that technology will either be included in the license at no additional cost, or, under certain circumstances, we will negotiate with Arch Coal to determine if Arch Coal wants to use the additional improvements. We retain all right, title and interest, including all intellectual property rights, in and to any technology we license to Arch Coal. The initial demonstration of coal treated at the mine and shipped by rail to a power plant produced promising results, and we have completed several additional demonstrations of the technology at specific power plants.

The MATS will likely create a market for chemicals to be used for the reduction in mercury emissions for much of the 600 million tons of western coals burned annually. One of the advantages of the chemical used in our Enhanced Coal technology is that it does not use bromine. The power industry is beginning to experience corrosion issues in their plants that they attribute to bromine that was used to enhance the capture of mercury. Thus, we have found the industry open to considering a new technology such as Enhanced Coal which helps avoid what could be very expensive repairs on the plants. In October of 2012 we were awarded the first of what we believe will be a family of patents designed to protect our technology both in the U.S. and abroad.

Flue Gas Chemicals and Services

We have developed and deployed technologies for conditioning flue gas streams from coal-fired combustion sources that allow existing air pollution control devices to operate more efficiently. Through various suppliers and contractors, we manufacture engineered units for each individual application. The units mix, pump and monitor the feed of proprietary chemical blends. The chemical blends are applied to the flue gas streams by a pressurized system of specially designed lances and nozzles. Such treatment of the flue gas stream allows for more effective collection of fly ash particles that would otherwise escape into the atmosphere and may aid in the control of mercury emissions using ACI equipment.

Other Consulting Services

We also offer consulting services to assist electric power generators and others in planning and implementing strategies to meet the new and increasing government emission standards requiring reductions in SO_2, NO_x, particulates, acid gases and mercury. This includes demonstrations of our commercial products. We often receive funding for consulting and a portion of our development and testing activities from industry partners that have a strategic interest in the technology.

CO_2 Capture

Government and Industry-Supported Contracts

The DOE issues solicitations periodically for various research, development and demonstration (“R&D”) projects. DOE solicitations range in subject matter, and we submit proposals for those solicitations that fit our mission, strategic plan and capabilities. The bids include a proposed statement of work and cost estimates, and the DOE then negotiates a final contract with the successful bidder to perform the specified work. The contracts with the DOE can be Grants or Cooperative Agreements and are considered financial assistance awards. Generally, the agreements cover the development and/or demonstration of air pollution control technologies for coal-fired power generating plants. The work may involve designing and fabricating equipment, installing the equipment at power plants, some or all of which we may contract to others, testing the equipment, preparing economic studies, and preparing various reports. The deliverables required by the agreements include various technical and financial reports that we submit on a prescribed schedule. The agreements require us to perform the negotiated scope of work in agreed phases, which includes testing/demonstrating various air pollution control technologies.

The DOE is providing partial funding for CO_2 control projects and in September 2010 we signed a contract with the DOE to continue development of clean coal technology to capture CO_2 from coal-fired power plants and other industrial sources of CO_2 emissions. The agreements with the DOE provide that any inventions we create as a result of the work become our property and we retain the rights to commercialize any products we develop under the contracts. We participated in two such agreements in 2012 pursuant to which we are researching and developing a novel process to capture CO_2 from coal-fired power plants. In June 2012, we initiated the fabrication and construction phase for a pilot plant to treat a slipstream of flue gas equivalent to that generated from producing one-megawatt of electricity. The pilot plant, which is scheduled to commence operations in October 2013, will be installed at Southern Company subsidiary Alabama Power’s Miller Electric Generating Plant outside of Birmingham, Alabama.

Agreements with the DOE generally require industry cost share, which may take the form of cash contributions and/or in-kind contributions of material and services. The industry cost share percentages on the mercury control projects in which we have participated in the past have ranged from 25% to 50% of the total project costs. Typically, the electric power generator host site for the demonstration project provides a considerable amount of the cost share with other interested industry partners also providing funding, either individually or through the Electric Power Research Institute (“EPRI”). We expect that for 2013, contributions from the DOE, industry partners and EPRI will not fully cover the required project costs calculated at the DOE allowed overhead rates. As a result and to the extent that the required cost share is not provided by industry partners or EPRI, we would expect to provide the balance as a development investment by providing some cost sharing on our own in one form or another, which could negatively impact our margins on these projects.

Competition

ACI systems are the most established mercury specific control technology with over 150 commercial installations to date. We have the largest share of the market, with systems on 69 boilers to date, generally yielding up to 90% mercury control on many applications. This approach to mercury control is cost effective compared to other available technologies that require capital intensive equipment such as wet scrubbers, generally installed for other pollutants, but control mercury emissions as well. We add significant value to our base offerings by having complementary products and services. Our expertise and experience in conducting full-scale emissions control demonstrations reflects our understanding of the application of the control technologies that customers find invaluable. Our ability to provide users with performance guaranties on our equipment along with comprehensive testing services and overall compliance strategies enhances our competitive position in this market. The ACI and DSI capital equipment we provide for the larger utility coal-boilers generally ranges from approximately $600,000 to $2 million per coal-fired boiler unit. We believe companies such as Norit Americas, Inc. (“Norit”), a division of Cabot Corporation, Alstom Power, The Babcock & Wilcox Company and Clyde

Bergemann, Inc. have responded to requests for commercial bids for ACI systems, and are some of our principal competitors in the ACI market. Competition for ACI systems is based primarily on price, quality, performance, terms of performance guaranties and the ability to meet the requested schedule. In addition, certain of our competitors have the ability to offer their own activated carbon for use in their ACI systems, which may provide them with a competitive advantage. Based on the contracts we have been awarded since 2005, we believe that we are one of the market leaders, with approximately 35% of the existing ACI market. As the MATS driven EC market matures, we expect competition to continue to increase. In addition, we believe companies such as Nol-Tec Systems, Inc., UCC, Clyde Bergemann, Nalco and Babcock & Wilcox have responded to requests for commercial bids for DSI systems, and are some of our principal competitors in the emerging DSI market. Similar to ACI systems, competition for DSI systems is based primarily on price, quality, performance and the ability to meet the requested engineering, fabrication, delivery and installation schedule.

With respect to our RC technology, the window is closed for new entrants as no new RC facilities can be built without a future extension of the placed-in-service requirement by Congress. One other company that has a limited number of RC facilities for sale is ChemMod, a subsidiary of Arthur J. Gallagher. We compete for capital with others who either produce tax credits or are involved in tax-leveraged transactions. The list of those who provide such investment opportunities is wide and varied among industries.

Patents

We have received 17 United States patents and have an additional 17 United States and seven international patent applications pending or filed relating to different aspects of our technology. Our existing patents have terms of 17 years measured from the application date, the earliest of which was in 1998. Although important as protection for certain aspects of our continuing business, we do not consider any of our patents or pending patents to be critical to the ongoing conduct of our business, with the exception of the patents and intellectual property rights licensed to Clean Coal and Arch Coal, as noted above.

Supply of Chemicals for Our Customers

We typically negotiate blending contracts that include secrecy agreements with chemical suppliers located near major customers. These arrangements minimize transportation costs while assuring continuous supply of our proprietary chemical blends. We have operated under these arrangements since the spring of 1999. They are generally renewed on an annual basis.

Raw Materials and Working Capital Practices

We purchase equipment and steel from a variety of vendors for the engineered ACI systems, components and other equipment we manufacture or provide. Such equipment is available from numerous sources; however based on the system requested by the customer, we may determine that some sources are not suitable. We typically subcontract the major portion of the work associated with installation of such equipment from a variety of vendors, usually located near the work site. We purchase materials and components from a variety of vendors for the DSI systems fabricated at BCSI facilities. We typically fabricate our own DSI silos, manifolds, lances and control panels and integrate these components and auxiliary buildings at our shop. We purchase our proprietary chemicals through negotiated blending contracts with chemical suppliers generally located near each major customer. The chemicals used are readily available, and there are several chemical suppliers that can provide us with our requirements. We enhance coal through a propriety and patented process and components of the enhancement are readily available. We do not provide any extended payment terms to our customers. We typically provide equipment warranties and performance guaranties related to our EC systems. (See "Risk Factors" and Footnote 10, "Commitments and Contingencies" in the Consolidated Financial Statements filed as a part of this Report).

Seasonality of Activities

The sale of chemicals and RC facility operations depend on the operations of the electric power generators to which the applicable chemicals are provided or RC equipment is sited, respectively. These customers routinely schedule maintenance outages in the spring and/or fall depending upon the operation of the boilers. During the period in which an outage may occur, which may range from one week to over a month, no chemicals are used or RC produced and purchases from us and related revenues are correspondingly reduced. The other aspects of our business are not seasonal in any material way.

Dependence on Major Customers

In 2012, we performed work on ACI systems for 11 customers. In 2012, through Clean Coal, we recognized 16% of our total revenue from the lease of three of our RC facilities from two entities related to GS. Our own sales staff markets our technology through trade shows, mailings and direct contact with potential customers.

Backlog Orders

As of December 31, 2012, we had contracts in progress for work related to our EC segment totaling approximately $25.3 million which we expect to recognize in 2013 and 2014. Our current DOE and industry funded R&D contract in progress, assuming no changes in funding, are expected to result in future revenues of $12.7 million, of which we expect to recognize approximately $9.7 million in 2013.

Research and Development Activities

In 2012, we were involved in several consulting R&D contracts funded by DOE, industry groups and ourselves, directed toward the control of mercury emissions, DSI, RC activities, Enhanced Coal activities and CO_2 capture. We participate in cost share arrangements in a few of those contracts. Our direct cost share for R&D under DOE related contracts in 2012 was $253,000. We spent $311,000 and $418,000 on our own behalf on research and development activities related to further development of our technologies during 2012 and 2011, respectively, exclusive of CO_2 capture related efforts.

Employees

As of December 31, 2012, ADA employed 105 full-time and part-time personnel, including ten Company executives. 95 people are employed at our offices in Colorado, two are employed by us in Pennsylvania and one is employed by us in each of Maryland, Massachusetts, Alabama, Georgia, New Jersey, Texas, Utah and Illinois. BCSI, our wholly owned subsidiary located in Pennsylvania, employed an additional 55 full-time and part-time personnel and Clean Coal employed 6 full-time employees in Colorado, and 1 located in California.

Copies of Reports

Our periodic and current reports are filed with the SEC pursuant to section 13(a) of the Securities Exchange Act of 1934 and are available free of charge within 24 hours after they are filed with or furnished to the SEC at the Company's website at www.adaes.com.

Copies of Corporate Governance Documents

The following Company corporate governance documents are available free of charge at the Company's website at www.adaes.com and such information is available in print to any shareholder who requests it by contacting the Secretary of the Company at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129.

- Audit Committee Charter
- Compensation Committee Charter

- Nominating and Governance Committee Charter
- Code of Conduct

Forward-Looking Statements Found in this Report

This Annual Report contains forward-looking statements within the meaning of Sections 21E of the Securities Exchange Act of 1934 and 27A of the Securities Act of 1933 that involve risks and uncertainties. In particular such forward-looking statements are found in this Part I and under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operation." Words or phrases such as "anticipates," "believes," "hopes," "expects," "intends," "plans," the negative expressions of such words, or similar expressions are used in this Report to identify forward-looking statements, and such forward-looking statements include, but are not limited to, statements or expectations regarding:

(a) the scope and impact of mercury and other regulations or pollution control requirements, including the impact of the final Mercury and Air Toxics Standards ("MATS");

(b) expected growth in and potential size of our target markets;

(c) expected supply and demand for our products and services;

(d) the effectiveness of our technologies and the benefits they provide;

(e) expected timing of conducting additional demonstrations of our technology;

(f) the timing of awards of, and work under, our contracts and agreements and their value and their availability;

(g) expected production levels at our refined coal ("RC") facilities, when those RC facilities will be placed into permanent operation expected use of the tax credits under Section 45 of the Internal Revenue Code ("Section 45 tax credits") generated by the RC facilities and the expected future value of Section 45 tax credits;

(h) the status upon expiration of the Section 45 tax credit of RC facilities that we lease or sell;

(i) our ability to profitably sell, lease and/or recognize the tax benefits from operating additional RC facilities;

(j) timing and amounts of or changes in future revenues, funding for our business and projects, margins, expenses, earnings, tax rate, cash flow, working capital, liquidity and other financial and accounting measures;

(k) the materiality of any future adjustments to previously recorded revenue as a result of Department of Energy ("DOE") audits and the amount of contributions from the DOE and others towards project demonstrations;

(l) the ability of third parties to which we lease or sell RC facilities to obtain Private Letter Rulings ("PLRs") from the Internal Revenue Service ("IRS"); and

(m) whether any legal challenges or Environmental Protection Agency ("EPA") actions will have a material impact on the implementation of the MATS or other regulations.

Our expectations are based on certain assumptions, including without limitation, that:

(a) coal will continue to be a major source of fuel for electrical generation in the United States;

(b) we will continue as a key supplier of equipment and services to the coal-fired power generation industry as it seeks to implement reduction of mercury emissions;

(c) contracts we have with the DOE will continue to be funded at expected levels and we will be chosen to participate in additional contracts of a similar nature;

(d) current environmental laws and regulations requiring reduction of mercury from coal-fired boiler flue gases will not be materially weakened or repealed by courts or legislation in the future;

(e) we will be able to meet any performance guaranties we make and continue meet our other obligations under contracts;

(f) we will be able to obtain adequate capital and personnel resources to meet our operating needs and to fund anticipated growth and our indemnity obligations;

(g) we will be able to establish and retain key business relationships with other companies;

(h) orders we anticipate receiving will in fact be received;

(i) governmental audits of our costs incurred under DOE contracts will not result in material adjustments to amounts we have previously received under those contracts;

(j) we will be able to formulate new chemicals and blends, including those for Enhanced Coal, that will be useful to, and accepted by, the coal-fired boiler power generation business;

(k) we will be able effectively to compete against others;

(l) we will be able to meet any technical requirements of projects we undertake;

(m) Clean Coal will be able to sell or lease to the RC facilities to third party investors or use the Section 45 tax credits generated by their operation and;

(n) Parties to which we have leased or sold RC facilities and that have requested a PLR from the IRS will receive such PLRs.

The forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from the anticipated results we discuss in this Report. Although forward-looking statements provide additional information about us, investors should keep in mind that forward-looking statements are only predictions, at a point in time, and are inherently less reliable than historical information. We do not guarantee future results, levels of activity, performance or achievements and we do not assume responsibility for the accuracy and completeness of these statements. You are cautioned not to place undue reliance on the forward-looking statements made in this Annual Report on Form 10-K, and to consult any later filings we may make with the Securities and Exchange Commission for additional risks and uncertainties that may apply to our business and the ownership of our securities. The forward-looking statements contained in this Report are made and based on information as of the date of this Report. We assume no obligation to update any of these statements based on information after the date of this Report. In evaluating these statements, you should specifically consider the risks discussed in greater detail under the caption “Risk Factors” in Item 1A below. These risk factors may cause our actual results to differ materially from any forward-looking statement.

Item 1A. Risk Factors.

RISKS RELATING TO OUR BUSINESS

The following risks relate to our business as of the date of this Report. This list of risks is not intended to be exhaustive, but reflects what we believe are the material risks inherent in our business and the ownership of our securities as of the date of this Report. A statement to the effect that the happening of a specified event may have a negative impact on our business, results of operations, profitability, financial condition, or the like, is intended to reflect the fact that such an event would be likely to have a negative impact on your investment in the Company, but should not imply the likelihood of the occurrence of such specified event. The order in which the following risk factors are presented is not intended as an indication of the relative seriousness of any given risk.

DEMAND FOR OUR PRODUCTS AND SERVICES DEPENDS SIGNIFICANTLY ON ENVIRONMENTAL LAWS AND REGULATIONS; UNCERTAINTY AS TO THE FUTURE OF SUCH LAWS AND REGULATIONS, AS WELL AS CHANGES TO SUCH LAWS AND REGULATIONS, OR GRANTING OF EXTENSIONS OF COMPLIANCE DEADLINES HAS HAD AND WILL LIKELY CONTINUE TO HAVE A MATERIAL EFFECT ON OUR BUSINESS.

A significant market driver for our existing products and services, and those planned in the future, are present and expected environmental laws and regulations that limit mercury and other emissions from coal-fired power plants and other environmental laws. If such laws and regulations were rescinded or substantially changed to increase acceptable emission limits, our business would be adversely affected by declining demand for such products and services. For example:

- The invalidation of the Clean Air Mercury Rule in February 2008 resulted in a “wait and see” approach by our customers, which we saw in delays in orders and deliveries of previously placed orders, cancellations or delays in planned product demonstrations and decreased sales to coal-fired electric generating utilities. Such uncertainty also caused delays in purchasing decisions for EC equipment, especially for those utilities who were considering multi-pollution control solutions.
- The implementation of environmental regulations regarding certain pollution control and permitting requirements has been delayed from time to time due to various lawsuits. The uncertainty created by litigation and reconsiderations of rule-making by the EPA has negatively impacted our business, results of operations and financial condition and will likely continue to do so.
- To the extent federal, state and local legislation mandating that electric power generating companies serving a state or region purchase a minimum amount of power from renewable energy sources such as wind, hydroelectric, solar and geothermal, and such amount lessens demand for electricity from coal-fired plants, those mandates would likely reduce demand for our products and services.
- Enactment of laws or passage of regulations regarding emissions from the combustion of coal by the U.S. or some of its states or by other countries, or other actions to limit such emissions including public opposition to new coal power plants, has caused and could continue to cause electricity generators to transition from coal to other fuel and power sources, such as natural gas, wind, hydroelectric and solar. The potential financial impact on us of future laws or regulations or public pressure will depend upon the degree to which electricity generators diminish their reliance on coal as a fuel source. That, in turn, will depend on a number of factors, including the specific requirements imposed by any such laws or regulations, the periods over which those laws or regulations would be phased in, amount of public opposition and the state of commercial development and cost of related technologies and processes. In addition, Public Utility Commissions may not allow utilities to charge consumers for and pass on the cost of emission control technologies without federal or state mandate. In view of the significant uncertainty surrounding each of these factors, we cannot reasonably predict the impact that any such laws or regulations or public opposition may have on our results of operations, financial condition or cash flows.

THE ABILITY OF CLEAN COAL TO GENERATE REVENUES FROM THE SALE OR LEASE OF ADDITIONAL RC FACILITIES TO THIRD PARTY INVESTORS IS NOT ASSURED, AND THE INABILITY TO SELL, LEASE OR OPERATE RC FACILITIES TO GENERATE SECTION 45 TAX CREDITS COULD ADVERSELY AFFECT OUR FUTURE GROWTH AND PROFITABILITY.

To take advantage of the extension of the “placed-in-service” deadlines for facilities eligible for Section 45 tax credits to January 1, 2012, Clean Coal placed 26 additional RC facilities in service for a total of 28 RC facilities. Clean Coal has leased or sold five of these RC facilities and is presently operating only eight RC facilities in total. Except for RC facilities that Clean Coal plans to retain and operate permanently for its own account, Clean Coal is attempting to sell or lease the remaining facilities to third party investors who receive the benefit of the Section 45 tax credits. Agreements have been finalized for the lease of one additional RC facility, which is awaiting permits and is not yet operating. The inability of Clean Coal to successfully lease or sell additional facilities to third party investors who will receive the benefit of the Section 45 tax credits that it expects to generate from those facilities would likely have an adverse effect on future growth and profitability.

Furthermore, if in the future electric power generators decide to limit generation from their facilities for economic reasons and/or not to burn and use RC and instead switch to another power or fuel source, Clean Coal

would likely be unable to fully utilize the Section 45 tax credits potentially available from RC facilities over the anticipated term of the Section 45 tax credits. In addition, pursuant to Clean Coal's Operating Agreement, if Clean Coal is unable to generate enough revenue through the sale or lease of RC facilities over the next nine years to return the initial investment in Clean Coal of $60 million made by GSFS, an affiliate of GS, plus a 15% return thereon, then GSFS may require Clean Coal to redeem its interest in Clean Coal for any deficit of such amount not distributed to GSFS.

MARKET UNCERTAINTY CREATED BY THE LACK OF GUIDANCE AND RULINGS ISSUED BY COURTS AND THE INTERNAL REVENUE SERVICE COULD INHIBIT OUR ABILITY TO LEASE OR SELL ADDITIONAL RC FACILITIES OR REQUIRE A RESTRUCTURING OF, OR RESULT IN THE TERMINATION OF, EXISTING ARRANGEMENTS.

The availability of Section 45 tax credits to taxpayers with which we engage in lease or sale transactions depends upon a number of factors, including the risk assumed by the taxpayer in the transactions pursuant to which it earns Section 45 tax credits. The law addressing when a taxpayer may and may not avail itself of Section 45 tax credits is not fully developed and is subject to rulings by courts, interpretations by the IRS and other official pronouncements on tax credit regulations. If rulings, guidance or other pronouncements of courts or the IRS are lacking or become available and are interpreted as allowing the IRS to restrict the availability of, increase the difficulty of taking advantage of or suggest that the ability of taxpayers to take advantage of Section 45 tax credits may be limited in the future, several aspects of our RC business could be adversely impacted, including the viability of the market for Section 45 tax credits in general, the perceived risk involved in obtaining Section 45 tax credits and thus the price a third party would be willing to pay for them and the structure of agreements that we enter into to lease or sell our RC facilities.

TECHNICAL OR OPERATIONAL PROBLEMS WITH LONG-TERM OPERATION OF OUR RC FACILITIES COULD RESULT IN ADDITIONAL COSTS AND DELAYS THAT ADVERSELY AFFECT OUR FINANCIAL CONDITION.

Clean Coal placed its first two RC facilities into long-term operation in June 2010 and six more facilities since the first quarter of 2012. It is attempting to sell or lease additional facilities. Clean Coal is continuing to evaluate the likelihood for technical or operational problems with its RC facilities from long-term operations, but cannot be certain that such problems will not arise. Any such problems could result in decreased production of RC at such facilities and/or delays in, or postponement or cancellation of, expected potential future installations and operations at electric power generators and would likely have a material adverse effect on our business, financial condition and results of operations.

OUR DEPENDENCE ON THIRD PARTIES FOR MANUFACTURING KEY COMPONENTS OF OUR SYSTEMS MAY CAUSE DELAYS IN DELIVERIES AND INCREASED COSTS TO US.

We own and control only one manufacturing and assembly facility for our ACI systems, our DSI systems and other components that we sell in our business. Like most of our competitors, we rely heavily upon third parties for the manufacture, assembly and some of the testing of key components, tanks and equipment. Delays and difficulties in the manufacturing or assembly of our products and equipment could substantially harm our business and financial condition.

There may be limited sources of acceptable supply for some key ACI and DSI system components. Business disruptions, financial difficulties of the manufacturers or suppliers of these components and facilities or raw material shortages could increase the cost of our goods sold or reduce the availability of these components. If orders of ACI and DSI systems accelerate as we anticipate, we will likely experience a rapid and substantial increase in our need for components and facilities. If we are unable to obtain a sufficient supply of required components, we could experience significant delays in manufacturing, which could result in the loss of orders and customers or liability for liquidated damages under delivery contracts. This could materially and adversely affect our business, financial condition and results of operations.

WE PRESENTLY RELY UPON ONE CUSTOMER AT THREE OF CLEAN COAL'S OPERATING RC FACILITIES FOR A SUBSTANTIAL PORTION OF OUR REVENUES AND ANY LOSS OF THIS CUSTOMER OR ANY FAILURE TO CONTINUE TO PRODUCE RC AT THESE FACILITIES COULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS.

Clean Coal placed 28 RC facilities into operation prior to the required date for doing so under Internal Revenue Code provisions for Section 45 tax credits for RC to be produced by the facilities, and has leased three of the facilities in the Midwest to two entities related to GS, in exchange for rent payments based on the availability of Section 45 tax credits to the lessee. In 2012, through Clean Coal, we recognized 16% of our total revenue from our arrangements with these GS related entities. The lease agreements for the first two leases with GS RC Investments, LLC, ("GS RC") an entity related to GS, were amended in March 2013 to change the structure and timing of the lease payments. The payments will be paid quarterly in advance and subject to adjustments for inflation. Each lease has an initial non-cancellable term of two years and will automatically renew, unless terminated at the option of the lessee thereof, for successive one-year terms through November 9, 2021 and December 10, 2021, as applicable.

If these GS related entities terminated the leases for these RC facilities or if the utility customers reduce their use of RC at the six furnaces that these RC facilities feed, this could have a material adverse effect on our business, results of operations or financial condition.

FAILURE TO PROTECT OUR INTELLECTUAL PROPERTY OR INFRINGEMENT OF OUR INTELLECTUAL PROPERTY BY A THIRD PARTY COULD HAVE AN ADVERSE IMPACT ON OUR FINANCIAL CONDITION.

We rely on a combination of patent, copyright and trademark laws, trade secrets, confidentiality procedures and contractual provisions to protect our proprietary rights. Such means of protecting our proprietary rights may not be adequate because they provide only limited protection. We also enter into confidentiality and non-disclosure of intellectual property agreements with our employees, consultants and many of our vendors and generally control access to and distribution of our proprietary information. Notwithstanding these precautions, a third party could copy or otherwise obtain and use our proprietary information without authorization. We cannot assure you that the steps taken by us will prevent misappropriation of our technology and intellectual property, which could result in injury to our business and financial condition. In addition, such actions would divert the attention of our management from the operation of our business.

WE MAY BE SUBJECT TO INTELLECTUAL PROPERTY INFRINGEMENT CLAIMS FROM THIRD PARTIES THAT ARE COSTLY TO DEFEND AND THAT MAY LIMIT OUR ABILITY TO USE THE DISPUTED TECHNOLOGIES.

Companies in the business of developing technology face the risk of being subject to intellectual property infringement claims that are costly to defend. As a company regularly involved in developing and commercializing new technologies, we may be subject to intellectual property infringement claims from third parties, the defense of which would likely be costly in terms of monetary expenses and management demands. If our technologies infringe the intellectual property rights of others, we may be prevented from continuing sales of existing products or services and from pursuing research, development or commercialization of new products or services. Further, we may be required to obtain licenses to third party intellectual property, or be forced to develop or obtain alternative technologies. Our failure to obtain a license to any technology that we may require or to develop or obtain alternative technologies could significantly and negatively affect our business.

THE USE OF ALTERNATIVE ENERGY SOURCES FOR POWER GENERATION COULD REDUCE COAL CONSUMPTION BY U.S. ELECTRIC POWER GENERATORS, WHICH COULD RESULT IN LESS DEMAND FOR OUR PRODUCTS AND SERVICES. IF UTILITIES SWITCH TO NATURAL GAS OR OTHER FUEL SOURCES THIS COULD REDUCE OUR REVENUES AND MATERIALLY AND ADVERSELY AFFECT OUR BUSINESS AND RESULTS OF OPERATIONS.

The amount of coal consumed for U.S. electric power generation is affected by, among other things (1) the location, availability, quality and price of alternative energy sources for power generation, such as natural gas, fuel oil, nuclear, hydroelectric, wind, biomass and solar power; and (2) technological developments, including those related to alternative energy sources.

Gas-fueled generation has the potential to displace coal-fueled generation, particularly from older, less efficient coal-powered generators. We expect that many of the new power plants needed to meet increasing demand for electricity generation will be fueled by natural gas because the price of natural gas has remained at relatively low levels after a period of sharp decline, gas-fired plants are cheaper to construct and permits to construct these plants are easier to obtain as natural gas is seen as having a lower environmental impact than coal-fueled generators. Possible advances in technologies and incentives, such as tax credits, to enhance the economics of renewable energy sources could make these sources more competitive with coal. Any reduction in the amount of coal consumed by domestic electric power generators could reduce the demand for our products and services, thereby reducing our revenues and materially and adversely affecting our business and results of operations.

Additionally, long-term changes in environmental regulation that threaten or preclude the use of coal or other fossil fuels as a primary fuel source for electricity production, and result in the reduction or closure of a significant number of coal-fired power plants, may adversely affect the Company’s business, financial condition and results of operations.

IF WE ARE UNABLE TO COMPETE WITH OTHER INDUSTRY PARTICIPANTS, WE WOULD SUFFER ADVERSE EFFECTS TO OUR BUSINESS AND FINANCIAL CONDITION.

We face competition in all aspects of our operations, including competition from both domestic and foreign suppliers. In North America, our competitors consist of large national and international companies and local and regional companies of varying sizes and financial resources. Certain of our competitors have advantages over us, including substantially greater financial and other resources. We may not be able to successfully compete with them. In some past years, we have seen our market share for ACI systems decline due to pricing pressures from increased competition. If we are unable to maintain a significant market share for our systems, our financial prospects would be adversely affected. In addition, competitors may reduce their prices to attract or retain customers, which may result in an adverse impact to our market share, margins, revenues and business.

IF THE QUALITY AND EFFECTIVENESS OF OUR ACI AND DSI SYSTEMS AND RELATED TECHNOLOGIES AND PRODUCTS DO NOT MEET OUR CUSTOMERS’ EXPECTATIONS, THEN OUR SALES, RESULTS OF OPERATIONS AND ULTIMATELY OUR REPUTATION COULD BE NEGATIVELY IMPACTED.

If flaws in the design, production, assembly or testing of our ACI and DSI systems and related technologies and products (by us or our suppliers) were to occur, we could experience substantial repair, replacement or service costs and potential damage to our reputation. In addition, we have issued mercury control performance guarantees for certain ACI and DSI systems we have sold and are responsible within contractual limits for repair or replacement costs and certain operating costs if those systems do not perform as promised. Continued improvement in manufacturing capabilities, technological development, control of material and manufacturing quality and costs and testing are critical factors in our future growth and meeting our customers’ expectations. Our efforts to monitor, develop, modify and implement appropriate design, test and manufacturing processes for our EC systems and processes may not be sufficient to avoid failures and/or lack of adequate performance in our

EC systems and related technologies that may result in significant repair or replacement costs or potential damage to our reputation, any of which could have a material adverse effect on our business, results of operations or financial condition.

WE HAVE AGREEMENTS TO INDEMNIFY THIRD PARTIES AGAINST INTELLECTUAL PROPERTY CLAIMS CONCERNING LICENSED TECHNOLOGY THAT COULD BE SIGNIFICANT.

We have agreed to indemnify Clean Coal, NexGen Refined Coal, LLC ("NexGen"), Arch Coal, Inc. ("Arch Coal") and other licensees and may enter into additional license agreements with others under which we agree to indemnify and hold the licensee harmless from and against losses it may incur as a result of the infringement of third party rights by use of our patents or other intellectual property. Infringement claims, which are expensive and time-consuming to defend, could have a material adverse effect on our business, operating results and financial condition, even if we are successful in defending ourselves (and indemnified parties) against them.

WE ARE UNABLE TO PREDICT THE IMPACT OF RECENT (AND CONTINUING) ECONOMIC FACTORS ON OUR BUSINESS.

The United States and global economies are currently experiencing a period of substantial economic uncertainty with wide-ranging effects, including:

- Disruption in global financial markets that has reduced the liquidity available to us, our customers and suppliers;
- Extreme volatility in commodity prices;
- Increasing risk, uncertainty and costs related to possible periods of significant or prolonged inflation or deflation;
- Increasing risk that customers and suppliers may liquidate or seek protection under federal bankruptcy laws and reject existing contractual commitments; and
- The inability to predict with any certainty the effectiveness and long-term impact of government economic policies.

We are unable to predict the impact, severity and duration of these events, any of which could have a material adverse impact on our financial position, results of operations and cash flows.

OUR FUTURE SUCCESS DEPENDS IN PART ON OUR ONGOING DEVELOPMENT OF INTELLECTUAL PROPERTY AND THE INTRODUCTION OF NEW PRODUCTS AND TECHNOLOGIES TO SERVICE OUR DIFFERENT BUSINESS SEGMENTS AND OUR RESULTS CAN BE IMPACTED BY THE EFFECTIVENESS AND MAGNITUDE OF OUR INVESTMENTS IN NEW PRODUCTS AND TECHNOLOGIES.

The process of developing and enhancing products, systems, services and solutions for our different customers in the RC, EC and carbon capture markets is complex, costly and uncertain, and any failure by us to anticipate customers' changing needs, emerging trends and new regulations accurately could significantly harm our future market share and results of operations. Our approach to technology development, implementation and commercialization involves taking technology to full-scale as quickly as we can, and testing and improving the technology under actual power plant operating conditions. We may focus our resources on technologies that eventually do not become widely accepted or are not commercially viable. This involves a significant up-front investment of our resources. Our results are subject to risks related to our significant investment in developing and introducing new technologies and EC systems and products. If we are unable to develop and scale up new technologies, systems and services to meet the needs of our customers, our financial results could be adversely affected.

WE MANAGE SOME OF OUR BUSINESS VIA JOINT VENTURE OPERATING AGREEMENTS AND HAVE IMPLEMENTED SIGNIFICANT OVERSIGHT PROCEDURES WITH REGARD TO THEM BUT THE NATURE OF JOINT MANAGEMENT IS THAT WE DO NOT HAVE SOLE CONTROL OF THE DECISION MAKING PROCESS SO WE CANNOT MANDATE DECISIONS OR ENSURE OUTCOMES.

ADA oversees its joint ventures via operating agreements and by participating in the following activities: (1) representation on the respective governing Boards, (2) design and implementation of financial and operational controls and reporting requirements, (3) hiring, (4) design, construction, testing and operation of RC facilities, and (5) other regular and routine involvement with our joint venture partners. Notwithstanding this regular participation and oversight, our joint venture partners also participate in the management of these businesses and they may have business or economic interests that divert their attention from the joint venture or they may prefer to invest resources in a manner that is contrary to ADA's preferences. Since business decisions must be made jointly with our joint venture partners, ADA cannot mandate decisions or ensure outcomes.

AN INJURY TO OR DEATH OF ONE OF OUR EMPLOYEES COULD RESULT IN MATERIAL LIABILITIES TO THE COMPANY.

The industrial activities conducted at our and our customer's facilities present significant risk of serious injury or death to our employees, customers or other visitors to our operations, notwithstanding our safety precautions, including our material compliance with federal, state and local employee health and safety regulations. While we have in place policies and procedures to minimize those risks, we may be unable to avoid material liabilities for an injury or death. Even though we maintain workers' compensation insurance to address the risk of incurring material liabilities for injury or death, the insurance coverage may not be adequate or may not continue to be available on the terms acceptable to us, or at all, which could result in material liabilities to us for an injury or death.

OUR EXPECTED PROFITABILITY COULD BE ADVERSELY AFFECTED BY INCREASES IN THE COST OF RAW MATERIALS AND FREIGHT.

The prices of commodities that we require in our operations, including steel for silos, iron waste products and other chemicals, are subject to price fluctuations, and the timing of changes in the market prices for these commodities is largely unpredictable. We may not be able to pass on all cost increases to our customers or offset fully the effects of higher costs for raw materials or freight through the use of surcharges and other measures, which may negatively impact profitability. There is also the possibility of potential time lag between increases in prices for raw materials under our purchase contracts and the point when we can implement corresponding increase in price under our sales contracts with customers. As a result, we may be exposed to fluctuations in raw material prices, including steel, since during the time lag we may have to bear the additional cost of the price increase under our purchase contracts. If these events were to occur, beyond the price validity time period we have obtained from our suppliers, they could have a material adverse effect on our financial position, results of operations and cash flows.

THE EFFECTS OF ISSUING PERFORMANCE GUARANTEES FOR COMMERCIAL ACI AND DSI SYSTEMS AND ISSUING PAYMENT AND PERFORMANCE GUARANTEES FOR CLEAN COAL'S RC FACILITIES ARE LARGELY UNKNOWN AND COULD ADVERSELY AFFECT OUR FINANCIAL CONDITION.

Performance and payment guarantees have been and will likely continue to be an integral part of successful sales of our products and services. Guarantees with respect to our ACI and DSI systems typically require levels of emission removal efficiency based on stated injection rates of a specified or approved absorbent or alkali material, as the case may be, given other operating parameters, including the nature of the coal burned. Such guarantees generally require us to spend amounts up to the value of the sales contract to "make right" the performance of the ACI or DSI system if the guaranteed level of performance is not achieved. Recently our

customers have sought stronger guarantees, which place us at greater risk. In addition to guarantees on ACI and DSI systems, we have provided certain of Clean Coal's lessees with joint and several guarantees guaranteeing any payments and performance that might be due to the lessee under the various agreements Clean Coal executed. Any substantial payments made under such guarantees could have a material adverse effect on our financial position, results of operations and cash flows.

WE DEPEND ON KEY PERSONNEL.

We depend on the performance of our senior management team and their direct reports and other key employees, particularly highly skilled engineers. Our success depends on our ability to attract, retain and motivate these individuals. We do not have any binding agreements with most of our employees that prevent them from leaving our Company at any time without any restrictions on their competing against us after their employment terminates. We compete heavily for these types of personnel. In addition, although we maintain key person life insurance on certain of our executives, the loss of the services of any of our key employees or our failure to attract, retain and motivate key employees could harm our business.

WE DEPEND SUBSTANTIALLY ON EMPLOYEES OF CLEAN COAL FOR OUR RC BUSINESS, AND THE LOSS OF THEIR SERVICES COULD HAVE AN ADVERSE EFFECT ON THE GROWTH OF THAT BUSINESS.

Clean Coal depends on several key employees to operate the RC business. If Clean Coal were to lose the services of these key employees, especially to a competitor, this could have a material adverse effect on the business of Clean Coal and our results of operation. It might be difficult to timely replace such key employees on reasonable terms, and our business could be harmed if any those employees were to engage in activities competitive with one of our businesses or areas of interest.

MATERIAL ADJUSTMENTS PURSUANT TO DOE AUDITS OF OUR PAST PERFORMANCE COULD HAVE A DETRIMENTAL IMPACT ON OUR BUSINESS.

Twelve of our completed and current contracts awarded by the DOE and related industry participants remain subject to adjustments as a result of future government audits. Our historical experience with these audits has not resulted in significant adverse adjustments to amounts previously received; however the audits for the years 2005 and later have not been finalized. Revenues recognized from 2005 through 2012 that are or were subject to government audit totaled $31 million. In addition, we had $12.7 million of remaining unearned amounts under contracts subject to audit as of December 31, 2012. If audits for open years were to require us to repay material amounts, our results of operations and business would likely suffer material adverse impacts.

CHANGES IN TAXATION RULES OR FINANCIAL ACCOUNTING STANDARDS COULD ADVERSELY AFFECT OUR RESULTS OF OPERATIONS OR FINANCIAL CONDITION.

Changes in taxation rules and accounting pronouncements (and changes in interpretations of accounting pronouncements) have occurred and may occur in the future. A change in existing taxation rules or accounting standards could have an adverse effect on our reported or future results of operations or financial condition.

THE FAILURE OF ANY BANK IN WHICH WE DEPOSIT OUR FUNDS COULD REDUCE THE AMOUNT OF CASH WE HAVE AVAILABLE FOR OPERATIONS AND ADDITIONAL INVESTMENTS IN OUR BUSINESSES.

The Federal Deposit Insurance Corporation, or "FDIC," only insures amounts up to $250,000 per depositor per insured bank. We currently have cash and cash equivalents and restricted cash deposited in certain financial institutions significantly in excess of federally insured levels. If any of the banking institutions in which we have deposited funds ultimately fails, we may lose our deposits over $250,000. The loss of our deposits would reduce the amount of cash we have available for operations and would have a material adverse effect on our financial condition.

RISKS RELATING TO OUR COMMON STOCK

A SIGNIFICANT PORTION OF OUR OUTSTANDING SHARES OF COMMON STOCK MAY BE SOLD IN THE PUBLIC MARKET, WHICH COULD LOWER THE MARKET PRICE OF OUR STOCK.

As of March 8, 2013, we had 10,059,145 shares of common stock issued and outstanding. Sales of significant quantities of our common stock, or the perception that such sales might occur, have had and may continue to have a material adverse effect on our stock price.

THE ISSUANCE OF ADDITIONAL SECURITIES COULD DECREASE THE VALUE OF THE OUTSTANDING SHARES OF OUR COMMON STOCK.

On January 28, 2011, we filed a shelf registration to raise $140 million by which we may issue additional shares of common stock or convertible securities with preferences and priorities over those of our common stock. The issuance of any additional securities could dilute the percentage interests and per share book value of existing shareholders and have a detrimental impact on the market for our common stock.

THE VOLATILITY OF OUR STOCK PRICE COULD SUBJECT US TO SECURITIES CLASS ACTION LITIGATION.

The market price of our common stock fluctuates significantly. The market price of our common stock may be affected by numerous factors, including:

- Actual or anticipated fluctuations in our operating results and financial condition;
- Changes in laws or regulations and court rulings;
- Our ability to permanently place by leasing or selling our RC facilities;
- Changes in government funding and industry cost share of our projects;
- Announcements of sales awards;
- Conditions and trends in our industry;
- Changes in supply and demand of key equipment and raw materials;
- Adoption of new accounting standards affecting our industry;
- Changes in financial estimates by securities analysts;
- Perceptions of the value of corporate transactions; and
- The degree of trading liquidity in our common stock and general market conditions.

From December 31, 2011 to December 31, 2012, the closing price of our common stock ranged from $14.22 to $29.17 per share. Significant declines in the price of our common stock could impede our ability to obtain additional capital, attract and retain qualified employees and reduce the liquidity of our common stock.

In addition, the stock market has from time to time experienced significant price and volume fluctuations that have particularly affected the market prices for the common stock of similarly staged companies. These broad market fluctuations may adversely affect the market price of our common stock. In the past, following periods of volatility in the market price of a particular company's securities, shareholders have often brought class action securities litigation against that company. If class action securities litigation were brought against the Company, such litigation could result in substantial costs and a diversion of management's attention and resources.

OUR ARTICLES OF INCORPORATION AND BYLAWS CONTAIN PROVISIONS THAT MAY DELAY OR PREVENT AN OTHERWISE BENEFICIAL TAKEOVER ATTEMPT OF OUR COMPANY.

Certain provisions of our articles of incorporation and bylaws could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our shareholders. These include provisions:

- Establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at shareholders' meetings; and
- Allowing our board of directors to issue shares of preferred stock without shareholder approval.

These provisions, alone or in combination with each other, may discourage transactions involving actual or potential changes of control, including transactions that otherwise could involve payment of a premium over prevailing market prices to holders of our common stock, or could limit the ability of our shareholders to approve transactions that they may deem to be in their best interest.

LACK OF DIVIDENDS MAY MAKE OUR STOCK LESS ATTRACTIVE AS AN INVESTMENT.

We intend to retain all future earnings for our businesses and do not anticipate paying any cash dividends on our common stock for the foreseeable future. Generally, stocks that pay regular dividends command higher market trading prices, and our stock price may therefore be lower as a result of our dividend policy.

WE ARE EXPOSED TO RISKS RELATING TO EVALUATIONS OF OUR INTERNAL CONTROL OVER FINANCIAL REPORTING REQUIRED BY SECTION 404 OF THE SARBANES-OXLEY ACT OF 2002.

We are required to comply with Section 404 of the Sarbanes-Oxley Act of 2002. In June of 2012, management determined that the Company's interest in Clean Coal held by an affiliate of GS would be more appropriately classified as temporary equity instead of as part of stockholders' equity. Management made this determination because of a provision in Clean Coal's operating agreement that permits GS under certain limited circumstances to require redemption of the unreturned portion of its initial investment in Clean Coal plus a return of 15%.

In August of 2012, management determined that the Company should have recognized a full valuation allowance against its net deferred tax assets. Management made this determination after reconsidering the weight given in its original assessment of the potential for ultimate realization of the deferred tax assets to the relevant information used to measure the positive and negative evidence weighing for and against such potential. As a result of these determinations, in October of 2012, the Company restated its consolidated financial statements as of and for the years ended December 31, 2010 and 2011 and the quarterly periods ended March 31, 2011, June 30, 2011, September 30, 2011, March 31, 2012 and June 30, 2012.

Management determined that the issues leading to the restatements arose because of material weaknesses in the Company's internal control over financial reporting. A "material weakness" is a control deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. Management has taken steps to remediate the material weaknesses that it identified and, while management feels that it has remediated these material weaknesses, we cannot assure you that we will not have material weaknesses of internal control over financial reporting in the future.

Because we for a time did not maintain a system of internal control over financial reporting that met the requirements of Section 404, we could be subject to sanctions or investigation by regulatory authorities such as the Securities and Exchange Commission or by the NASDAQ Stock Market. Additionally, the failure to comply with Section 404 or the report by us of any further material weakness may cause investors to lose confidence in

our financial statements and our stock price may be adversely affected. If we fail to remedy any material weakness, our financial statements may be inaccurate, we may be subject to shareholder litigation and increases in insurance costs, we may not have access to the capital markets, and our stock price may be adversely affected.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Office Leases

ADA leases office and warehouse space in Highlands Ranch, Colorado, a suburb of Denver. Our operating leases generally provide for periodic increases in rent and renewal options. The office lease that was entered into in 2012 covers approximately 30,000 square feet of office space, expires in February 2019 and includes the option to renew for two additional five-year periods. The lease includes abatement of base rent and operating expenses for the first six months and abatement of base rent for an additional thirteen months. The lease also included a one-time tenant improvement allowance in an amount of approximately $480,000.

ADA leases approximately 150,000 square feet of office and warehouse space in Highlands Ranch, Colorado which expires in October 2017 with the option to renew for two additional three-year periods. ADA also leases approximately 15,000 square feet of warehouse space in Highlands Ranch, Colorado which expires in February 2019 and includes the option to renew for two additional five-year periods. The lease also included a one-time tenant improvement allowance of approximately $150,000. Clean Coal entered into a sub-lease agreement for office space in 2012 with an entity related to NexGen that expires in February 2021. Future consolidated annual lease costs are expected to amount to approximately $4.6 million through February 2021.

Clean Coal Leases and Sale

Clean Coal leased two RC Facilities in June 2010 to an entity related to GS. The current leases for these facilities were entered into in March 2013, have initial terms of two years and will automatically renew for up to seven additional one year terms unless sooner terminated by the parties, which may be effective as of the end of any term by providing three months' prior written notice.

Clean Coal leased a third RC facility in the first quarter of 2012 to another related entity of GS. The lease has a preliminary lease term that renews every fifteen days and will continue to renew until the initial lease term commences once certain conditions are satisfied. The lessee has until November 30, 2013 to provide notice to renew or terminate the lease.

Clean Coal leased a fourth RC facility to another third party investor in August 2012. The lease contains an initial three year term, with additional automatic renewal terms for six successive one year terms ending in 2021, subject to certain termination clauses.

In February 2013 Clean Coal finalized a contract for the sale of a fifth RC facility with a new third party investor. The economic structure of the sale is similar to that of the initial leases and provides the buyer with the right to require Clean Coal to repurchase the facility for a nominal fee in certain circumstances.

The above RC facilities are located in the Midwest.

Item 3. Legal Proceedings.

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Price Range of Common Stock

Our common stock currently trades on the NASDAQ Capital Market under the symbol "ADES." The table below sets forth the price range of our common stock for each quarter of 2012 and 2011:

	2012		2011	
	High	Low	High	Low
1st Quarter	$27.00	$20.27	$24.92	$10.53
2nd Quarter	$29.83	$21.46	$24.75	$ 7.58
3rd Quarter	$25.55	$18.69	$19.37	$13.26
4th Quarter	$23.76	$13.88	$23.41	$13.52

Holders

The number of record holders of our common stock as of March 8, 2013 was approximately 1,300. The approximate number of beneficial shareholders is estimated at 3,600.

Dividends

We have not paid dividends since inception. We currently have no plans to pay dividends in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

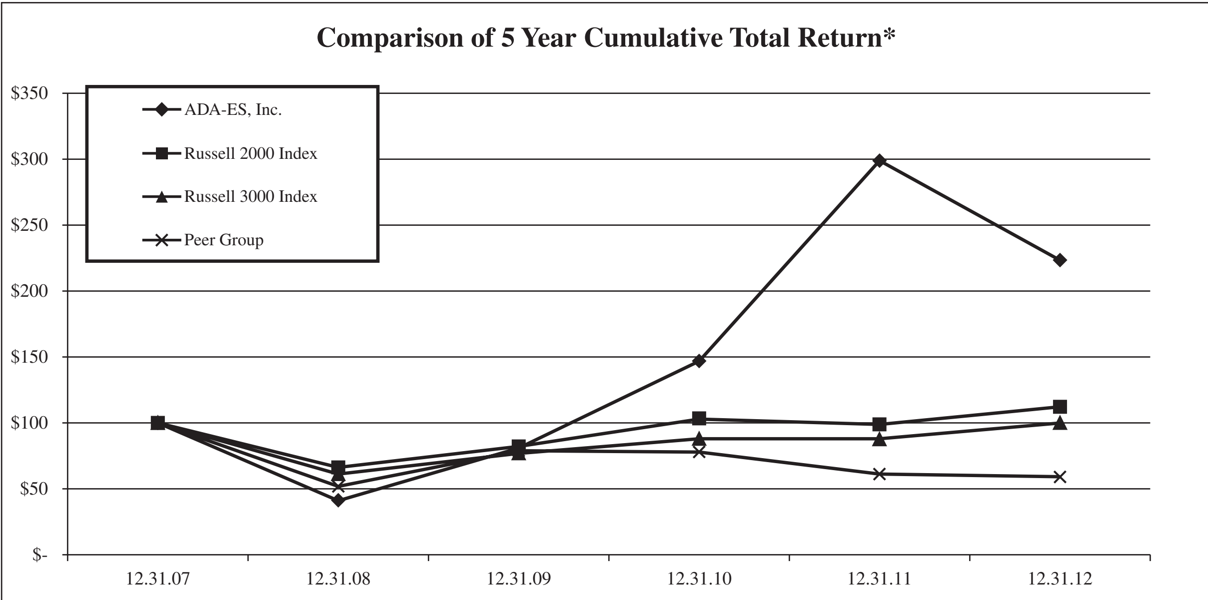
The disclosure required by this Item is included under Item 12 of this Report.

Purchases of Equity Securities by the Company and Affiliated Purchasers

Neither we nor any "affiliated purchaser," as defined in SEC Rule 10b-18(a)(3), purchased any of our equity securities during the quarter ended December 31, 2012.

Company Stock Performance

The following graph shows a five-year comparison of cumulative total shareholder return, calculated on a dividend reinvested basis, for the Company, the Russell 2000 Index, the Russell 3000 Index, and an average of a peer group index including ten companies as determined by the Company. The graph assumes $100 was invested in each of the Company's common stock, the Russell 2000 Index, the Russell 3000 Index, and the peer group index as determined by the Company as of the market close on December 31, 2007. Data points on the graph are annual. Note that historic price performance is not necessarily indicative of future stock price performance.



* 100 invested on December 31, 2007 in stock or index, including reinvestment of dividends.

INDEXED RETURNS

	Base Period	Years Ended				
Company Name / Index	**12/31/2007**	**12/31/2008**	**12/31/2009**	**12/31/2010**	**12/31/2011**	**12/31/2012**
ADA-ES, Inc.	$100	$41	$81	$147	$299	$223
Russell 2000 Index	$100	$66	$82	$103	$ 98	$112
Russell 3000 Index	$100	$61	$77	$ 88	$ 87	$100
Peer Group	$100	$52	$79	$ 78	$ 61	$ 59

The peer group index used by the Company consists of CECO Environmental Corp., Fuel Tech Inc., Calgon Carbon Corp., Westport Innovations Inc., EnerNOC Inc., Fuel Systems Solutions Inc. Capstone Turbine Corp., FuelCell Energy Inc., PowerSecure International Inc. and Active Power Inc.

Item 6. Selected Financial Data.

FIVE-YEAR SUMMARY OF SELECTED FINANCIAL DATA

The following selected financial data are derived from the audited Consolidated Financial Statements and should be read in conjunction with Item 1A Risk Factors, Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations, and our Consolidated Financial Statements and the related notes included in Item 8 Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

(Amounts in thousands, except per share data)	Years Ended December 31,				
Income Statement Data	2012	2011	2010	2009	2008
Revenues	$212,523	$ 53,316	$ 22,281	$20,061	$16,193
Net loss	$ (13,701)	$(22,819)	$(31,127)	$ (8,771)	$ (4,106)
Net loss, per common share, basic and diluted	$ (1.31)	$ (2.85)	$ (4.21)	$ (1.26)	$ (0.67)
Dividends declared per common share	$ —	$ —	$ —	$ —	$ —

	As of December 31,				
Balance Sheet Data	2012	2011	2010	2009	2008
Total assets	$ 75,749	$ 87,474	$ 41,011	$40,967	$75,142
Long-term debt	$ 2,305	$ 3,624	$ —	$ —	$ —
Stockholders' equity (deficit)	$ (40,137)	$(29,446)	$ (2,213)	$24,351	$56,987

QUARTERLY FINANCIAL DATA – UNAUDITED

	2012				2011			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(Amounts in thousands, except per share data)							
Revenues	$18,220	$52,511	$74,353	$67,439	$ 8,467	$7,026	$13,232	$24,591
Gross margin	$ 3,992	$ 7,434	$ 3,957	$ 4,585	$ 7,173	$5,175	$ 7,154	$ 4,850
Net income (loss)	$ (2,420)	$ (1,298)	$ (3,948)	$ (5,405)	$(41,798)	$6,416	$ (4,603)	$17,166
Common Stock Data								
Basic net income (loss) per share	$ (0.24)	$ (0.13)	$ (0.39)	$ (0.54)	$ (5.51)	$ 0.84	$ (0.60)	$ 1.94
Diluted net income (loss) per share	$ (0.24)	$ (0.13)	$ (0.39)	$ (0.54)	$ (5.51)	$ 0.82	$ (0.60)	$ 1.90
Average common shares outstanding								
Basic	9,999	10,002	10,017	10,021	7,579	7,601	7,661	8,832
Diluted	9,999	10,002	10,017	10,021	7,579	7,803	7,661	9,015

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following Management Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") incorporates restated figures related to the previously filed amended consolidated financial statements, data and related disclosures for 2011 and 2010. The restatement resulted from management's determination that the Company had not properly accounted for the interest held by an affiliate of The Goldman Sachs Group, Inc. ("GS") in our joint venture, Clean Coal since May 2011 and that a full valuation allowance against the Company's deferred tax assets should have been recognized as of December 31, 2010 and each subsequent quarter thereafter. For this reason, the following MD&A should be read in conjunction with the amended financial statements and notes thereto and the MD&A included in the Company's Amendment No. 2 to its Annual Report on Form 10-K/A for the fiscal year ended December 31, 2011 and in the Company's Amendment No. 2 to its Annual Report on Form 10-K/A for the fiscal year ended December 31, 2010, which were both filed on October 19, 2012, as well as the Company's other filings with the SEC.

Overview

The Company is a leader in clean coal technologies and associated specialty chemicals, primarily serving the coal-fueled power plant industry. Our proprietary environmental technologies and specialty chemicals enable power and coal-fired plants to enhance existing air pollution control equipment, minimize mercury, CO_2 and other emissions, maximize capacity, and improve operating efficiencies, to meet the challenges of existing and pending emission control regulations. We have three operating segments: RC (refined coal), EC (emission control) and CC (CO_2 capture). The RC segment includes revenues from the lease or sale of RC facilities and RC sales which approximate the cost of raw coal acquired for RC facilities operated for our own account. The EC segment includes revenue from the supply of emissions control systems including powdered activated carbon injection ("ACI") systems, dry sorbent injection ("DSI") systems to control SO_2, SO_3 and HCl and flue gas conditioning systems, the licensing of certain technology and provision of consulting services. The CC segment includes revenue from projects relating to the CO_2 capture and control market, including projects co-funded by government agencies, such as the DOE and industry supported contracts.

Our RC segment generates revenues through the lease or sale of RC facilities that produce RC intended to qualify for production tax credits under Section 45 of the Internal Revenue Code ("Section 45 tax credits"), to third party investors, as well as operating RC facilities and keeping the tax credits for our own and our partners' accounts. To date, 28 RC facilities have been "placed-in-service" through Clean Coal, our RC joint venture. Unless Congress again extends the placed-in-service deadline for such facilities, which has expired, we do not expect to place any more RC facilities into service.

The primary drivers for many of our EC products and services are environmental laws and regulations primarily impacting the electric power generation industry and other coal users. Environmental regulations, such as the 1990 Clean Air Act Amendments, the MATS regulations, various Maximum-Achievable Control Technology ("MACT") standards including the Industrial Boiler MACT regulations, the Cement MACT regulation, various state regulations and permitting requirements for coal-fired power plants are requiring electric power generators and others to reduce emissions of pollutants, such as particulate matter, SO_2, NO_x, mercury, and acid gases. We are a key supplier of mercury control equipment and services, which include ACI systems, to the EC market whose commercial equipment component first began in 2005 when several individual states began to require limits on mercury emissions. We also offer DSI systems to control SO_2 and acid gases such as HCl and SO_3.

We conduct research and development efforts in CO_2 capture and control from coal-fired boilers. In September 2010, we signed our second significant contract related to CO_2 capture with the DOE, for a project that is expected to continue through the end of 2014.

Refined Coal

We are marketing our CyClean and M-45 technologies, services and equipment through our joint venture Clean Coal. Since its inception, ADA has been considered the primary economic beneficiary of Clean Coal and has consolidated its accounts.

Environmental Legislation and Regulations

Clean Coal's primary opportunity is based on Section 45 tax credits established by the American Jobs Creation Act of 2004, and as amended by the Emergency Economic Stabilization Act of 2008, the American Recovery and Reinvestment Act of 2009, and the Tax Relief and Job Creation Act of 2010, the last of which extended the placed-in-service deadline for the Section 45 tax credits from its original date to January 1, 2012. The tax credit amounted to $6.47 per ton of RC in 2012 and is expected to escalate annually through 2021. In December 2009, the Internal Revenue Service (the "IRS") issued the initial guidance as to the specifics concerning how the emissions reductions are to be measured and certified to demonstrate compliance necessary for RC production to qualify for the Section 45 tax credits. The IRS provided subsequent guidance on October 4, 2010 to address various issues that had arisen. Additionally, the IRS has published a number of Private Letter Rulings ("PLRs")

that provide approval to specific taxpayers on matters related to the Section 45 tax credit issues addressed in the PLRs. Although the approval in each PLR only applies to the taxpayer and the specific project mentioned in the PLR, other taxpayers can gain an understanding on how the IRS interprets certain matters based on the conclusions reached in the PLR. In August, 2012 Clean Coal was issued a PLR on one of the units it intended to operate by the IRS that addressed how to handle blending of coal from different ranks, using laboratory analysis of coal samples for periodic requalification of RC facilities, and increased options for measuring mercury during full scale testing. After that time the IRS stopped issuing PLRs on RC matters, resulting in delays in the closings of transactions for RC facilities. We understand that in February 2013 the IRS announced that it had begun to reissue PLRs again.

Use of the tax credits is also subject to audits of the entity that claims the credits on its tax return, negotiated/ structured settlements that may be reached with the IRS and, in some cases, where the parties cannot reach agreement and the matter is litigated, rulings can impact various aspects of the RC business including the viability of the market for Section 45 tax credits in general, the perceived risk involved in the allocation of Section 45 tax credits and thus the amount a third party would be willing to invest for the opportunity to participate in the tax credits and the structure of contracts that we enter into to recognize value from our RC facilities.

Technology License Agreements

ADA licensed to Clean Coal, on an exclusive basis, the CyClean technology in November 2006. On July 27, 2012 ADA licensed the M-45 technology (the "M-45 License") to Clean Coal in order to leverage Clean Coal's operating expertise and take advantage of the other synergies that can be obtained by Clean Coal having the ability to provide and use either the CyClean or M-45 technology.

In addition, the M-45 License gives Clean Coal, on a limited, non-exclusive, non-transferable, royalty-bearing basis, with the right to sublicense (under specified terms to be approved by ADA prior to the sublicense being granted) to limited utilities that purchase or have purchased RC produced using the M-45 technology, the right to use the M-45 technology under certain circumstances for the purpose of "Mercury Only Emission Control".

The M-45 License runs from July 27, 2012, through the latest of the expiration of (i) the Section 45 tax credits, (ii) any similar tax credit subsequently enacted, after the effective date of the agreement up to within one year of the expiration of the Section 45 tax credits, which tax credit provides for the production of a coal-based fuel (pre-combustion) that emits, when combusted, a lower level of both NOx and mercury emissions, and (iii) the date on which Clean Coal and all sublicensees of the M-45 technology have permanently ceased to provide Mercury Only Emission Control.

Pursuant to the M-45 License, we receive royalties equal to (i) a percentage of the per-ton, pre-tax margin from RC produced with the M-45 technology from leased or sold RC facilities, (ii) a percentage of the Section 45 tax credits claimed by Clean Coal (or a Clean Coal affiliate), or their respective owners, on RC produced by a facility that Clean Coal does not sell or lease to a third party and instead operates to retain the Section 45 tax credits from that facility for its (or an affiliate's) own benefit, net of all directly allocable operating expenses and all utility payments incurred by Clean Coal (or an affiliate) in connection with the production and sale of such RC, and (iii) a percentage of the revenue, net of all direct expenses, received by Clean Coal as a direct result of Clean Coal's exercise of the license for Mercury Only Emission Control described above. ADA has received $10 million in prepaid royalty deposits upon the attainment by Clean Coal of certain milestones, consisting of the initial payment of $2 million made upon signing of the non-binding term sheet for the M-45 License in November, 2011 and an additional $8 million received in March 2013. We have certain obligations to provide technical assistance to Clean Coal and its sublicensees during the term of the M-45 License, as well as certain obligations to protect and maintain the patents that underlie the M-45 technology and to indemnify Clean Coal against certain claims related to the technology.

Leased and Operating RC Facilities

Clean Coal initially placed two RC facilities in service prior to the initial placed-in-service deadline of January 1, 2010 and demonstrated the required emission reductions for their RC product to qualify for the Section 45 tax credits. On June 29, 2010, Clean Coal signed agreements to lease these two RC facilities through its wholly owned subsidiaries (the "Lessors") to GS RC with initial two and one half year terms and annual renewals that were set to expire in 2019. In November and December 2011, Clean Coal, the Lessors and GS RC entered into two Exchange Agreements pursuant to which the parties exchanged the leased RC facilities at each power plant with newly constructed, redesigned RC facilities which resulted in termination of the original leases and entry into new lease agreements (the "Exchange Transactions"). The new leases carried over most of the substantive terms and conditions of the initial leases and initially had annual terms that would have automatically renewed through December 31, 2021. The two facilities are installed at two different power plants in the Midwest each of which operates two cyclone boilers burning PRB coal from Wyoming.

GS RC also entered into supply agreements for each RC facility pursuant to which it supplies RC to the applicable power plant owner. Clean Coal Solution Services ("CCSS"), a Colorado limited liability company owned 50% by us and 50% by NexGen, (subject to oversight by GS RC) operates and maintains the RC facilities under two Operating and Maintenance Agreements entered into with GS RC in June 2010. CCSS also arranges for the purchase and delivery of certain chemical additives necessary for GS RC's production of RC under the supply agreements. The term of each such agreement runs coincident with the leases. These agreements were amended in November and December 2011 in connection with the Exchange Transactions.

In addition, pursuant to the Exchange Transactions, we, NexGen and two entities affiliated with NexGen have provided GS RC with joint and several guaranties (the "CCS Guaranties") guaranteeing all payments and performance due under the agreements described above. We also entered into a contribution agreement with NexGen under which any party called upon to pay on a CCS Guaranty is entitled to receive contribution from the other party equal to 50% of the amount paid. GSFS, GS RC's parent, provided Clean Coal with a guaranty as to the payment of all fixed rent payments under the leases, which, although terminable at any time, cannot be terminated without the substitution of such guaranty with another guaranty on similar terms from a creditworthy guarantor.

In December 2012, the parties amended the two leases to change the lease terms to month-to-month and allow GS RC, upon five business days' written notice, to either terminate the leases or convert the lease terms to yearly. In March 2013 the parties amended and restated the lease agreements to change the structure and timing of the lease payments. The payments will be paid quarterly in advance and are subject to adjustments for inflation. Each lease has an initial non-cancellable term of two years and will automatically renew unless terminated at the option of the lessee thereof, for successive one-year terms through November 9, 2021 and December 10, 2021, as applicable. Revenues to Clean Coal are expected to remain at similar levels as seen under the prior written agreements. The parties also amended and restated the two Operating and Maintenance Agreements to provide for the payment of a fixed fee under the agreements instead of variable payments based on the production of RC.

In connection with an Exclusive Right to Lease Agreement between Clean Coal and GSFS (the "Lease Agreement"), Clean Coal granted GSFS the exclusive right (but not the obligation) to lease additional RC facilities that will produce up to approximately 12 million tons (+/- 10%) (the "Target Tons") of RC per year on pre-established lease terms similar to those in effect at the time for Clean Coal's two then-existing leased RC facilities, but which are more economically favorable to Clean Coal than the rates in the leases for the existing RC facilities that Clean Coal leased to GS RC in June 2010. Under the Lease Agreement, Clean Coal is required to submit a package to GSFS with respect to each RC facility it proposes that GSFS consider for leasing (being all RC facilities developed by Clean Coal until the Target Tons are met), and upon certification and acceptance of the certification for a given RC facility by GSFS, GSFS is required to pay Clean Coal, as a deposit, an agreed amount for each 1 million tons of projected annual RC production. Upon closing of such a lease of an RC facility from Clean Coal, GSFS is required to pay Clean Coal an additional amount per 1 million tons of projected annual RC production. These payments are paid as advance rent, and actual amounts due under the leases (with true-ups)

are paid in accordance with the operative lease and related agreements. If GSFS determines that it will not lease an RC facility after it has paid the deposit, it can provide notice requesting the return of the deposit paid for that RC facility, and the deposit must be returned within 30 days of the end of the quarter in which the notice is given. The amount of any deposit will earn interest from the date of the notice until the deposit is returned.

Clean Coal received $14.9 million from GSFS in 2011 as initial deposits for more than the Target Tons. In October 2012, GSFS determined that it would not pursue leases on two particular RC facilities on which it had paid deposits totaling $4.7 million and concurrently gave notice for the return of the related deposits. In December 2012, GSFS agreed to defer the return of the deposits until April 30, 2013. In March 2013, Clean Coal returned the $4.7 million in deposits plus accrued interest to GSFS.

Pursuant to the Lease Agreement, Clean Coal leased a third RC facility in the first quarter of 2012 to another entity related to GS. Clean Coal leased a fourth RC facility to another third party investor during the third quarter of 2012. All agreements included terms and conditions substantially similar to those applicable to the first two leased RC facilities. On February 28, 2013, Clean Coal sold an RC facility to a new third party investor, bringing the total number of RC facilities leased or sold to five. The structure of the sale was similar to that of the initial leases and provided the buyer with the right to require Clean Coal to repurchase the RC facility for a nominal fee in certain situations. The terms of the sale included $20 million paid immediately to Clean Coal and a combination of fixed and variable payments going forward. An additional $5 million is to be paid to Clean Coal when the buyer receives an applied for PLR from the IRS, which is expected later this year.

In addition to the four leased RC facilities and the fifth RC facility sold to a third party investor, Clean Coal currently operates three additional RC facilities for its own account, resulting in its ability to claim the Section 45 tax credits for the RC produced during those operations. We expect the largest of those facilities to be leased to one of the existing third party investors within the first half of 2013.

With the four leased RC facilities, the fifth RC facility sold to a third party investor and the three RC facilities currently operated by Clean Coal for its own account, there are currently eight RC facilities in routine operations on 15 coal-fired boilers that, in the aggregate, have historically burned more than 20 million tons of coal per year. One of Clean Coal's goals is to process to RC as high a percentage of coal made available to it as possible. During 2012, Clean Coal facilities produced approximately 15 million tons of RC representing over 95% of the coal made available.

Clean Coal plans to retain and operate one or two of the currently operating RC facilities permanently for its own account. Clean Coal's ultimate goal is to retain RC facilities sufficient to claim Section 45 tax credits for one of every five tons of RC produced by all RC facilities going forward. During 2012, the RC facilities operated for Clean Coal's account generated $38.6 million in Section 45 tax credits that can be used to offset future tax expenses of its owners and $157.9 million in revenues from RC sales which were offset by $157.9 million in raw coal costs. ADA's portion of these credits amounted to $16.4 million in 2012. Clean Coal is in negotiations to lease or sell several additional RC facilities and plans to have all RC facilities in operation by the end of 2014 utilizing the CyClean and M-45 technologies.

In those cases where Clean Coal chooses to operate an RC facility for its own account, either on an interim basis or for the long-term, it receives the benefit of the Section 45 tax credits from the RC produced at the facility. As part of those operations Clean Coal purchases raw coal from the utility, refines the raw coal into RC and then sells the RC back to the utility, generally at the same price per ton, recognizing revenue from the RC sale and costs of revenue for the raw coal purchased. These amounts may be significant as the average per ton price for the raw coal purchased and RC sold has historically ranged from $20 to $40 per ton. In those operations Clean Coal also pays, recognizing as an expense, and may also deduct for tax purposes, operational costs, a fee to the utility for coal handling and a fee for the land used to site the RC facility. For the RC facilities that Clean Coal operates for its own account, it incurs operating expenses of approximately $3 per ton of coal treated and generates approximately $7.50 per ton in tax benefits.

In those cases where Clean Coal chooses to lease or sell an RC facility to a third party investor, once the final utility site and the third party investor have been determined, it takes a minimum of six to twelve months to obtain environmental permits for full-time operation, secure necessary approvals from state Public Utility Commissions, and negotiate and complete all necessary contracts. Since the IRS has yet to provide explicit guidance on certain aspects of RC production such as the blending of coal to qualify for Section 45 tax credits, PLRs may be needed from the IRS if requested by the applicable utility or third party investor, which may take several additional months to obtain after formal contracts are completed. We expect that the requesting party will eventually be able to obtain all required PLRs necessary for operating the RC facilities.

Closings of several deals with utilities and tax equity partners for our RC facilities were delayed in 2012 for various reasons, including: permitting, regulatory approval, corporate financial restructuring of third parties involved in some aspect of the transaction, changes in plant ownership, changes and retirements of personnel involved in the negotiations, involvement of additional parties in the transactions, and uncertainties in the tax credit community. As our previous disclosures have indicated, because of the complexities of each RC deal and the number of externalities that are outside our direct control and involvement, there was potential for and we may experience delays beyond our initial estimates of six to twelve months to close the transactions.

We expect that future transactions for RC facilities not presently operating may be either lease or sale transactions with the purchase price payable over time, but that regardless of their form the final transaction structures will provide long-term economic benefits substantially similar to those provided by the prior lease transactions. However, the economics of each facility will be somewhat unique as the revenue and expected margins will differ from one RC facility to another depending upon, among other factors, the size of the power plant that the facility serves, the amount of RC produced at the plant and the expenses incurred, including the cost of chemicals, labor costs, negotiated payments to the utility, upfront prepaid rent payments and royalty payments for the license of certain technologies. As is generally the case in these transactions, the sale or lease of the RC facilities involves a relationship between the utility, a third party investor and Clean Coal. By buying or leasing the RC facility and producing RC, the third party investor becomes the producer of RC, receives the benefit of the annually escalating per ton Section 45 tax credit and is able to deduct depreciation and/or a portion or all of the lease payments. In return it pays, and may also deduct, a fee to the utility for coal handling and land use to site the RC facility and operational costs. In addition, the third party investor pays a mutually agreed combination of fixed and contingent rents or, in certain instances, fixed rents only, to Clean Coal for the lease of the RC facility. In the case of a sale, the overall economics of the payments made are substantially similar to the fixed and/or contingent rents paid under the initial leases. In addition to the site and coal handling payments, the utility receives the benefit of the resulting mercury reductions which have an estimated value of between $1.00-$4.00 per ton of RC burned.

Since its inception, ADA has been considered the primary economic beneficiary of Clean Coal and has consolidated its accounts in our financial statements, but we do not consolidate the accounts of CCSS because NexGen controls the entity pursuant to the operating agreement of the entity. Clean Coal’s total annual contribution to our operating income will ultimately depend on the utilities’ use of coal in the generation of electricity, which use will likely fluctuate over the term of the Section 45 tax credits. In order to maintain our interest in Clean Coal, we are obligated to fund half of its operating costs and capital expenditures.

Status of Remaining RC Facilities

Our goal is to place into full time operations the remaining RC facilities as soon as possible with an expectation that all will be in operation in 2014. For the remaining facilities, there are a number of possible locations all with different sizes and characteristics. As a result, it is difficult to provide explicit guidance at this time as to the timing, location and likelihood of their permanent placement. For example, we are holding five facilities in reserve for placement at five very large potential RC production sites. Each of these sites has its own unique set of circumstances and issues that will likely require some change in operations at the utility or other changes such as technology improvements, switch in coal rank, or obtaining a PLR from the IRS, in order for those facilities to

begin full time operation. In this regard we have made significant progress in expanding the potential target market by extending our RC technologies beyond cyclone boilers and PRB coals. Clean Coal is currently operating two RC facilities using the M-45 technology at plants burning Gulf Coast lignite and one RC facility using the CyClean technology at a plant burning North Dakota lignite. In addition, tests have demonstrated the potential to apply these RC technologies to bituminous coals. Clean Coal has successfully conducted tests on an improvement to the M-45 technology that would potentially make it available for use on different types of pulverized coal ("PC") boilers. The ability to use the M-45 technology on PC boilers would significantly increase the potential market for locations where the RC facilities could be located as PC boilers represent over 80% of the 1,200 electricity generating boilers in the U.S. and there are over 50 plants where it may be possible to treat five to ten million tons of coal per year with a single RC facility. The tax credit rules further ease the transition by allowing us to change the process by which coal is refined and use the RC facilities at plants other than those at which they were originally placed into service. We believe it is possible to have an RC facility operating on a PC unit as early as the third quarter of 2013.

We believe that once all new and existing RC facilities are leased or sold to others and become fully operational, they will achieve an annualized segment rental revenue rate of approximately $200 million; this revenue figure excludes approximately $250 million to $300 million in ongoing coal sales and raw coal purchases for RC facilities that Clean Coal is expected to operate in the long-term for its own account. These revenue rates would be expected to eventually generate approximately $100 million in segment income to the Company after payments to joint venture partners, including an estimated $30 million in tax credits (the Company's share) to be generated by RC facilities operated by Clean Coal. The projected segment revenue and income are expected to continue through 2021.

From now through 2014, we expect leases and sales of new facilities to generate significant cash receipts from prepaid rent and upfront purchase price payments for Clean Coal. For the RC facilities that it operates, Clean Coal will record operating costs, coal sales and costs of coal that may be significant. This will result in increased expenses and revenues over and above the increased revenue recognized from the lease and sale of additional RC facilities and will likely depress the level of gross margin dollars below what we would expect if the RC facilities were not retained.

Emission Control

Many power companies recognize the urgency of the issued and pending environmental regulations, and as a result have either started or will soon begin procuring ACI and DSI systems. We also continue to receive requests to evaluate mercury and acid gas control options at a number of plants. We anticipate seeing additional ACI and DSI revenues as contracts are awarded on the outstanding proposals (see discussion below).

Activated Carbon Injection and Dry Sorbent Injection Systems

Since 2005, we have completed or are in the process of executing awarded projects for over 60 ACI systems intended to control mercury emissions from 69 coal-fired EGU boilers. We anticipate the MATS market will require greater than 400 more ACI systems to be supplied between 2013 and 2015, which would require further scale-up of our production capabilities to maintain our target 35% market share. The ACI and DSI capital equipment we provide for the larger utility coal-boilers generally ranges from approximately $600,000 to $2 million per coal-fired boiler unit and in total we expect the MATS rules to create a market in excess of $1 billion for the combination of ACI and DSI systems. DSI systems, which sell at approximately $1.5 million to $3 million for an average size EGU, provide a low CAPEX alternative to scrubbers for meeting certain provisions of the MATS and CSAPR. The EPA predicts that about 200 DSI systems will be sold by 2015.

In order to meet the expected demand in the ACI and DSI markets, we purchased the assets of Bulk Conveyor in August 2012 in exchange for $2 million in cash and $3 million in notes payable over the next five years as evidenced by two promissory notes of $2.8 million and $200,000, with payment under the larger note guaranteed by ADA.

We believe that several contracts for ACI and DSI systems will be awarded during the remainder of this year, and that the MATS could eventually generate over $300 million in combined sales of ACI and DSI systems for the Company between now and the end of 2015, although there has been some indication that some generators have obtained extensions for MATS compliance, which could result in the consummation of these sales being delayed for an additional one to two years. As an indication of progress in the development of this market, as of the end of February 2013 the Company has active bids on over $125 million for ACI systems and over $160 million for DSI systems.

In early February of 2012, we signed a $2 million contract for a DSI system for a power generator. In November 2012, BCSI signed a contract to supply up to four DSI systems for a group of coal-fired generating plants. This contract has a total value of up to $14 million if the power company elects to purchase all of the contracted systems. The project began generating revenues immediately and deliveries are scheduled over the 15 months following the contract's signing. In addition, we were awarded a large fleet-wide award from a major utility client for a minimum of 10 ACI systems with several others from the same client occurring over the next several months that is expected to be in the $10 million to $20 million range when completed. We started engineering services for this large contract in November and expect to begin making the first system deliveries in the late summer of 2013. In March 2013, we were awarded a contract to supply ACI and DSI systems with a contract value at more than $8.5 million that is scheduled to be delivered in the fourth quarter of 2012 and first quarter of 2013.

Enhanced Coal and License to Arch Coal

Pursuant to the License Agreement we license to Arch Coal certain technology to produce Enhanced Coal, and we also provide Arch Coal with development services aimed at applying the technology to PRB coal. In consideration for this development work and the license provided under the License Agreement, Arch Coal paid us an initial, non-refundable license and development fee in cash totaling $2 million in June 2010 which was recognized as revenue in 2010 and 2011. Under the License Agreement, we are entitled to royalties of as much as $1 per ton of a portion of the premium for Enhanced Coal sold by Arch Coal, depending upon the premium Arch Coal is able to charge on sales of Enhanced Coal. Any royalty ultimately payable under the License Agreement will first be subject to credit to Arch Coal of an amount equal to the initial license fee, other development and operational costs paid by Arch Coal plus a rate of return on such payments.

Subsequent to entering into the License Agreement, on November 1, 2012, we entered into a related Supply Agreement under which Arch Coal will purchase the additives used in conjunction with the technology licensed under the License Agreement exclusively from us, and we will supply Arch Coal with the additives it needs. For customers that prefer to have the coal treatment applied on-site at their plants, the Company will provide the technology directly to the power plants.

CO_2 Capture

In addition to our two key growth areas, RC and EC, we continue to demonstrate our position as a premier developer of innovative clean energy technologies. We expect that CO_2 capture technologies will be required to control CO_2 emissions from coal-fired power plants in the future as a result of the impact of CO_2 emissions on climate change. In the last few years, a number of permits for new coal-fired plants were rejected by various state officials in response to protests by environmental groups. We see this as an opportunity and continue to develop technologies to address the long-term needs of our customers to reduce CO_2 from their existing and new plants.

In 2010 we began the first field tests of our CO_2 control technology on a $3.8 million program co-funded by the DOE, as well as several major forward-thinking utility companies. The initial results at a plant confirmed the promising performance we had demonstrated in our laboratory. The pilot plant was moved to another plant for additional testing. Once captured, the CO_2 could be either stored underground (sequestration) or beneficially used in processes such as enhanced oil recovery. This technology appears to offer potential cost and energy advantages over competing liquid-solvent-based technologies.

In October 2010, we began work on a second major CO_2 project, which is expected to run for a total of 51 months to scale-up the technology to the one-megawatt level, which is a key step in the technology development process. We are the prime contractor for the approximately $20.5 million project (including expected contributions by other industry partners) administered by the DOE's National Energy Technology Laboratory which is providing $15 million of the funding. The project provides funding to advance our commercialization plan for regenerable solid-sorbent technology.

In June 2012, we initiated the fabrication and construction phase for the pilot plant to treat a slipstream of flue gas equivalent to that generated from producing one-megawatt of electricity.

We anticipate that DOE funded CO_2 programs will continue to represent an important component of the revenue stream of the Company over the next several years.

Results of Operations – 2012 versus 2011

Revenues totaled $212.5 million for 2012 versus $53.3 million in 2011, representing an increase of 299%. The increase is due primarily to revenues from operations at the RC facilities we leased to third parties and RC sales from other facilities placed-in-service in 2011 that were operated by Clean Coal in 2012 prior to being leased to third parties. The increase is also due in part to a 47% increase in our EC segment revenues. We expect overall revenues and costs for 2013 to be lower than for 2012 given our plan to sell or lease our RC facilities currently being operated for our own account.

Cost of revenues increased by $163.6 million or 565% in 2012 from 2011 primarily as a result of the costs of raw coal purchased for the RC facilities operated by Clean Coal and the operating costs incurred related to those facilities. In addition, costs increased in the EC segment due to the increased activity in this segment and due to the hiring of additional staff required to meet expected growth.

Gross margins were 9% for the year compared to 46% in 2011. The decrease primarily reflects such increased costs. If the coal sales and raw coal purchases of $157.9 million and operating costs of $20.4 million related to RC produced for Clean Coal's account, which will not continue with respect to any facilities after they are leased or sold, are subtracted from the revenue and costs of revenue amounts reported for 2012, adjusted gross margin would have been 74% for 2012 compared to 80% in 2011. The revenues and cost of revenues for 2011 included coal sales and raw coal purchases of $20 million and operating cost of $2.3 million related to RC produced for Clean Coal's account. Adjusted gross profit margin percentage is a non-GAAP financial measure which is used to provide investors with greater transparency with respect to the effect on gross margin from Clean Coal's operation of certain RC facilities for its own account. We believe this non-GAAP financial measure provides meaningful supplemental information for investors regarding the performance of our business and the effect on gross margin of the operation of these RC facilities by Clean Coal for its own account. For the near term, we expect the lease and sale of RC facilities to represent an increasing source of revenues, for which the anticipated gross margins are higher than our EC and CC segments. As a result, we expect the gross margin for fiscal year 2013 to be higher than the overall margin realized in 2012.

Refined Coal

Revenues in our RC segment totaled $194.9 million in 2012 compared to $40.3 million in 2011, representing an increase of 384%. Rental income from the leased RC facilities totaled $36.9 million in 2012 compared to $20.1 million in 2011. RC coal sales totaled $157.9 million in 2012 compared to $20 million in 2011 as a result of raw coal purchases and RC sales at the RC facilities that Clean Coal operated for its own account.

Clean Coal incurs the operating costs for the RC facilities operated for its own account and retains for its owners the tax credits generated from the approximately 6 million tons produced for its own account during 2012. We expect our quarterly revenues to continue to fluctuate based on seasonal variations in electricity demand as well

as planned and unplanned outages required by the power plants for equipment repair and maintenance. On an ongoing basis, we expect the five RC facilities leased or sold third party investors to generate approximately $55 million to $65 million in revenue per year now through 2021.

Cost of revenues for the RC segment increased by $159 million or 787% for 2012 from 2011. Costs increased due primarily to the cost of coal acquired to operate RC facilities placed-in-service which cost approximates the revenues realized on its sale as noted above. We expect future RC margins for the RC facilities leased or sold to others to be at a level near 95%.

RC segment profits decreased by $3.8 million or 21% for 2012 compared to 2011 primarily as a result of the cost of operating certain RC facilities for our own account and one-time costs incurred as we work through moving the placed-in-service facilities to full-time, long-term operations, offset by the two additional RC facilities leased during the first and third quarters of 2012 and an increase in the
amount of coal burned at the utilities where the leased RC facilities are located due to seasonal changes in demand during the third quarter of 2012. These amounts are prior to the allocation of such profits to the non-controlling interests of Clean Coal.

Emission Control

Revenues in our EC segment totaled $14.6 million in 2012 compared to $10 million in 2011, representing an increase of 47%. The amounts reported for 2012 and 2011 exclude the work ADA has conducted for Clean Coal, as further described below, which was eliminated in our consolidation. Revenues from the EC segment for 2012 were comprised of sales of ACI and DSI systems and services (66%), flue gas chemicals and services (5%) and other services (29%), compared to 42%, 9%, and 49%, respectively, in 2011. We expect our EC segment revenues related to ACI and DSI systems to continue to grow in 2013 when we expect utilities, cement plants and industrial boilers to continue placing orders in response to the MATS and other MACT regulations. We expect our gross margin percentage for our EC segment for 2013 will approximate 20 to 25%.

Our consulting revenues totaled $4.2 million during 2012 compared to $4.9 million in 2011 representing a 14% decrease primarily due to a decrease in the size and scope of our consulting contracts, a result of potential clients deferring work on MATS compliance until 2013. We are continuing with demonstrations and other work related to the MATS and we expect our consulting revenue to continue to be a significant part of EC revenues during 2013 as several customers are seeking alternatives on how best to comply with the MATS.

As of December 31, 2012, we had contracts in progress for work related to our EC segment totaling $25.3 million which we expect to recognize as revenue in 2013 and 2014. Our ACI and DSI systems revenues totaled $9.6 million for 2012 representing an increase of 131% compared to 2011. In the EC segment, we performed work related to RC facilities provided to Clean Coal valued at $2.7 million for year-end 2012, respectively compared to $8.3 million for 2011, which would otherwise be recognized as revenue but was eliminated in the consolidation of Clean Coal. The 2011 amount includes work provided to Clean Coal for the 26 additional RC facilities placed-in-service.

Cost of revenues for the EC segment increased by $4.3 million or 63% in 2012 from 2011, primarily as a result of the increased revenue-generating activities from our ACI and DSI systems sales. Gross margin for the EC segment was 23.8% for 2012 compared to 31% for 2011. The decrease in gross margin from the prior year is primarily a result of a higher percent of work in this segment related to ACI and DSI systems that carry lower margins than our typical consulting work and increased costs related to our ACI and DSI systems activities including hiring additional staff required for expected growth.

EC segment profits decreased by $1.1 million or 79% for 2012 compared to 2011. The decrease was primarily a result of lower margins and overhead costs related to the hiring of additional staff for expected growth as discussed above.

CO_2 Capture

Revenues in our CC segment totaled $3 million in 2012 compared to $3.1 million in 2011 representing a decrease of 2%. We had outstanding DOE contracts, including anticipated industry cost share in progress totaling $12.7 million as of December 31, 2012. We expect to recognize approximately $9.7 million from these contracts in 2013 including participation by other industry partners. We are seeking additional cost share participants for the remaining work under the contracts.

Cost of revenues for the CC segment increased by $292,000 or 15% for 2012 from 2011, primarily from increased activities related to our development of CO_2 capture technology. Gross margin for this segment was 27% in 2012 compared to 38% in 2011. The decrease in gross margin from 2012 to 2011 is due primarily to greater use of subcontractors for which our margins are lower under these contracts. Lower cost share participation from third parties also contributed to higher costs and lower margins. We expect overall gross margins for the CC segment for 2013 to be lower than the levels achieved in 2012, due to our likely share of costs and the mixture of direct and indirect costs (labor versus equipment) associated with this segment.

CC segment profits decreased by $31,000 or 13% for 2012 compared to 2011. As discussed above, the decrease was primarily the result of lower cost share participation by others and greater use of subcontractors as discussed above.

Our contracts with the government are subject to audit by the federal government, which could result in adjustments to previously recognized revenue. Our historical experience with these audits has not resulted in significant adverse adjustments to amounts previously received; however the audits for the years 2005 and later have not been finalized. Revenues recognized from 2005 through 2012 that are subject to government audit totaled approximately $31 million. In addition, we had $12.7 million of remaining unearned amounts under contracts subject to audit as of December 31, 2012. We believe, however, that we have complied with all requirements of the contracts and future adjustments, if any, will likely not be material. In addition, the federal government must appropriate funds on an annual basis to support DOE contracts, and funding is always subject to unknown and uncontrollable contingencies.

Other Items

General and administrative expenses increased by $2.7 million or 15% to $20.2 million in 2012. The increase for the year was primarily due to increased compensation due to our increased sales, marketing, bid and proposal staff and activities, increased occupancy cost from our expanded space and overlap in the approximately five months during which we transitioned out of our old lab and rental space, costs related to the acquisition of Bulk Conveyor’s assets and initiation of activities at the BCSI site, and increases in the staff expense and overhead costs of Clean Coal.

Legal costs decreased $3.1 million or 76% in 2012 compared to 2011. Legal expenses in 2011 resulted primarily from costs related to our legal proceedings and settlements described in prior filings.

We incur research and development (“R&D”) expenses not only on direct activities that we conduct but also by sharing a portion of the costs in the government and industry programs in which we participate. Total R&D expense increased by $679,000 or 30% in 2012 compared to 2011 as a result of increases in EC and CC activities. The increase in total R&D is related to preparing for growth in the delivery of our ACI and DSI systems, as well as our RC activities. We had $311,000 in direct cost share for R&D under DOE related contracts in 2012. Future consolidated research and development expenses, except for those anticipated to be funded by the DOE contracts and others that may be awarded, are expected to be higher in 2013 compared to 2012. We continue to anticipate that our future R&D expenses will grow in direct proportion to DOE funded CO_2 work we perform for the next several years and other technology development we choose to pursue.

Other income totaled $305,000 compared to other income of $2.2 million in 2011 representing an 86% decrease primarily due to notes receivable and other amounts due from NexGen received in 2011. We recognized $2.3 million in expenses related to royalty payments to Norit Americas, Inc. and Norit International N.V. f/k/a Norit N.V. ("Norit") in 2012. We expect that these royalty payments to Norit will amount to between approximately $2 million and $3 million per year for the next several years. We recognized $41.7 million in expenses in 2011 related to legal proceedings and settlements and a $20 million gain from a settlement as discussed in prior filings. We had interest expense of $1.5 million in 2012 compared to $1.6 million in 2011, related primarily to Clean Coal's line of credit agreements and the deferred gain resulting from the tax treatment of the RC facilities leased by Clean Coal during such periods.

The deferred income tax benefit of $10.4 million for December 31, 2011 represents the income tax effect of the sale of the equity interest in Clean Coal to GS in May 2011. The 2011 consolidated financial statements have been restated to include a full valuation allowance against the deferred tax assets as discussed in Note 16 of the notes to the consolidated financial statements.

The net operating loss from continuing operations before income tax benefit (expense) and non-controlling interest was $11.1 million in 2012 compared to $25.2 million in 2011. The decrease in the net operating loss in 2012 is due in large part to the decrease in legal and settlement costs associated with our arbitration and litigation and a decrease in our net loss from unconsolidated entities as a result of the relinquishment of our interest in ADA Carbon Solutions, LLC in the fourth quarter of 2011.

Results of Operations – 2011 versus 2010

Revenues totaled $53.3 million for 2011 versus $22.3 million in 2010, representing an increase of 139%. The change is due primarily to revenues from operations at the RC facilities we leased to a third party and coal sales for new RC placed-in-service facilities plus a 49% increase in our CC segment revenues.

Cost of revenues increased by $20.3 million or 236% in 2011 from 2010 primarily as a result of costs of coal incurred related to demonstration and testing by Clean Coal of new RC facilities. In addition, costs increased in the CC segment due to the increased activity in this segment and in the EC segment due to the hiring of additional staff required to meet expected growth in this segment. Gross margins were 46% for the year compared to 61% in 2010. The decrease primarily reflects such increased costs.

Refined Coal

Revenues in our RC segment totaled $40.3 million in 2011 compared to $10.4 million in 2010, representing an increase of 288%. The two operating RC facilities were placed into routine operations during the second quarter of 2010 and were in operation throughout 2011. In addition to recognition of rental income totaling $20.1 million from the two operating facilities, the current year includes sales of RC totaling $20 million as a result of demonstrating and placing additional RC facilities into service.

Cost of revenues for the RC segment increased by $18.8 million or 1303% for 2011 from 2010. Costs increased in 2011 due primarily to the cost of coal acquired to test new RC facilities which costs approximate the revenues realized on its sale noted above, due to the RC facilities being in operation for a full year, and an increase in activities undertaken to place additional facilities into service.

RC segment profits increased by $10.1 million or 129% for 2011 compared to 2010 as the two facilities were leased for the full year in 2011 and placed in routine operation in the middle of 2010. These amounts are prior to the allocation of such profits to the non-controlling interest of Clean Coal.

Emission Control

Revenues in our EC segment totaled $10 million in 2011 compared to $9.8 million in 2010, representing an increase of 1%. The amounts reported for 2011 and 2010 excludes the work ADA has conducted for Clean Coal, as further described below, which was eliminated in our consolidation. Revenues from the EC segment for 2011 were comprised of sales of ACI systems and services (42%), flue gas chemicals and services (9%) and other services (49%), compared to 56%, 6%, and 38%, respectively, in 2010.

Our consulting revenues increased $1.3 million during 2011 compared to 2010 as a result of continued demonstrations and other work related to recent changes with the MATS and included revenues totaling $1.3 million from our Arch Coal non-refundable license. Our consulting revenues contributed $4.9 million during 2011.

As of December 31, 2011, we had contracts in progress for work related to our EC segment totaling $736,000. Our ACI systems revenues totaled $4.1 million for 2011, representing a decrease of 25% compared to 2010. In the EC segment, we performed work related to RC systems provided to Clean Coal valued at $8.3 million and $3.7 million for the years ended December 31, 2011 and 2010, respectively, which would otherwise be recognized as revenue but was eliminated in the consolidation of Clean Coal. The amounts for 2010 include our participation in the construction and installation of the initial RC facilities. In 2011, Clean Coal utilized a number of third-party resources to construct and install the new RC facilities. However, we provided services toward the construction and installation of 26 facilities in 2011 compared to 2 facilities in 2010.

Cost of revenues for the EC segment increased by $732,000 or 12% in 2011 from 2010, primarily as a result of increased costs related to our ACI systems activities including hiring additional staff required for expected growth. Gross margin for the EC segment was 31% for 2011 compared to 38% for 2010. The decrease in gross margin from the prior year is primarily a result of the increase in costs related to our ACI systems.

EC segment profits decreased by $764,000 or 36% for 2011 compared to 2010. The decrease was primarily a result of costs associated with hiring additional staff required for expected growth in future ACI systems sales.

CO_2 Capture

Revenues in our CC segment totaled $3.1 million in 2011 compared to $2.1 million in 2010 representing an increase of 49%. We had outstanding DOE contracts, including anticipated industry cost share in progress totaling $15.7 million as of December 31, 2011.

Cost of revenues for the CC segment increased by $858,000 or 80% for 2011 from 2010, primarily from increased activities related to our development of $_{CO2}$ capture technology. Gross margin for this segment was 38% in 2011 compared to 49% in 2010. The decrease in gross margin from 2011 to 2010 is due primarily to greater use of subcontractors for which our margins are lower under these projects. Lower cost share participation from third parties also contributed to higher costs and lower margins.

CC segment profits decreased by $654,000 or 73% for 2011 compared to 2010. As discussed above, the decrease was primarily the result of greater use of subcontractors and lower cost share participation by others.

Other Items

General and administrative expenses decreased by $15.3 million or 47% to $17.5 million in 2011. Legal costs decreased $20.4 million or 83% in 2011 primarily due to a decrease in non-routine expenses associated with litigation and settlements which totaled $24.5 million in 2010. This decrease was offset by increases in compensation costs and other general and administrative costs totaling $1.5 million and $3.6 million, respectively, from 2010 which are primarily due to a 46% increase in staff in anticipation of increased business.

We incur research and development ("R&D") expenses not only on direct activities that we conduct but also by sharing a portion of the costs in the government and industry programs in which we participate. Total R&D expense increased by $1.4 million or 151% in 2011 compared to 2010 as a result of increases in RC and CC activities. We incurred $343,000 for direct cost share for R&D under DOE related contracts in 2011. We had no significant direct cost share for R&D under DOE related contracts in 2010. The increase in total R&D is related to preparing for growth in the delivery of our ACI systems, as well as our RC activities.

We had net other income including interest of $2.2 million in 2011 compared to $2.5 million in 2010 related primarily to interest on notes receivable and other amounts received from NexGen. We had interest expense of $1.6 million in 2011 related to the line of credit and deferred gain for income tax purposes on the Clean Coal lease transactions. There was $16,000 in interest expense in 2010. We recognized $42 million in expenses in 2011 related to the Norit matter, and a $20 million gain from the settlement with Carbon Solutions/ECP as discussed below. We recognized a net $6.1 million gain in 2010 related to the settlement with our damage claim against Calgon Carbon Corporation ("Calgon") also as discussed below.

In November 2011, an Indemnity Settlement Agreement was entered into whereby ADA agreed to settle certain indemnity obligations asserted against ADA and relinquished all of its interest in the Carbon Solutions joint venture with ECP. The interest in Carbon Solutions was accounted for under the equity method of accounting and considerable losses had been recorded since its inception in 2008. We recorded the transactions resulting from the Indemnity Settlement Agreement for the satisfaction of the indemnity obligations and the relinquishment of ADA's interest which resulted in a gain of $20 million which is included other income (loss) in the consolidated statements of operations.

ADA's equity in the net loss of Carbon Solutions for 2011 and 2010 totaled $7.2 million and $8.2 million, respectively and is included in other income (expense) in the consolidated statement of operations. The amount is reported net of our equity in the net income of CCSS which amounted to $189,000 and $118,000 for 2011 and 2010, respectively.

The income tax provisions for 2011 and 2010 represent an effective tax benefit (expense) rate of 41% and (35%) for the years ended December 31, 2011 and 2010, respectively. The deferred income tax benefit of $10.4 million for the fiscal year ended December 31, 2011 represents the income tax effect of the sale of the equity interest in Clean Coal to GS in May 2011. Our income tax rate does not include any material amount of Section 45 tax credits from Clean Coal as those tax benefits will primarily be realized by the Lessee under the RC facilities' leases.

The net operating loss from continuing operations before income tax benefit (expense) and non-controlling interest was $25.2 million in 2011 compared to a loss of $20.4 million in 2010. The net operating loss is due in large part to the costs associated with our settlement of litigation involving Norit and our equity in the losses incurred by Carbon Solutions.

Liquidity and Capital Resources

Our principal sources of liquidity are our cash on hand at present and anticipated growing cash flows from RC activities and other operations. We had consolidated cash and cash equivalents totaling $9.7 million at December 31, 2012 compared to consolidated cash and cash equivalents of $40.9 million at December 31, 2011.

At December 31, 2012, we had a working capital deficit of $24.1 million compared to working capital of $1.4 million at December 31, 2011. Included in that December 31, 2012 amount are $21.2 million in deposits and $4.5 million in deferred revenues. Decreases in working capital during 2012 resulted primarily from $10.8 million in capital expenditures related to RC facilities and leasehold improvements, a $2 million payment for the acquisition of assets by BCSI, a $2.5 million payment related to a litigation settlement, a $500,000 loan to CCSS, net repayments of $11.5 million under the Clean Coal line of credit and increased overhead costs related to increases in our staff level to support anticipated growth. These were offset by increases in receivables, securities and prepaid expenses and other assets.

If GSFS determines that it will not lease an RC facility after it has paid the deposit, it can provide notice requesting the return of the deposit paid for that RC facility, and the deposit must be paid within 30 days of the end of the quarter in which the notice is given. In October 2012, GSFS determined that it would not pursue leases on two particular RC facilities on which it had paid deposits totaling $4.7 million and concurrently gave notice for the return of related deposits. In December 2012, GSFS agreed to defer the return of these deposits until April 30, 2013. In March 2013, Clean Coal returned the $4.7 million in deposits plus accrued interest to GSFS.

On February 28, 2013, Clean Coal sold an RC facility to a new third party investor. The terms of the sale included $20 million paid immediately to Clean Coal and a combination of fixed and variable payments going forward. An additional $5 million is to be paid to Clean Coal when the buyer receives an applied for PLR from the IRS, which is expected later this year. Subsequent to receiving the $20 million payment, Clean Coal paid ADA $8 million pursuant to the M-45 License.

Clean Coal has a revolving line of credit with a bank for $15 million that is secured by the equity interests and proceeds related to such equity interests of each subsidiary owned by Clean Coal that expires on March 31, 2013. At December 31, 2012, the line of credit had been fully repaid and no additional borrowings are available under this agreement. In May 2012, an increased commitment note was issued in conjunction with the line of credit for $3 million which is secured by a cash collateral account of $3 million with funds received equally from ADA and NexGen. In December 2012, the agreement was amended to extend the term of that agreement until June 2013. The balance under the agreement at December 31, 2012 totaled $3 million, and the balance was paid in March 2013. In January 2013, the line of credit agreement was amended again to provide an additional $2 million with any borrowings under the amended agreement due on December 31, 2013. Clean Coal has not borrowed any additional amounts pursuant to the $2 million increased commitment.

Our ability to generate the financial liquidity required to meet ongoing operational needs and to meet our obligations will likely depend upon our ability to maintain a significant share of the market for mercury control equipment, the continued operation of the RC facilities leased or sold to third parties to date, success in the sale or lease of additional RC facilities to third party investors and our ability to raise additional financing. We believe, with the lease of four RC facilities to date, and the sale of the fifth RC facility, that we have sufficient working capital to meet the operation needs of the Company for the next 12 months. If GSFS requires the return of its deposits or does not place deposits on additional RC facilities, we may need to seek additional sources of financing to meet those obligations if they became immediately due and payable and/or decide to suspend operations at one or more of the RC facilities that Clean Coal is operating for its own account.

We have recorded long-term liabilities of $2.5 million related to litigation settlement obligations, $2.3 million in notes payable related to the acquisition of assets by BCSI and $809,000 for accrued warranty, deferred revenue and other liabilities as of December 31, 2012. Our stockholders' deficit was $40.1 million as of December 31, 2012 compared to $29.4 million as of December 31, 2011. The increase in stockholders' deficit is primarily due to the net loss and is offset by the net income from the non-controlling interest for 2012.

Clean Coal Related Items

Clean Coal, our joint venture with NexGen, placed two RC facilities into service in 2010 (which were exchanged for two newly constructed, redesigned RC facilities in November and December 2011), which are leased to a third party. In 2012, two RC facilities were leased, one to the lessee of the first two facilities and one to a new third party investor. In addition, in February 2013, a fifth RC facility was sold which Clean Coal had been previously operating for its own account. On an ongoing basis, we expect our five currently leased and sold RC facilities to generate from $55 million to $65 million in revenue per year from now through 2021 based on their operations and periodic payments we expect to receive. We expect by the end of 2013 to have additional RC facilities under lease or sale such that total revenues from these activities will be at a run-rate of over $100 million per year and be at a level of producing pre-tax cash flows of as much as $50 million per year. We would expect those levels to continue through 2021, the present term of the Section 45 tax credit, with an opportunity to

double those amounts by the end of 2014 as we look to have all of our RC facilities operating on a continuous basis and leased or sold by that time. We believe that once all new and existing RC facilities are leased or sold to others and become fully operational, they will achieve an annualized segment rental revenue rate of approximately $200 million; excluding the approximately $250 million to $300 million in ongoing coal sales and raw coal purchases from RC facilities that Clean Coal is expected to operate in the long-term for its own account. These revenue rates would be expected to generate approximately $100 million in segment income to the Company after payments to minority partners, including an estimated $30 million in tax credits apportioned to the Company to be generated by RC facilities operated by Clean Coal.

Other Liquidity and Capital Resource Items

Our trade receivables balance is comprised of both amounts billed to customers as well as unbilled revenues that have been recognized. As of December 31, 2012 our trade receivables balance was $11 million compared to $5.9 million at December 31, 2011. Our trade receivables balance was higher at December 31, 2012 compared to December 31, 2011 primarily due to the nature and timing of billing milestones for our ACI and DSI systems contracts and increased receivables related to our RC activity.

Under our defined contribution and 401(k) retirement plan, we match up to 7% of limited salary amounts deferred by employees in the Plan. During 2012 and 2011, we recognized $413,000 and $349,000, respectively, of matching expense which payment was made with our stock.

We had net current deferred tax assets of $2.3 million and long-term deferred tax assets of $37.2 million as of December 31, 2012 compared to net current deferred tax assets of $2.4 million and long-term deferred tax assets of $16.2 million as of December 31, 2011. The current and long-term amounts for both periods have been reduced to zero by recording a valuation allowance as discussed in Notes 13 and 16 to the consolidated financial statements. Management determined that it was necessary to record the valuation allowance against the Company's deferred tax assets after reconsidering the weight given in the original assessment to the relevant information used to measure the positive and negative evidence regarding the potential for ultimate realization of the net deferred tax assets.

Cash flows used in operations totaled $5 million for 2012 compared to $8 million in 2011. The decrease in operating cash flows primarily resulted from increases in accounts receivable of $5.1 million, prepaid assets and other assets of $1.4 million, accounts payable of $1.6 million, deposits of $6.3 million and deferred revenue and other liabilities of $2.9 million. These increases were offset by a decrease in settlement awards and related accrued liabilities of $3.2 million. These changes in our operating assets and liabilities correspond to the nature and timing of our procurement and billing cycle and development activities. In addition, adjustments related to non-cash operating activities included expenses paid with stock and restricted stock of $541,000, depreciation and amortization of $5.3 million and non-controlling interest in Clean Coal of $1.9 million, each of which increased our cash flow from operations.

Net cash used in investing activities was $13.9 million for 2012 compared to $32.2 million for 2011. The cash used consisted primarily of purchases of equipment, leasehold improvements and RC facility related costs of $10.8 million, purchases of certificates of deposit of $1.1 million and a $2 million payment for the acquisition of Bulk Conveyor's assets by BCSI and reflects significantly higher capital expenditures in 2011 as we worked and spent to meet the year-end placed-in-service deadline for RC facilities.

Cash used in financing activities was $12.2 million in 2012 compared to cash provided by financing activities of $71.4 million in 2011. The cash used consisted of net payments on the line of credit of $11.5 million, distributions by Clean Coal to the non-controlling interest of $106,000 and a loan by ADA to CCSS of $500,000. Among other factors, the decrease in 2012 from 2011 reflected a 2011 sale of stock for proceeds totaling $35.1 million and the one-time receipt of $60 million in 2011 from the sale of our interest in Clean Coal.

We had the following contractual commitments as of December 31, 2012:

	Payment Due by Period				
	Total	2013	2014 and 2015	2016 and 2017	2018 and Beyond
	(in thousands)				
Purchase obligations	$ 6,233	$6,233	$ —	$ —	$—
Operating lease obligations	4,570	477	1,557	1,605	931
Total	$10,803	$6,710	$1,557	$1,605	$931

Off-Balance Sheet Arrangements

We do not have any significant off-balance sheet arrangements except for the operating leases disclosed above and the commitments and contingencies disclosed in Note 10 of our consolidated financial statements contained in Item 8 of this Annual Report.

Critical Accounting Policies and Estimates

Revenue Recognition – We follow the percentage of completion method of accounting for all significant contracts excluding RC leases, government contracts, coal and chemical sales and technology license royalties. The percentage of completion method of reporting income takes into account the estimated costs to complete and estimated gross margin for contracts in progress. RC base rents, which are fixed, are recognized over the life of the lease. RC contingent rents are recognized as they are earned. We recognize revenue on government contracts generally based on the time and expenses incurred to date. Royalties from technology licenses are recognized when earned.

Significant estimates are used in preparation of our financial statements and include:

- our warranty costs;
- our percentage of completion method of accounting for significant long-term contracts, which is based on estimates of gross margins and of the costs to complete such contracts; and
- the period over which we estimate we will earn up-front license payments and;
- estimated future royalty obligations associated with our settlement with Norit.

In addition, amounts invoiced for government contracts are subject to change based on the results of future audits by the federal government. We have not experienced significant adjustments in the past, and we do not expect significant adjustments will be required in the future. We also use our judgment to support the current net book value of goodwill and other intangible assets of $3.9 million in the consolidated balance sheets. Management believes the value of other recorded intangibles is not impaired, although market demand for our products and services could change in the future, which would require a write-down in recorded values. As with all estimates, the amounts described above are subject to change as additional information becomes available, although we are not aware of anything that would cause us to believe that any material changes will be required in the near term.

Under certain contracts we may grant performance guaranties or equipment warranties for a specified period and the achievement of certain plant operating conditions. In the event the equipment fails to perform as specified, we are obligated to correct or replace the equipment. Estimated warranty costs are recorded at the time of sale based on current industry factors. The amount of the warranty liability accrued reflects our best estimate of expected future costs of honoring our obligations under the warranty section of each contract. We believe the accounting estimate related to warranty costs is a critical accounting estimate because changes in it can materially affect net income, it requires us to forecast the amount of equipment that might fail to perform in the future, and it requires a large degree of judgment.

Income taxes are accounted for under the asset and liability approach. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of differences between the carrying amounts of assets and liabilities and their respective tax bases using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the change is enacted. At each reporting date, management reviews deferred tax assets and liabilities and any related valuation allowance and, if necessary, revises them to reflect changed circumstances. In a situation where recent losses have been incurred, the accounting standards require convincing evidence that there will be sufficient future taxable income to realize deferred tax assets. Deferred tax assets have been reduced to zero by a valuation allowance because, in the opinion of management, it is more likely than not that all of the deferred tax assets will not be realized. A change in laws can have a material effect on the amount of income tax we are subject to. We are not aware of anything that would cause us to believe that any material changes will be required in the near term.

We recognize all share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights in our financial statements based upon their respective grant date fair values. Under this standard, the fair value of each employee stock option and employee stock purchase right is estimated on the date of grant using an option pricing model that meets certain requirements. We currently use the Black-Scholes option pricing model to estimate the fair value of our stock options and stock purchase rights. The Black-Scholes model meets the requirements of FASB Topic 718 but the fair values generated by the model may not be indicative of the actual fair values of our equity awards, as it does not consider certain factors important to those awards to employees, such as continued employment and periodic vesting requirements. The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life and risk-free interest rate. We use a historical volatility rate on our stock options. The fair value of our restricted stock is based on the closing market price of our Common Stock on the date of grant. If there are any modifications or cancellations of the underlying securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense. To the extent that we grant additional equity securities to employees or we assume unvested securities in connection with any acquisitions, our stock-based compensation expense will be increased by the additional unearned compensation resulting from those additional grants or acquisitions.

Consolidation of Subsidiaries –Since inception, ADA has been considered the primary economic beneficiary of the joint venture with Clean Coal and, therefore, we have consolidated its accounts with ours.

We hold a 50% interest in CCSS. However, we control only two of the five seats on the board of managers and our equity partner controls the other three seats. Therefore, we believe our 50% interest does not constitute control of CCSS and we have recorded our interest under the equity method.

Recently Issued Accounting Policies

None.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Commodity Price Risk

In the normal course of our business, we are exposed to market risk or price fluctuations related to the goods and services we procure related to our revenue-producing activities. Components of ACI and DSI systems and consulting services, which are or may be significant to such revenue producing activities, have market prices that fluctuate regularly, but not widely. In most cases we can pass such price fluctuations on to our customers. Based on the 2012 procurement of ACI and DSI components and consulting services, a hypothetical 10% increase (or decrease) in the price of such components and consulting services, if such fluctuations could not be passed on to our customers, would result in a pretax loss or gain of $594,000.

Interest Rate Risk

As of December 31, 2012, approximately $2.6 million of the cash and cash equivalents and investments in certificates of deposit were invested in interest-bearing accounts. Clean Coal had available $3 million under an increased commitment note issued in conjunction with their line of credit as of December 31, 2012 with an effective interest rate of 3.35% per annum. A hypothetical change of 10% in the effective interest rate from the year end 2012 rate would not have materially affected our financial statements.

Item 8. Financial Statements and Supplementary Data.

Our Financial Statements can be found at pages F-1 through F-26 of this report.

Index to Financial Statements

Report of Independent Registered Public Accounting Firm F-2

Financial Statements:

ADA-ES, Inc. and Subsidiaries

Consolidated Balance Sheets, December 31, 2012 and 2011 . . . . F-4

Consolidated Statements of Operations, For the Years Ended December 31, 2012, 2011 and 2010 . . . . F-5

Consolidated Statements of Changes in Stockholders' Equity, For the Years Ended December 31, 2012, 2011 and 2010 . . . . F-6

Consolidated Statements of Cash Flows, For the Years Ended December 31, 2012, 2011 and 2010 . . . F-7

Notes to Consolidated Financial Statements F-8

Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management necessarily applied its judgment in assessing the costs and benefits of such controls and procedures, which, by their nature, can provide only reasonable assurance regarding management's control objectives.

Evaluation of Disclosure Controls and Procedures

Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2012 that our disclosure controls and procedures are effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining effective internal control over financial reporting. Internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f))

is defined as a process designed by, or under the supervision of, a company's principal executive and financial officers, or persons performing similar functions, and effected by a company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally acceptable accounting principles and includes those policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

A material weakness is a control deficiency, or combination of control deficiencies, that result in more than a remote likelihood that a material misstatement of annual or interim financial statements will not be prevented or detected. Our management assessed our internal control over financial reporting as of December 31, 2012. Management based its assessment on criteria set forth in the framework in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our management's assessments, we believe that, as of December 31, 2012, our internal control over financial reporting is effective based on those criteria.

EKS&H, LLLP, f/k/a Ehrhardt Keefe Steiner & Hottman, an independent registered public accounting firm, has audited our Consolidated Financial Statements included in this Form 10-K, and as part of the audit, has issued a report, included herein, on the effectiveness of our internal control over financial reporting as of December 31, 2012.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance.

The information required by this item is incorporated by reference from the information contained under the captions "Election of Directors," "Experience and Qualifications of Director Nominees," "Corporate Governance—Director Independence," "Corporate Governance—Board Meetings and Committees," "Corporate Governance—Audit Committee," "Corporate Governance—Nominating and Governance Committee," "Executive Officers," "Corporate Governance—Code of Ethics and Business Conduct" and "Executive Compensation—Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive Proxy Statement for the 2013 Annual Meeting of Shareholders ("2013 Proxy Statement") to be filed within 120 days after the end of our fiscal year ended December 31, 2012.

Item 11. Executive Compensation.

The information required by this item is incorporated by reference from the information contained under the captions "Corporate Governance—Compensation Committee," "Executive Compensation," "Director Compensation" and "Stock Incentive Plans" in our 2013 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this item is incorporated by reference from the information contained under the caption "Security Ownership of Principal Shareholders and Management and Related Stockholder Matters" and "Equity Compensation Plan Information" in our 2013 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence.

The information required by this item is incorporated by reference from the information contained under the captions "Certain Relationships and Related Transactions," "Election of Directors" and "Director Independence" in our 2013 Proxy Statement.

Item 14. Principal Accountant Fees and Services.

The information required by this item is incorporated by reference from the information contained under the captions "Relationship with Independent Certified Public Accountants" and "Audit Committee Approval of Services" in our 2013 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements – see Part II, Item 8, which is incorporated herein by this reference;

(2) Financial Statement Schedules – None required or applicable; and

(3) Exhibits – as described in the following index.

Index to Exhibits

No.	Description
3.1	Amended and Restated Articles of Incorporation of ADA-ES (1)
3.2	Second Amended and Restated Bylaws of ADA-ES (2)
4.1	Form of Specimen Common Stock Certificate (3)
4.2	Intentionally left blank
4.3	Standstill and Registration Rights Agreement between ADA-ES, Inc. and Arch Coal, Inc. dated September 19, 2003 (5)
4.4	Intentionally left blank
4.5	Intentionally left blank
4.6	ADA-ES, Inc. Profit Sharing Retirement Plan Adoption Agreement (8)

No.	Description
4.7	American Funds Distributors, Inc. Nonstandarized 401(K) Plan (9)
4.8	American Funds Distributors, Inc. Defined Contribution Prototype Plan and Trust (10)
4.9	Amended ADA-ES, Inc. Plan Policy Document (11)
4.10	Employer Stock Addendum to Trust Agreement (12)
4.11	Registration Rights Agreement between ADA-ES, Inc. and Arch Coal, Inc. dated March 23, 2010 (13)
4.12	Stockholder Agreement dated July 7, 2003, between ADA-ES, Inc. and Arch Coal, Inc. (14)
10.1	2003 ADA-ES, Inc. Stock Option Plan** (15)
10.2	2003 Stock Compensation Plan #1** (16)
10.3	2003 Stock Compensation Plan #2** (17)
10.4	ADA-ES, Inc. 2004 Executive Stock Option Plan** (18)
10.5	Employment Agreement dated May 1, 1997 between C. Jean Bustard and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) ** (19)
10.6	Employment Agreement dated May 1, 1997 between Michael D. Durham and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) ** (20)
10.7	Employment Agreement dated January 2, 2000 between Mark H. McKinnies and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) ** (21)
10.8	Employment Agreement dated January 1, 2000 between Richard J. Schlager and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) ** (22)
10.9	2004 Stock Compensation Plan #2 and model stock option agreements** (18)
10.10	2004 Directors Stock Compensation Plan #1** (23)
10.11	2005 Directors' Compensation Plan** (24)
10.12	Purchase and Sale Agreement dated as of November 3, 2006 by and among ADA-ES, Inc., NexGen Refined Coal, LLC and Clean Coal Solutions, LLC (f/k/a ADA-NexCoal, LLC). (25)
10.13	Second Amended and Restated Operating Agreement of Clean Coal Solutions, LLC dated May 27, 2011, by and among Clean Coal Solutions, LLC, ADA-ES, Inc., GSFS Investments I Corp. and NexGen Refined Coal, LLC*** (26)
10.14	Employment Agreement dated March 1, 2003 between Sharon M. Sjostrom and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.)** (27)
10.15	Amended and Restated Executive Compensation Plan dated February 22, 2012** (63)
10.16	Amended and Restated 2007 Equity Incentive Plan, dated August 31, 2010** (28)
10.17	Employment Agreement dated November 28, 2005 between Richard Miller and ADA-ES, Inc.** (29)
10.18	Employment Agreement dated January 1, 2008 between Cameron E. Martin and ADA-ES, Inc.** (30)
10.19	Intellectual Property License Agreement between ADA-ES, Inc. and Crowfoot Development, LLC dated October 1, 2008*** (31)

No.	Description
10.20	First Amendment to Purchase and Sale Agreement dated as of October 26, 2009 by and among ADA-ES, Inc., NexGen Refined Coal, LLC and Clean Coal Solutions, LLC (f/k/a ADA-NexCoal, LLC) (32)
10.21	Development and License Agreement with Arch Coal, Inc. dated June 25, 2010*** (33)
10.22	Technology Sublicense Agreement between ADA-ES, Inc., Clean Coal Solutions, LLC and GS RC Investments LLC dated June 29, 2010 (34)
10.23	Agreement to Lease between Clean Coal Solutions, LLC, AEC-NM, LLC, AEC-TH, LLC, and GS RC Investments LLC dated June 29, 2010*** (35)
10.24	Amended and Restated License Agreement between ADA-ES, Inc. and Clean Coal Solutions, LLC dated October 30, 2009 (36)
10.25	US Department of Energy Cooperative Agreement No. DE-FE0004343 “Evaluation of Solid Sorbents as an Industrial Retrofit Technology for Carbon Dioxide Capture”, dated September 30, 2010 (37)
10.26	First Amendment to the Amended and Restated License Agreement between ADA-ES, Inc. and Clean Coal Solutions, LLC dated as of August 4, 2010 (38)
10.28	Amended and Restated 2010 Non-Management Compensation and Incentive Plan**(39)
10.29	Credit Agreement by and between Clean Coal Solutions, LLC and Cobiz Bank (Colorado Business Bank in the State of Colorado) dated as of March 30, 2011 (40)
10.30	Exclusive Right to Lease Agreement dated May 27, 2011 between Clean Coal Solutions, LLC and GSFS Investments I Corp ***(41)
10.31	Class B Unit Purchase Agreement dated May 27, 2011 between Clean Coal Solutions, LLC and GSFS Investments I Corp (42)
10.32	ADA-ES, Inc. Guaranty for the benefit of GSFS Investments I Corp. dated May 27, 2011 (43)
10.33	Contribution Agreement dated May 27, 2011 between ADA-ES, Inc. and NexGen Refined Coal, LLC (44)
10.34	Settlement Agreement by and among ADA-ES, Inc., ADA Environmental Solutions, LLC, Norit Americas, Inc. and Norit International N.V. f/k/a Norit N.V. dated August 29, 2011 (45)
10.35	The First Amendment to the Second Amended and Restated Operating Agreement of Clean Coal Solutions, LLC, by and among Clean Coal Solutions, LLC, ADA-ES, Inc., GSFS Investments I Corp. and NexGen Refined Coal, LLC dated September 9, 2011 (46)
10.36	The Omnibus Amendment and Reaffirmation Agreement between Clean Coal Solutions, LLC and Cobiz Bank (Colorado Business Bank in the State of Colorado) dated September 9, 2011 (47)
10.37	Omnibus Amendment by and among ADA-ES, Inc., Clean Coal Solutions, LLC, AEC-NM, LLC, AEC-TH, LLC and GS RC Investments LLC dated August 10, 2010 (48)
10.38	Exchange Agreement between Clean Coal Solutions, LLC, AEC-NM, LLC and GS RC Investments LLC dated November 21, 2011 ***(49)
10.39	Amendment to Technology Sublicense Agreement between ADA-ES, Inc., GS RC Investments, LLC and Clean Coal Solutions, LLC dated November 21, 2011***(51)
10.40	ADA-ES, Inc. Guaranty for the benefit of GS RC Investments LLC dated November 21, 2011(52)
10.41	Office Building Lease between ADA-ES, Inc. and Ridgeline Technology Center, LLC, dated November 9, 2011(54)

No.	Description
10.42	Amendment #2 to Technology Sublicense Agreement between ADE-ES, Inc, GS RC Investments, LLC and Clean Coal Solutions, LLC dated December 15, 2011(57)
10.43	ADA-ES, Inc. Guaranty for the benefit of GS RC Investments LLC dated December 15, 2011(58)
10.44	Amended and Restated Refined Coal Activities Supplemental Compensation Plan dated November 9, 2011 **(59)
10.45	Amendment No.1 to Intellectual Property License Agreement by and between ADA-ES, Inc. and ADA Carbon Solutions, LLC (f/k/a Crowfoot Development Company, LLC) dated November 28, 2011(60)
10.46	Amendment No. 1 to the ADA-ES, Inc. Amended and Restated 2007 Equity Incentive Plan **(61)
10.47	Amendment to Agreement to Lease among Clean Coal Solutions, LLC, AEC-NM, LLC, AEC-TH, LLC, and GS RC Investments LLC dated May 9, 2011*
10.48	Lease of Space between ADA, ES, Inc. and Highridgeline, LLC dated February 23, 2012(62)
10.49	First Amendment to 2011 Loan and Security Agreement by and between Clean Coal Solutions, LLC and CoBiz Bank (Colorado Business Bank in the State of Colorado) dated as of March 7, 2012(64)
10.50	Second Amendment to 2011 Loan and Security Agreement by and between Clean Coal Solutions, LLC and CoBiz Bank (Colorado Business Bank in the State of Colorado) dated as of May 21, 2012(65)
10.51	M-45 Technology License Agreement between ADA-ES, Inc. and Clean Coal Solutions, LLC dated July 27, 2012***(66)
10.52	Second Amendment to the Second Amended and Restated Operating Agreement of Clean Coal Solutions, LLC by and among ADA-ES, Inc., NexGen Refined Coal, LLC and GSFS Investments I Corp. dated August 1, 2012(67)
10.53	Forms of agreements for use under the ADA-ES, Inc. Amended and Restated 2007 Equity Incentive Plan, as amended(68)
10.54	Third Amendment to 2011 Loan and Security Agreement by and between Clean Coal Solutions, LLC and CoBiz Bank (Colorado Business Bank in the State of Colorado) dated as of November 30, 2012*
21.1	Subsidiaries of ADA-ES, Inc.*
23.1	Consent of EKS&H, LLLP*
31.1	Certification of Chief Executive Officer of ADA-ES, Inc. Pursuant to 17 CFR 240.13a-14(a) or 17 CFR 240.15d-14(a)*
31.2	Certification of Chief Financial Officer of ADA-ES, Inc. Pursuant to 17 CFR 240.13a-14(a) or 17 CFR 240.15d-14(a)*
32.1	Certification of Chief Executive Officer of ADA-ES, Inc. Pursuant to 18 U.S.C Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Certification of Chief Financial Officer of ADA-ES, Inc. Pursuant to 18 U.S.C Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
101	The following financial statements, formatted in XBRL: (i) Consolidated Balance Sheets as of December 31, 2012 and 2011, (ii) Consolidated Statements of Operations for the Years ended December 31, 2012, 2011 and 2010, (iii) Consolidated Statements of Changes in Stockholders' Equity (Deficit) for the Years ended December 31, 2012, 2011 and 2010, (iv) Consolidated Statements of Cash Flows for the Years ended December 31, 2012, 2011 and 2010; and (v) Notes to the Consolidated Financial Statements. The information in Exhibit 101 is "furnished" and not "filed" as provided in Rule 401 of Regulation S-T.

Notes:

* – Filed herewith.

** – Management contract or compensatory plan or arrangement.

*** – Portions of this exhibit have been omitted pursuant to a request for confidential treatment. The non-public information has been separately filed with the Securities and Exchange Commission.

(1) Incorporated by reference to Exhibit 3.1 to the Form 10-QSB for the quarter ended September 30, 2005 filed on November 10, 2005 (File No. 000-50216).

(2) Incorporated by reference to Exhibit 3.2 to the Form 10-Q for the quarter ended September 30, 2010 filed on November 12, 2010 (File No. 000-50216).

(3) Incorporated by reference to Exhibit 4.1 to the Form 8-K dated October 21, 2005 filed on October 26, 2005 (File No. 000-50216).

(4) Intentionally left blank

(5) Incorporated by reference to the same numbered Exhibit to the Form 10-KSB for the year ended December 31, 2005 filed on March 30, 2006 (File No. 000-50216).

(6) Intentionally left blank

(7) Intentionally left blank

(8) Incorporated by reference to Exhibit 4.1 to the form S-8 filed on June 3, 2009 (File No. 333-159715).

(9) Incorporated by reference to Exhibit 4.1 to the form S-8 filed on June 3, 2009 (File No. 333-159715).

(10) Incorporated by reference to Exhibit 4.2 to the form S-8 filed on June 3, 2009 (File No. 333-159715).

(11) Incorporated by reference to Exhibit 4.9 to the Form 10-K for the year ended December 31, 2010 filed on March 28, 2011 (File No. 000-50216).

(12) Incorporated by reference to Exhibit 4.4 to the form S-8 filed on June 3, 2009 (File No. 333-159715).

(13) Incorporated by reference to Exhibit 4.1 to the Form 10-Q for the quarter ended March 31, 2010 filed on May 13, 2010 (File No. 000-50216).

(14) Incorporated by reference to Exhibit 4.12 to the Form 8-K dated September 9, 2011 filed on September 14, 2011 (File No. 000-50216).

(15) Incorporated by reference to Exhibit 10.2 to the Form 10-KSB for the year ended December 31, 2005 filed on March 30, 2006 (File No. 000-50216).

(16) Incorporated by reference to Exhibit 99.2 to the Form S-8 filed on November 14, 2003 (File No. 333-110479).

(17) Incorporated by reference to Exhibit 99.1 to the Form S-8 filed on February 6, 2004 (File No. 333-112587).

(18) Incorporated by reference to Exhibit 99.3 to the Form S-8 filed on December 14, 2004 (File No. 333-121234).

(19) Incorporated by reference to Exhibit 10.23 to the Form 10-KSB for the year ended December 31, 2004 filed on March 30, 2005 (File No. 000-50216).

(20) Incorporated by reference to Exhibit 10.24 to the Form 10-KSB for the year ended December 31, 2004 filed on March 30, 2005 (File No. 000-50216).

(21) Incorporated by reference to Exhibit 10.25 to the Form 10-KSB for the year ended December 31, 2004 filed on March 30, 2005 (File No. 000-50216).

(22) Incorporated by reference to Exhibit 10.26 to the Form 10-KSB for the year ended December 31, 2004 filed on March 30, 2005 (File No. 000-50216).

(23) Incorporated by reference to Exhibit 99.1 to the Form S-8 filed on April 16, 2004 (File No. 333-114546).

(24) Incorporated by reference to Exhibit 10.29 to the Form 10-KSB for the year ended December 31, 2005 filed on March 30, 2006 (File No. 000-50216).

(25) Incorporated by reference to Exhibit 10.3 to the Form 10-Q for the quarter ended September 30, 2006 filed on November 8, 2006 (File No. 000-50216).

(26) Incorporated by reference to Exhibit 10.33 to the Form 10-Q/A for the quarter ended June 30, 2010 filed on September 28, 2011 (File No. 000-50216).

(27) Incorporated by reference to Exhibit 10.34 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).

(28) Incorporated by reference to Exhibit 10.79 to the Form 10-Q for the quarter ended September 30, 2010 filed on November 12, 2010 (File No. 000-50216).
(29) Incorporated by reference to Exhibit 10.39 to the Form 10-K for the year ended December 31, 2007 filed on March 14, 2008 (File No. 000-50216).
(30) Incorporated by reference to Exhibit 10.43 to the Form 10-K for the year ended December 31, 2007 filed on March 14, 2008 (File No. 000-50216).
(31) Incorporated by reference to Exhibit 10.56 to the Form 10-Q for the quarter ended September 30, 2008 filed on November 07, 2008 (File No. 000-50216).
(32) Incorporated by reference to Exhibit 10.64 to Form 10-K for the year ended December 31, 2009 filed on March 29, 2010 (File No. 000-50216).
(33) Incorporated by reference to Exhibit 10.71 to the Form 10-Q for the quarter ended June 30, 2010 filed on August 16, 2010 (File No. 000-50216).
(34) Incorporated by reference to Exhibit 10.74 to the Form 10-Q for the quarter ended June 30, 2010 filed on August 16, 2010 (File No. 000-50216).
(35) Incorporated by reference to Exhibit 10.76 to the Form 10-Q for the quarter ended June 30, 2010 filed on August 16, 2010 (File No. 000-50216).
(36) Incorporated by reference to Exhibit 10.77 to the Form 10-Q for the quarter ended June 30, 2010 filed on August 16, 2010 (File No. 000-50216).
(37) Incorporated by reference to Exhibit 10.80 to the Form 10-Q for the quarter ended September 30, 2010 filed on November 12, 2010 (File No. 000-50216).
(38) Incorporated by reference to Exhibit 10.81 to the Form 10-K for the year ended December 31, 2010 filed on March 28, 2011 (File No. 000-50216).
(39) Incorporated by reference to Exhibit 10.31 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(40) Incorporated by reference to Exhibit 10.83 to the Form 10-Q for the quarter ended March 31, 2011 filed on May 13, 2011 (File No. 000-50216).
(41) Incorporated by reference to Exhibit 10.84 to the Form 10-Q/A for the quarter ended June 30, 2011 filed on September 28, 2011 (File No. 000-50216).
(42) Incorporated by reference to Exhibit 10.85 to the Form 10-Q/A for the quarter ended June 30, 2011 filed on September 28, 2011 (File No. 000-50216).
(43) Incorporated by reference to Exhibit 10.86 to the Form 10-Q for the quarter ended June 30, 2011 filed on August 12, 2011 (File No. 000-50216).
(44) Incorporated by reference to Exhibit 10.87 to the Form 10-Q for the quarter ended June 30, 2011 filed on August 12, 2011 (File No. 000-50216).
(45) Incorporated by reference to Exhibit 10.88 to the Form 10-Q for the quarter ended September 30, 2011 filed on November 14, 2011 (File No. 000-50216).
(46) Incorporated by reference to Exhibit 10.89 to the Form 10-Q for the quarter ended September 30, 2011 filed on November 14, 2011 (File No. 000-50216).
(47) Incorporated by reference to Exhibit 10.90 to the Form 10-Q for the quarter ended September 30, 2011 filed on November 14, 2011 (File No. 000-50216).
(48) Incorporated by reference to Exhibit 10.91 to the Form 8-K dated November 21, 2011 filed November 22, 2011 (File No. 000-50216).
(49) Incorporated by reference to Exhibit 10.41 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(50) Intentionally left blank.
(51) Incorporated by reference to Exhibit 10.43 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(52) Incorporated by reference to Exhibit 10.44 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(53) Intentionally left blank.
(54) Incorporated by reference to Exhibit 10.46 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).

(55) Intentionally left blank.
(56) Intentionally left blank.
(57) Incorporated by reference to Exhibit 10.49 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(58) Incorporated by reference to Exhibit 10.50 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(59) Incorporated by reference to Exhibit 10.51 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(60) Incorporated by reference to Exhibit 10.52 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(61) Incorporated by reference to Exhibit 10.53 to the Form 10-K for the year ended December 31, 2011 filed on March 15, 2012 (File No. 000-50216).
(62) Incorporated by reference to Exhibit 10.54 to the Form 10-Q for the quarter ended March 30, 2012 filed on May 10, 2012 (File No. 000-50216).
(63) Incorporated by reference to Exhibit 10.55 to the Form 10-Q for the quarter ended March 30, 2012 filed on May 10, 2012 (File No. 000-50216).
(64) Incorporated by reference to Exhibit 10.56 to the Form 10-Q for the quarter ended March 30, 2012 filed on May 10, 2012 (File No. 000-50216).
(65) Incorporated by reference to Exhibit 10.57 to the Form 10-Q for the quarter ended June 30, 2012 filed on August 9, 2012 (File No. 000-50216).
(66) Incorporated by reference to Exhibit 10.58 to the Form 10-Q for the quarter ended September 30, 2012 filed on November 9, 2012 (File No. 000-50216).
(67) Incorporated by reference to Exhibit 10.59 to the Form 10-Q for the quarter ended September 30, 2012 filed on November 9, 2012 (File No. 000-50216).
(68) Incorporated by reference to Exhibit 10.61 to the Form 10-Q for the quarter ended September 30, 2012 filed on November 9, 2012 (File No. 000-50216).

(b) See (a)(3) above.
(c) See (a)(2) above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ADA-ES, Inc.
(Registrant)

By /s/ Mark H. McKinnies
Mark H. McKinnies, Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)

Date: March 18, 2013

By /s/ Michael D. Durham
Michael D. Durham
President (Chief Executive Officer)

Date: March 18, 2013

Pursuant to the requirements of the Exchange Act, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

By /s/ Robert E. Shanklin
Robert E. Shanklin, Director
Date: March 18, 2013

By /s/ Walter P. Marcum
Walter P. Marcum, Director
Date: March 18, 2013

By /s/ Jeffrey C. Smith
Jeffrey C. Smith, Director
Date: March 18, 2013

By /s/ Michael D. Durham
Michael D. Durham, Director
Date: March 18, 2013

By /s/ Mark H. McKinnies
Mark H. McKinnies, Director
Date: March 18, 2013

By /s/ Ronald B. Johnson
Ronald B. Johnson, Director
Date: March 18, 2013

By /s/ Robert N. Caruso
Robert N. Caruso, Director
Date: March 18, 2013

By /s/ Richard Swanson
Richard Swanson, Director
Date: March 18, 2013

By /s/ Alan Bradley Gabbard
Alan Bradley Gabbard, Director
Date: March 18, 2013

By /s/ Kim B. Clarke
Kim B. Clarke, Director
Date: March 18, 2013

By /s/ Derek C. Johnson
Derek C. Johnson, Director
Date: March 18, 2013

INDEX TO FINANCIAL STATEMENTS

	PAGE
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets – December 31, 2012 and 2011	F-4
Consolidated Statements of Operations – For the Years Ended December 31, 2012, 2011 and 2010	F-5
Consolidated Statements of Changes in Stockholders' Deficit – For the Years Ended December 31, 2012, 2011 and 2010	F-6
Consolidated Statements of Cash Flows – For the Years Ended December 31, 2012, 2011 and 2010	F-7
Notes to Consolidated Financial Statements	F-8

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
ADA-ES, Inc. and Subsidiaries
Littleton, Colorado

We have audited the accompanying consolidated balance sheets of ADA-ES, Inc. and subsidiaries (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2012. We also have audited the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management Report on Internal Control over Financial Reporting included in Item 9A. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control, based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: 1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; 2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and 3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of ADA-ES, Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, ADA-ES, Inc. and Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ EKS&H LLLP

March 18, 2013
Denver, Colorado

ADA-ES, Inc. and Subsidiaries
Consolidated Balance Sheets
December 31, 2012 and 2011

(Amounts in thousands, except share data)

	2012	2011
ASSETS		
Current Assets		
Cash and cash equivalents	$ 9,737	$ 40,879
Receivables, net of allowance for doubtful accounts	11,025	5,914
Investment in securities	1,641	508
Prepaid expenses and other assets	2,888	1,532
Total current assets	25,291	48,833
Property and Equipment, at cost	53,542	41,771
Less accumulated depreciation and amortization	(8,931)	(4,651)
Net property and equipment	44,611	37,120
Investment in unconsolidated entity	1,850	590
Other assets	3,997	931
Total other assets	5,847	1,521
Total Assets	**$ 75,749**	**$ 87,474**
LIABILITIES, TEMPORARY EQUITY AND STOCKHOLDERS' DEFICIT		
Current Liabilities		
Accounts payable	$ 6,615	$ 8,849
Accounts payable to related parties	5,082	1,209
Accrued payroll and related liabilities	2,569	2,545
Line of credit	3,000	10,873
Current portion of notes payable	559	—
Deposits	21,200	14,900
Deferred revenue and other liabilities	6,919	5,105
Settlement awards and related accrued liabilities	3,453	3,983
Total current liabilities	49,397	47,464
Long-term Liabilities		
Line of credit	—	3,624
Long-term portion of notes payable	2,305	—
Settlement awards and indemnity liability	2,500	5,200
Deferred revenue	875	—
Accrued warranty and other liabilities	809	632
Total long-term liabilities	6,489	9,456
Total Liabilities	55,886	56,920
Commitments and Contingencies (Note 10)		
Temporary Equity - Non-controlling Interest Subject to Possible Redemption	60,000	60,000
Stockholders' Deficit		
ADA-ES, Inc. stockholders' deficit		
Preferred stock: 50,000,000 shares authorized, none outstanding	—	—
Common stock: no par value, 50,000,000 shares authorized, 10,028,269 and 9,996,144 shares issued and outstanding at December 31, 2012 and 2011, respectively	63,724	63,184
Accumulated deficit	(79,765)	(66,694)
Total ADA-ES, Inc. stockholders' deficit	(16,041)	(3,510)
Non-controlling interest	(24,096)	(25,936)
Total Stockholders' Deficit	(40,137)	(29,446)
Total Liabilities, Temporary Equity and Stockholders' Deficit	**$ 75,749**	**$ 87,474**

See accompanying notes.

ADA-ES, Inc. and Subsidiaries
Consolidated Statements of Operations
For the Years Ended December 31, 2012, 2011 and 2010

(*Amounts in thousands, except per share data*)

	2012	2011	2010
Revenues			
Refined coal	$194,900	$ 40,253	$ 10,383
Emission control	14,603	9,967	9,825
CO_2 capture	3,020	3,096	2,073
Total revenues	212,523	53,316	22,281
Cost of Revenues			
Refined coal	179,204	20,201	1,440
Emission control	11,135	6,839	6,107
CO_2 capture	2,216	1,924	1,066
Total cost of revenues	192,555	28,964	8,613
Gross Margin before Depreciation and Amortization	19,968	24,352	13,668
Other Costs and Expenses			
General and administrative	20,151	17,468	32,790
Research and development	2,968	2,289	911
Depreciation and amortization	5,277	1,568	917
Total expenses	28,396	21,325	34,618
Operating Income (Loss)	(8,428)	3,027	(20,950)
Other Income (Expense)			
Net equity in net income (loss) from unconsolidated entities	760	(6,967)	(8,037)
Other income including interest	305	2,218	2,510
Interest expense	(1,461)	(1,584)	(16)
Settlement of litigation and arbitration award, net	(2,301)	(21,932)	6,072
Total other income (expense)	(2,697)	(28,265)	529
Loss from Continuing Operations Before Income Tax Benefit and Non-controlling Interest	(11,125)	(25,238)	(20,421)
Income Tax Benefit (Expense)	—	10,400	(7,093)
Net Loss Before Non-controlling Interest	(11,125)	(14,838)	(27,514)
Non-controlling Interest	(1,946)	(7,981)	(3,613)
Net Loss Attributable to ADA-ES, Inc.	**$ (13,071)**	**$(22,819)**	**$(31,127)**
Net Loss Per Common Share – Basic and Diluted Attributable to ADA-ES, Inc.	$ (1.31)	$ (2.85)	$ (4.21)
Weighted Average Common Shares Outstanding	10,013	8,020	7,393
Weighted Average Diluted Common Shares Outstanding	10,013	8,020	7,393

See accompanying notes.

ADA-ES, Inc. and Subsidiaries
Consolidated Statements of Changes in Stockholders' Equity (Deficit)
For the Years Ended December 31, 2012, 2011 and 2010

(Amounts in thousands, except share data)

	Common Stock		Accumulated	Total ADA-ES Stockholders' Equity	Non-controlling	Total Equity
	Shares	Amount	Deficit	(Deficit)	Interest	(Deficit)
Balances, December 31, 2009	**7,093,931**	**$ 37,000**	**$(12,748)**	**$ 24,252**	**$ 99**	**$ 24,351**
Stock-based compensation	214,089	1,024	—	1,024	—	1,024
Issuance of stock to 401(k) plan	45,106	282	—	282	—	282
Issuance of stock for cash	143,885	1,000	—	1,000	—	1,000
Issuance of stock on exercise of options	41,850	347	—	347	—	347
Equity contributions by non-controlling interest	—	—	—	—	2,090	2,090
Distributions to non-controlling interest	—	—	—	—	(3,767)	(3,767)
Expense of stock issuance and registration	—	(26)	—	(26)	—	(26)
Net income (loss)	—	—	(31,127)	(31,127)	3,613	(27,514)
Balances, December 31, 2010	**7,538,861**	**$ 39,627**	**$(43,875)**	**$ (4,248)**	**$ 2,035**	**$ (2,213)**
Stock-based compensation	114,582	786	—	786	—	786
Issuance of stock to 401(k) plan	27,769	349	—	349	—	349
Issuance of stock for cash	2,300,000	35,075	—	35,075	—	35,075
Issuance of stock on exercise of options	14,932	106	—	106	—	106
Income tax impact of sale of temporary equity in joint venture	—	(10,400)	—	(10,400)	—	(10,400)
Equity contributions by non-controlling interest	—	—	—	—	250	250
Distributions to non-controlling interest	—	—	—	—	(36,202)	(36,202)
Expense of stock issuance and registration	—	(2,359)	—	(2,359)	—	(2,359)
Net income (loss)	—	—	(22,819)	(22,819)	7,981	(14,838)
Balances, December 31, 2011	**9,996,144**	**$ 63,184**	**$(66,694)**	**$ (3,510)**	**$(25,936)**	**$(29,446)**
Stock-based compensation	10,716	128	—	128	—	128
Issuance of stock to 401(k) plan	19,443	413	—	413	—	413
Issuance of stock on exercise of options	1,966	21	—	21	—	21
Distributions to non-controlling interest	—	—	—	—	(106)	(106)
Expense of stock issuance and registration	—	(22)	—	(22)	—	(22)
Net income (loss)	—	—	(13,071)	(13,071)	1,946	(11,125)
Balances, December 31, 2012	**10,028,269**	**$ 63,724**	**$(79,765)**	**$(16,041)**	**$(24,096)**	**$(40,137)**

See accompanying notes.

ADA-ES, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2012, 2011 and 2010

(Amounts in thousands)

	2012	2011	2010
Cash Flows from Operating Activities			
Net loss	$(13,071)	$(22,819)	$(31,127)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	5,277	1,568	917
Deferred tax (benefit) expense	—	(10,400)	7,093
Loss on disposal of assets	46	37	—
Provision for doubtful accounts	(5)	—	(7)
Expenses paid with stock, restricted stock and stock options	541	1,135	1,306
Net equity in net (income) loss from unconsolidated entities	(760)	6,967	8,037
Non-cash gain from joint venture partner	—	—	(1,768)
Non-cash gain from indemnity claim settlement	—	(20,034)	—
Non-controlling interest in income from subsidiaries	1,946	7,981	3,613
Changes in operating assets and liabilities:			
Receivables, net	(5,106)	3,152	(3,247)
Prepaid expenses and other assets	(1,368)	(1,258)	289
Accounts payable	1,639	6,412	(1,666)
Accrued payroll, expenses and other related liabilities	(34)	693	1,274
Deposits	6,300	14,900	—
Deferred revenue and other liabilities	2,867	(4,578)	6,412
Settlement awards and related accrued liabilities	(3,230)	3,983	—
Accrued indemnity liabilities	—	4,288	20,589
Net cash provided by (used in) operating activities	(4,958)	(7,973)	11,715
Cash Flows from Investing Activities			
Investment in securities	(1,133)	(3)	(105)
Acquistion of of assets of consolidated entity	(2,000)	—	—
Proceeds from sale of property and equipment	35	—	—
Principal payments received on notes receivable	—	1,580	188
Capital expenditures for equipment, patents and development projects	(10,846)	(33,788)	(2,919)
Cash paid for equity contributions to unconsolidated entity	—	—	(283)
Net cash used in investing activities	(13,944)	(32,211)	(3,119)
Cash Flows from Financing Activities			
Net borrowings (repayments) under line of credit	(11,497)	14,497	—
Loan to unconsolidated entity	(500)	—	—
Non-controlling interest equity contributions	—	250	2,090
Distributions to non-controlling interest	(106)	(36,202)	(3,767)
Exercise of stock options	21	106	347
Sale of temporary equity in joint venture	—	60,000	—
Issuance of common stock	—	35,075	1,000
Repayments of notes payable	(136)	—	—
Stock issuance and registration costs	(22)	(2,359)	(26)
Net cash provided by (used in) financing activities	(12,240)	71,367	(356)
Increase (Decrease) in Cash and Cash Equivalents	(31,142)	31,183	8,240
Cash and Cash Equivalents, beginning of period	40,879	9,696	1,456
Cash and Cash Equivalents, end of period	**$ 9,737**	**$ 40,879**	**$ 9,696**
Supplemental Cash Flow Disclosure			
Stock and stock options issued for services	$ 541	$ 1,135	$ 1,306
Cash paid for interest	$ 1,551	$ 1,311	$ 24
Notes payable related to acquisition of intangible assets of consolidated entity	$ 3,000	$ —	$ —

See accompanying notes.

Notes to Consolidated Financial Statements

1. **Summary of Nature of Operations and Significant Accounting Policies**

Nature of Operations – ADA-ES, Inc. ("ADA"), its direct and indirect wholly-owned subsidiaries, Advanced Emissions Solutions, Inc., a Delaware corporation ("ADES") and ADA Intellectual Property, LLC, a Colorado limited liability company ("ADA IP") both of which had no operations in 2012, BCSI, LLC, a Delaware limited liability company ("BCSI"), ADA Environmental Solutions, LLC, a Colorado limited liability company ("ADA LLC") and ADA's joint venture interest in Clean Coal Solutions, LLC ("Clean Coal") are collectively referred to as the "Company". The Company is principally engaged in providing environmental technologies and specialty chemicals to the coal-burning electric power generation industry. The Company generates a substantial part of its revenue from the sale of refined coal ("RC"), the sale of Activated Carbon Injection ("ACI") and Dry Sorbent Injection ("DSI") systems, contracts co-funded by the government and industry and the development and lease or sale of equipment for the RC market. The Company's sales occur principally throughout the United States.

Principles of Consolidation – The consolidated financial statements include the accounts of ADA, ADES, ADA IP, BCSI, ADA LLC and Clean Coal and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Cash and Cash Equivalents – The Company considers all highly liquid debt instruments with purchased maturities of three months or less to be cash equivalents. The Company maintains the majority of its cash in certificates of deposit and money market accounts. The amount on deposit at December 31, 2012 was held in three commercial banks and deposits were in excess of the insurance limits of the Federal Deposit Insurance Corporation.

Receivables and Credit Policies – Trade receivables are uncollateralized customer obligations due under normal trade terms requiring payment within 30-45 days from the invoice date. Management reviews trade receivables periodically and reduces the carrying amount by a valuation allowance that reflects management's best estimate of the amount that may not be collectible. The balance was as follows:

	As of December 31,	
	2012	2011
	(in thousands)	
Receivables balance	$ 9,217	$4,919
Unbilled revenues balance	1,808	995
Total	$11,025	$5,914

Patents – Intangible assets include patents and are included in other assets in the consolidated balance sheets.

	As of December 31,	
	2012	2011
	(in thousands)	
Cost of patents	$562	$436
Less accumulated amortization	(93)	(82)
Total	$469	$354

	Year ended December 31,		
	2012	2011	2010
	(in thousands, except years)		
Amortization expense of intangible assets for the year	$12	$11	$10
Amortization life in years of patents	17	17	17
Anticipated annual amortization expense over the next five years	$11		
Weighted average amortization period in years	11		

Goodwill – The Company reviews the recoverability of goodwill at least annually as of December 31 and any time business conditions indicate a potential change in recoverability. During 2012, 2011 and 2010, we did not recognize any goodwill impairment charges.

Investments – Investments in securities represent certificates of deposit which are recorded at fair value. All of these certificates of deposit are pledged as security for letters of credit in the same amount as the investments.

Investment in Unconsolidated Entity – On January 20, 2010, the Company, together with NexGen Resources Corporation ("NexGen"), formed Clean Coal Solutions Services, LLC ("CCSS") for the purpose of operating the RC facilities leased or sold to third parties. The Company has a 50% ownership interest in CCSS (but does not control it) and accordingly has accounted for the investment under the equity method of accounting. The Company evaluates this investment annually for other than temporary declines in value. At December 31, 2012 and 2011, no such declines existed on this investment.

Property and Equipment – Property and equipment is stated at cost. Depreciation on assets is provided using the straight-line method based on estimated useful lives ranging from three to ten years. Maintenance and repairs are charged to operations as incurred and maintenance and repair of the leased RC facilities are the responsibility of CCSS under agreements with the lessee or owners of the facilities. When assets are retired, or otherwise disposed of, the property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is credited or charged to income.

Leasehold Improvements – Leasehold improvements are recorded at cost and included with property and equipment. Amortization expense is computed using the straight-line method over the shorter of the estimated useful lives of the assets or the period of the related lease.

Warranty Costs – Under certain ACI and DSI systems contracts, the Company may grant performance guaranties for a specified period and the achievement of certain system operating conditions. In the event the equipment fails to perform as specified, the Company is obligated to correct or replace the equipment. Estimated warranty costs are recorded at the time of sale based on current experience factors.

Impairment of Long-Lived Assets (other than Goodwill) – The Company performs an evaluation of the recoverability of the carrying value of its long-lived assets to determine if facts and circumstances indicate that the carrying value of assets or intangible assets may be impaired and if any adjustment is warranted. There were no indicators of impairment for 2012, 2011 and 2010.

Fair Value of Financial Instruments – The carrying amounts of financial instruments, including cash, cash equivalents, accounts receivable, line of credit, accounts payable, deposits and accrued expenses approximate fair value due to the short maturity of these instruments.

Revenue Recognition – The Company follows the percentage of completion method of accounting for all significant contracts which have a fixed contract price excluding government contracts and coal and chemical sales. The percentage of completion method of reporting income takes into account the percent of work completed and overall revenue for contracts in progress. The Company recognizes revenue on government contracts based on the time and expenses incurred to date.

	As of December 31,	
	2012	2011
	(in thousands)	
Costs in excess of billings included in accounts receivable, net	$1,623	$452
Billings in excess of recognized income included in deferred revenue	$3,730	$173

RC revenues are recognized when RC production and coal sales occur and when rental income has been earned. Chemical sales are recognized when products are shipped to customers. Based upon historical trends no reserve has been established for any returns. RC is typically produced by adding proprietary chemicals to coal at the customer's site and title passes to the customer when the production process is complete. RC rental income is generally comprised of two components; the fixed component is earned with the passage of time and the contingent component is earned upon the production of RC. Chemicals are shipped FOB shipping point and title passes to the customer when the chemicals are shipped. The Company's sales agreements for chemicals do not contain a right of inspection or acceptance provision and products are generally received by customers within one day of shipment. The Company has had no significant history of non-acceptance, or of replacing goods damaged or lost in transit.

Consulting revenue is recognized as services are performed and collection is assured.

Cost of Revenues – Costs of revenues include all labor, fringe benefits, subcontract labor, chemical and coal costs, materials, equipment, supplies and travel costs directly related to the Company's production of revenue.

General and Administrative – General and administrative costs include personnel related fringe benefits, sales and administrative staff labor costs, legal expenses, facility costs and other general costs of conducting business.

Penalties and Interest Costs – Under certain circumstances, the Company might have a penalty or interest charge that is classified as an expense and is shown in our general and administrative costs. The cost is charged in the period the Company was notified of the charge.

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Penalty and interest costs	$9	$35	$1

Research and Development Costs – Research and development costs are charged to operations in the period incurred.

Income Taxes – The Company accounts for income taxes under the liability method whereby deferred tax assets and liabilities are determined based on tax rates and laws enacted as of the date of the consolidated balance sheets. A valuation allowance is provided if and when deferred tax assets are not expected to be realized. At each reporting date, management reviews deferred tax assets and liabilities and any related valuation allowance and, if necessary, revises them to reflect changed circumstances. In a situation where recent losses have been incurred, the accounting standards require convincing evidence that there will be sufficient future taxable income to realize deferred tax assets. Clean Coal is a flow-through tax entity and therefore the owners are taxed or receive tax benefits based on their respective ownership interests.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position.

Net Loss Per Share – Basic EPS is calculated by dividing the loss available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted EPS is calculated using the same numerator as basic EPS and further reflects the potential dilution that could occur if outstanding stock options were exercised. No stock options were included in the calculations for 2012, 2011 or 2010 as their inclusion would be anti-dilutive due to the Company's net loss per share for those periods.

Stock-Based Compensation –The Company records equity compensation to employees at its estimated fair value.

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Stock based compensation before tax	$ 541	$1,135	$1,306
Stock based compensation after tax	$ 340	$ 714	$ 833
Basic and diluted loss per share	$(0.04)	$ (0.09)	$ (0.11)

Use of Estimates – The preparation of the Company's consolidated financial statements in conformity with generally accepted accounting principles requires the Company's management to make estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. Actual results could differ from those estimates.

The Company makes significant assumptions concerning:

- the impairment or lack thereof of and the remaining realizability of its long-lived assets including equity method investments, goodwill and intangibles;
- estimates of certain overhead and other rates on research contracts with the U.S. Government, which are subject to future audits;
- fair value of stock options;
- warranty costs;
- estimated future royalty obligations associated with our settlement with Norit Americas, Inc. ("Norit");
- the percentage of completion method of accounting for significant long-term fixed price contracts, which is based on estimates of gross margins and of the costs to complete such contracts;
- the deferred tax assets expected to be realized in future periods; and
- the period over which we estimate we will earn up front license payments.

Segment Information – The Company follows established standards on the way that public companies report financial information about operating segments in annual financial statements and required reporting of selected information about operating segments in interim financial statements issued to the public. These standards provide for disclosures regarding products and services, geographic areas, and major customers. These standards also define operating segments as components of a company about which discrete financial information is available that is evaluated regularly by the chief operating decision makers in deciding how to allocate resources and in assessing performance.

In applying these standards, the Company has defined its components as three reportable segments:

- Refined coal ("RC"),
- Emission control ("EC"), and
- CO_2 Capture ("CC").

Reclassification – Certain amounts in the 2011 and 2010 consolidated financial statements have been reclassified to conform to the 2012 presentation. Such reclassification had no effect on net income.

Newly Adopted Accounting Standard – In September 2011, the Financial Accounting Standards Board issued revised authoritative guidance for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. The guidance allows an entity the option to make a qualitative evaluation about the likelihood of goodwill impairment for a reporting unit. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative two-step impairment test is unnecessary. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

2. Property and Equipment

Property and equipment consisted of the following at the dates indicated:

	Life in Years	As of December 31, 2012	As of December 31, 2011
		(in thousands)	
Machinery and equipment	3-10	$ 7,522	$ 3,937
Leasehold improvements	2-5	1,106	624
Furniture and fixtures	3-7	781	281
RC assets	10	44,133	36,929
		53,542	41,771
Less accumulated depreciation and amortization		(8,931)	(4,651)
Total property and equipment, net		$44,611	$37,120

	Years Ended December 31, 2012	2011	2010
		(in thousands)	
Depreciation and amortization	$5,277	$ 1,568	$ 917

3. Deferred Revenue and Deposits

Deferred revenue consists of:

- billings in excess of costs and earnings on uncompleted contracts;
- deferred rent revenue related to Clean Coal's lease of its RC facilities .

Clean Coal Deferred Rent Revenue – In June 2010, Clean Coal executed agreements to lease two RC facilities to GS RC Investments, LLC ("GS RC"), a related entity of the Goldman Sachs Group, Inc. ("GS"). These agreements provided for, among other things, a "prepaid rent payment" of $9 million for both RC facilities that was received before June 30, 2010. In November and December 2011, Clean Coal entered into transactions to exchange the existing RC facilities (See Notes 7 and 11). There was no change to the prepaid rent payment or amortization period as a result of the exchanges. Clean Coal received an additional $1.5 million from another financial party in July 2012.

Following is a table of current deferred revenue which is included in deferred revenue and other liabilities in the consolidated balances sheets and long-term deferred revenue which is included in deferred revenue in the consolidated balance sheets related to these rent revenues:

	As of December 31,	
	2012	2011
	(in thousands)	
Deferred revenue, short-term	$625	$3,600
Deferred revenue, long-term	$875	$ —

The following table presents total rent revenues recognized and amortization with respect to the prepaid rents:

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Rent revenue recognized	$36,855	$20,110	$10,111
Amortization of prepaid rent included in amounts above	$ 3,600	$ 3,600	$ 1,800

Clean Coal Deposits

During 2011, Clean Coal received deposits of $14.9 million from GSFS Investments I Corp. (“GSFS”), an affiliate of GS towards RC facilities which may be leased upon attainment of certain milestones. An additional $6.3 million was received in 2012 and the total of $21.2 million is included in deposits in the consolidated balance sheets as of December 31, 2012 (see Note 11).

In October 2012, GSFS determined that it would not pursue leases on two particular RC facilities on which it had paid deposits totaling $4.7 million and concurrently gave notice for the return of the related deposits. In December 2012, GSFS agreed to defer the return of these deposits until April 30, 2013. In March 2013, Clean Coal returned the $4.7 million in deposits plus accrued interest to GSFS.

4. Government and Industry Funded Contracts

The Company has participated in several contracts awarded by the Department of Energy (the “DOE”). The Company typically invoices the DOE and industry cost-share partners monthly for labor and expenditures plus estimated overhead factors, less any cost share amounts. The contracts under which the Company has performed are subject to audit and future appropriation of funds by Congress. The Company has not experienced adverse adjustments as a result of government audits, however, the government audits for years ended 2005 through 2012 have not yet been finalized.

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Revenue recognized related to CC segment	$ 3,020	$ 3,096	$ 2,073
Unearned contract amount	$12,686	$15,706	$18,800
Expected revenue in 2013	$ 9,671		

5. **Investments in Unconsolidated Entities**

Clean Coal Solutions Services – As discussed in Note 1 above, the Company, together with NexGen, formed CCSS on January 20, 2010. The Company's investment in and advances to CCSS of $1.9 million and $590,000 as of December 31, 2012 and 2011, respectively, includes its share of CCSS income since its formation and is accounted for under the equity method of accounting. The following schedule shows CCSS' unaudited consolidated summarized information as to assets, liabilities and revenues and ADA's share of net income attributed to CCSS (before consolidation). CCSS' consolidated financial statements include the financial results of the entities that lease RC facilities and its revenues include the sale of RC and its cost of sales includes raw coal purchases.

	As of December 31,	
	2012	2011
	(in thousands)	
Current assets	$ 55,109	$22,609
Property, equipment, and other long-term assets	768	3,682
Total Assets	$ 55,877	$26,291
Total Liabilities	$ 31,904	$15,988

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Net revenue	$226,860	$153,684	$90,854
ADA's share of net income attributed to CCSS	$ 760	$ 189	$ 236

ADA Carbon Solutions, LLC ("Carbon Solutions") – On October 1, 2008, ADA entered into a Joint Development Agreement ("JDA"), a Limited Liability Company Agreement ("LLC Agreement"), and other related agreements with Energy Capital Partners I, LP and its affiliated funds ("ECP") and formed Carbon Solutions for the purposes of funding and constructing the activated carbon ("AC") manufacturing facility in Red River Parish, Louisiana and similar projects. In November 2011, ADA relinquished all of its interest in Carbon Solutions. The Company had been accounting for the investment in Carbon Solutions under the equity method and recorded $7.2 million and $8 million as its share of Carbon Solution's losses for 2011 and 2010, respectively.

Under the terms of the JDA, ADA was required to indemnify ECP and Carbon Solutions for certain damages and expenses they had incurred with respect to ADA's litigation with Norit which was settled in August 2011. On November 28, 2011, an Indemnity Settlement Agreement was entered into whereby ADA agreed to settle the indemnity obligations asserted against ADA and relinquish all of its interest in Carbon Solutions (See Note 10).

During the fourth quarter of 2011, we recorded the transactions resulting from the Indemnity Settlement Agreement for the satisfaction of the indemnity obligations and the relinquishment of ADA's interest which resulted in other income of $20 million.

Pursuant to an Intellectual Property License Agreement (as amended in November 2011 pursuant to the Indemnity Settlement Agreement discussed above), the Company has licensed to Carbon Solutions all intellectual property relating primarily to the manufacture of AC (that was not transferred to Carbon Solutions under the JDA) or any application or use of AC competitive with the control of mercury emissions from coal-fired power plants (the "Field") on an exclusive, perpetual, royalty-free basis and has provided certain rights of first refusal to Carbon Solutions with respect to intellectual property relating to the Field the Company may develop in the future.

6. **Acquisition of Assets by BCSI**

On August 31, 2012, pursuant to an Asset Purchase Agreement ("Purchase Agreement") executed on July 26, 2012, BCSI acquired certain assets of two related privately held companies ("Seller Companies") that fabricated and supplied DSI systems and other material handling equipment and provided testing and related DSI services for a purchase price of $2 million and other amounts payable over the next five years as described below. This acquisition provided the Company with DSI market experience and expanded manufacturing capabilities for ACI systems.

In conjunction with the Purchase Agreement, the Seller Companies' sole stockholder ("Sellers' Stockholder") and BCSI also executed a personal goodwill purchase agreement and goodwill promissory note whereby BCSI agreed to pay the Sellers' Stockholder a total of $2.8 million (subject to adjustment pursuant to the terms of the Purchase Agreement) as payment for the personal goodwill generated in connection with the Seller Companies.

In addition, the Sellers' Stockholder and BCSI entered into a consulting and non-competition agreement and non-compete promissory note whereby BCSI paid the Sellers' Stockholder $200,000 and is paying him a monthly consulting fee of approximately $21,000 per month for five years beginning August 31, 2012 in exchange for professional services provided by the Sellers' Stockholder, subject to terms and conditions as specified in the Purchase Agreement (see Note 10).

The transaction was accounted for using the purchase method of accounting and the operating results related to the acquired assets have been consolidated into the Company's results of operations beginning August 31, 2012.

The purchase price was allocated to the identifiable assets acquired and liabilities assumed based on their estimated fair values on the acquisition date. The following table summarizes the fair value of the Seller Companies' assets acquired and liabilities assumed as of August 31, 2012:

	(in thousands)
Assets acquired:	
Inventory	$ 109
Property and equipment	2,001
Intangible assets	2,748
Other assets	200
Total assets acquired	5,058
Liabilities assumed:	
Accrued liabilities	58
Total liabilities assumed	58
Net assets acquired	$5,000
Purchase consideration:	
Deposit paid	$ 200
Cash paid at closing	1,800
Notes payable	3,000
Total purchase consideration	$5,000

7. **Joint Venture Investment in Clean Coal**

In November 2006, the Company sold a 50% interest in its joint venture in Clean Coal, which was formed in 2006 with NexGen to market RC technology. In May 2011, ADA and NexGen entered into a transaction in

which Clean Coal sold an effective 15% interest of the equity in Clean Coal to GSFS, an affiliate of GS which is included in temporary equity subject to possible redemption in the consolidated balance sheets (see Note 8). GSFS has certain preferences over ADA and NexGen as to liquidation and profit distribution. GSFS has no further capital call requirements and does not have a voting interest but does have approval rights over certain corporate transactions.

In September 2011, ADA, NexGen, and GSFS entered into a First Amendment to Second Amended and Restated Operating Agreement pursuant to which ADA and NexGen each transferred their 2.5% member interests in each of Clean Coal's subsidiaries back to Clean Coal. As a result of these transactions, ADA's interest in Clean Coal's net profits and losses is now 42.5%. This restructuring of ownership interests did not change the financial relationships of the parties and ADA still maintains a 50% governance interest in Clean Coal. In July 2012, ADA, NexGen and GSFS entered into the Second Amendment to the Operating Agreement (the "Operating Agreement") which, among other things, expanded Clean Coal's board of managers to allow for the appointment of an additional manager not directly representative of any of the members. Since its inception, ADA has been considered the primary economic beneficiary of this joint venture and has consolidated the accounts of Clean Coal.

Clean Coal's function is to supply technology, equipment and technical services to cyclone-fired and other boiler users, but Clean Coal's primary purpose is to put into operation facilities that produce RC that qualifies for tax credits available under Section 45 of the Internal Revenue Code ("Section 45 tax credits"). Clean Coal qualified two facilities in 2009 for such purposes and, as discussed in Note 3, leased those facilities to GS RC in 2010.

In December 2010, the Tax Relief and Job Creation Act of 2010 extended the placed in service deadline for the Section 45 tax credits to January 1, 2012. In consideration of the extension, Clean Coal built and qualified an additional 26 RC facilities in 2011 which met the extended placed in service date. In November and December 2011, the two leased RC facilities qualified in 2009 were exchanged with newly constructed, redesigned RC facilities. The new leases carried over most of the substantive terms and conditions of the initial leases. In December 2012, the parties amended the two leases to change the lease term to month-to-month and allow the lessee, upon five business days' written notice, to either terminate the leases or convert the lease terms to yearly. In March 2013 the parties amended and restated the lease agreements to change the structure and timing of the lease payments. The payments will be paid quarterly in advance and are subject to adjustments for inflation. Each lease has an initial non-cancellable term of two years and will automatically renew unless terminated at the option of the lessee thereof, for successive one-year terms through November 9, 2021 and December 10, 2021, as applicable. The parties also amended and restated the two Operating and Maintenance Agreements pursuant to which CCSS (subject to oversight by the lessee) operates and maintains the RC facilities to provide for the payment of a fixed fee under the agreements instead of payments based on the production of RC as had previously been in place.

Clean Coal leased a third RC facility in the first quarter of 2012 to another entity related to GS. Clean Coal leased a fourth RC facility to a third party investor during the third quarter of 2012. All agreements included terms and conditions substantially similar to those applicable to the first two leased RC facilities. On February 28, 2013, Clean Coal sold an RC facility to a new third party investor, bringing the total number of RC facilities currently leased or sold to five.

The Operating Agreement requires NexGen and ADA to each pay 50% of the costs of operating Clean Coal and specifies certain duties that both parties are obligated to perform. Pursuant to the Operating Agreement and Exclusive Right to Lease Agreement, GSFS is in the process of exercising its exclusive right (but not the obligation) to lease additional facilities that will produce up to approximately 12 million tons of RC per year on pre-established lease terms similar to those currently in effect for Clean Coal's first two leased facilities.

Following is summarized information as to assets, liabilities and results of operations of Clean Coal:

	As of December 31,	
	2012	2011
	(in thousands)	
Primary assets		
Cash and cash equivalents	$ 994	$ 8,804
Accounts receivable, net	3,275	3,177
Prepaid expenses and other assets	2,546	3,028
Property, plant and equipment including assets under lease and assets placed in service	40,096	36,751
Primary liabilities		
Accounts payable and accrued liabilities	$ 5,728	$10,526
Accounts payable to related parties	5,082	1,209
Line of credit	3,000	14,497
Deposits	21,200	14,900
Deferred revenue, current	625	3,600
Deferred revenue, long-term	875	—

	Years Ended December 31,		
	2012	2011	2010
	(in thousands)		
Net revenue	$194,900	$40,253	$10,383
Net income	$ 3,384	$13,658	$ 6,873

Amounts paid and payable to NexGen

During 2012, 2011 and 2010, Clean Coal paid NexGen $450,000, $2.6 million and $687,000, respectively, for management fees, rent and labor costs related to capital improvements for assets under lease and placed in service. At December 31, 2012 and 2011, the amount payable to NexGen was $1.3 million and $138,000, respectively, and is included in accounts payable to related parties in the consolidated balance sheets.

Amounts paid and payable to CCSS

During 2012, 2011 and 2010, Clean Coal paid CCSS $4.7 million, $3.4 million and $64,000, respectively, for development and operating expenses. At December 31, 2012 and 2011, the amount payable to CCSS was $3.5 million and $1.2 million, respectively, and is included in accounts payable to related parties in the consolidated balance sheets.

8. Temporary Equity Subject to Possible Redemption

As described in Note 7, in May 2011, ADA and NexGen entered into a transaction in which Clean Coal sold an effective 15% interest of the equity in Clean Coal to GSFS. Approximately 15.8 units of non-voting Class B membership interests were issued to GSFS for $60 million in cash. ADA and NexGen each received $30 million as a result of the sale. The terms of the Operating Agreement permit GSFS to require redemption of the unreturned portion of its initial $60 million investment in Clean Coal plus a return of 15% in 2021 and under certain limited circumstances. As a result, $60 million is classified as temporary equity subject to possible redemption in the consolidated balance sheets.

9. Stockholders' Deficit

On October 28, 2011, ADA closed on an underwritten public offering selling 2 million shares of common stock for $15.25 per share generating $28.4 million in net proceeds to ADA. In November 2011, the underwriters exercised their over-allotment option to purchase an additional 300,000 shares, generating an additional $4.3 million in net proceeds to ADA.

As described in Note 7, in May 2011, Clean Coal entered into a transaction in which it sold an effective 15% interest of its equity to GSFS. Approximately 15.8 units of non-voting Class B membership interests were issued to GSFS for $60 million in cash. ADA and NexGen each received $30 million as a result of the sale. In conjunction with the closing of the purchase agreement, ADA, NexGen and GSFS entered into a Second Amended and Restated Operating Agreement and ADA and NexGen each exchanged 50 units of membership interests for approximately 42.1 voting Class A units in Clean Coal (each of which represents a 50% voting interest). Since the transaction did not result in a change in control of Clean Coal, the amount received from this transaction was recorded to common stock, net of the tax effect of approximately $11 million.

For the years ended December 31, 2012 and 2011, the non-controlling interest portion of stockholders' deficit includes the non-controlling interest related to Clean Coal.

Since 2003, ADA has had several stock and option plans, including the 2005 Directors' Compensation Plan (the "2005 Plan"), the Amended and Restated 2007 Equity Incentive Plan (the "2007 Plan"), the Amended and Restated 2010 Non-Management Compensation and Incentive Plan, (the "2010 Plan") and the ADA-ES, Inc. Profit Sharing Retirement Plan, which is a plan qualified under Section 401(k) of the Internal Revenue Code (the "401(k) Plan") as described below. These plans allow ADA to issue stock or options for shares of common stock to employees, Board of Directors and non-employees.

Following is a table summarizing the option activity for the two years ended December 31, 2012 and 2011:

	Employee and Director Options	Weighted Average Exercise Price
Options outstanding, December 31, 2010	213,920	$10.18
Options granted	—	—
Options expired	(15,000)	15.20
Options exercised	(15,978)	8.18
Options outstanding, December 31, 2011	182,942	$ 9.95
Options granted	5,000	19.54
Options expired	—	—
Options exercised	(1,966)	10.73
Options outstanding, December 31, 2012	185,976	$10.20

Following is a table of aggregate intrinsic value of options exercised and exercisable for the two years ended December 31, 2012 and 2011:

	Intrinsic Value	Average Market Price
Exercised, December 31, 2012	$ 23,100	$22.47
Exercised, December 31, 2011	$ 140,155	$15.38

	Intrinsic Value	Market Price
Exercisable, December 31, 2012	$1,242,900	$16.88
Exercisable, December 31, 2011	$2,322,000	$22.64

Stock options outstanding and exercisable at December 31, 2012 are summarized in the table below:

Range of Exercise Prices	Number of Options Outstanding and Exercisable	Weighted Average Exercise Price	Weighted Average Remaining Contractual Lives
$8.60 - $10.20	142,583	$ 8.66	2.9
$13.80 - $15.20	38,393	$14.70	2.5
$19.54	5,000	$19.54	4.8
	185,976	$10.20	2.9

During 2005, the Company adopted the 2005 Plan, which authorized the issuance of shares of common stock and the grant of options to purchase shares of common stock to non-management directors. Under the 2005 Plan, the award of stock is limited to not more than 1,000 shares per individual per year, and the grant of options is limited to 5,000 per individual in total. The aggregate number of shares of common stock reserved for issuance under the 2005 Plan totals 90,000 shares (50,000 in the form of stock awards and 40,000 in the form of options). In October 2012, we issued 5,000 options to a new Board member under the 2005 Plan.

The 2007 Plan, which was adopted by ADA in 2007, was amended and restated as of August 31, 2010 to make non-material changes to assure Internal Revenue Code Section 409A compliance and to increase the non-management director annual grant limit to 15,000 shares of common stock from 10,000 shares. On July 19, 2012, the stockholders of ADA approved an amendment to the 2007 Plan to increase the number of shares presently issuable to 1.3 million and increase the number of shares authorized for issuance to 1.8 million. In addition, the stockholders also approved an increase in the number of shares with respect to which awards may be granted in any fiscal year from 30,000 to 50,000 and the annual grant limit for the non-management director annual grant was increased to 30,000 shares. The 2007 Plan authorizes the issuance to employees, directors and non-employees shares of common stock, either as restricted stock grants or to underlie options to purchase shares of ADA's common stock.

In 2009, ADA revised its 401(k) Plan. The revision permits ADA to issue shares of its common stock to employees to satisfy its obligation to match employee contributions under the terms of the plan in lieu of matching contributions in cash. ADA reserved 300,000 shares of its common stock for this purpose. The value of common stock issued as matching contributions under the plan is determined based on the per share market value of ADA's common stock on the authorization date.

The 2010 Plan, which was adopted by ADA in 2010, was amended and restated as of July 19, 2012 to make non-material changes to assure Internal Revenue Code Section 409A compliance. The Plan permits grants of awards, which may be shares, rights to purchase restricted stock or bonuses of restricted stock or other rights or benefits under the Plan.

Following is a table summarizing the common stock activity under various stock issuance plans for the two years ended December 31, 2012 and 2011:

	Stock Issuance Plans			
	2007 Plan	401(k) Plan	2010 Plan	Other Stock Plans
Shares available, December 31, 2010	93,943	183,794	300,000	12,065
Evergreen addition	44,593	—	—	—
Restricted stock issued to new and anniversary employees	(22,849)	—	—	—
Stock issued based on incentive and matching programs to employees	(35,825)	(27,769)	—	—
Stock issued to executives, directors and non-employees	(50,280)	—	—	(7,000)
Forfeited shares	1,372	—	—	—
Shares available, December 31, 2011	30,954	156,025	300,000	5,065
Additional shares authorized for issuance	300,000			
Evergreen addition	209,628	—	—	—
Restricted stock issued to new and anniversary employees	(8,464)	—	(1,898)	—
Stock issued based on incentive and matching programs to employees	—	(19,443)	—	—
Stock issued to executives, directors and non-employees	(864)	—	—	—
Forfeited shares	510	—	—	—
Shares available, December 31, 2012	531,764	136,582	298,102	5,065

Expense recognized under the different plans for the three years ended:

	(in thousands)			
December 31, 2012	$ 125	$ 413	$ —	$ 3
December 31, 2011	$ 747	$ 349	$ —	$ 39
December 31, 2010	$ 983	$ 282	$ —	$ 41

Unrecognized expense under the different plans for the three years ended:

	(in thousands)			
December 31, 2012	$ 646	$ —	$ —	$ —
December 31, 2011	$ 512	$ —	$ —	$ —
December 31, 2010	$ 341	$ —	$ —	$ —

A summary of the status of the non-vested shares for the two years ended December 31, 2012 and 2011 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2010	92,936	$ 5.46
Granted	22,849	14.95
Vested	(6,422)	10.38
Forfeited	(1,372)	7.48
Non-vested at December 31, 2011	107,991	$ 6.98
Granted	10,362	23.47
Vested	(10,280)	(22.31)
Forfeited	(510)	(11.51)
Non-vested at December 31, 2012	107,563	$ 8.26

10. Commitments and Contingencies

Line of Credit – Clean Coal has a revolving line of credit with a bank for $15 million that is secured by the equity interests and proceeds related to such equity interests of each subsidiary owned by Clean Coal. The line of credit expires on March 31, 2013 with payment due in four equal quarterly installments of principal of $3.75 million (plus all accrued interest at such time) beginning June 30, 2012. Borrowings under the line of credit bear interest at the higher of the "Prime Rate" (as defined in the related credit agreement) plus one percent (1%) or 5% per annum. At December 31, 2012, the balance on the line of credit had been fully repaid and no additional borrowings are available under this agreement.

In May 2012, an amendment was made to the line of credit agreement to increase the amount available by $3 million under an increased commitment note issued in conjunction with the line of credit. This amount is secured by a cash collateral account of $3 million held by the bank issuing the line of credit with funds received equally from ADA and NexGen. Interest is payable monthly at 3% over the rate paid by the bank on the cash collateral account (3.35% at December 31, 2012). The agreement was amended in December 2012 to extend the term of the agreement until June 1, 2013.

In January 2013, the line of credit agreement was amended to provide an additional $2 million with any borrowings under the amended agreement due on December 31, 2013. Borrowings under the additional line bear interest at the higher of the "Prime Rate" (as defined in the related credit agreement) plus one percent (1%) or 5% per annum. The increased commitment is secured by the equity interests and proceeds related to such equity interests of each subsidiary owned by Clean Coal.

At December 31, 2012, the outstanding balance on the increased commitment note was $3 million and the effective interest rate was 3.35% per annum. The $3 million balance was repaid in March 2013. Borrowings under the line of credit and increased commitment notes are subject to certain financial covenants applicable to Clean Coal.

Notes Payable - As discussed in Note 6, in August 2012 ADA executed two promissory notes in conjunction with the acquisition of BCSI which consist of the following:

	As of December 31,	
	2012	2011
	(in thousands)	
Goodwill promissory note, payable in twenty quarterly installments of approximately $154,000, including interest at 4% per year, due on September 30, 2017. The note is secured by a letter of credit in the amount of $308,000, which expires August 31, 2017.	$2,673	$—
Non-compete promissory note, payable in twenty quarterly installments of approximately $11,000, including interest at 4% per year, due on September 30, 2017. The note is secured by a letter of credit in the amount of $20,000, which expires August 31, 2017.	191	—
Total	2,864	—
Less current portion	(559)	—
Long-term portion	$2,305	$—

The notes payable mature as follows:

Years Ending December 31,	
2013	$ 559
2014	581
2015	605
2016	630
2017	489
	$2,864

Retirement Plan – The Company assumed the 401(k) plan covering all eligible employees as of January 1, 2003 which was revised in 2009, and makes matching contributions to the plan in the form of cash and its common stock. Such contributions are as follows:

	Years Ended December 31,		
	2012	2011	2010
	(in thousands)		
Matching contributions in stock	$413	$349	$282
Matching contributions in cash	—	—	—
Total	$413	$349	$282

Performance Guarantee on AC Injection Systems – Under certain contracts to supply ACI systems, the Company may guarantee the performance of the associated equipment for a specified period to the owner of the power plant. The Company may also guarantee the achievement of a certain level of mercury removal based upon the injection of a specified quantity of a qualified AC at a specified rate given other plant operating conditions. In the event the equipment fails to perform as specified, the Company may have an obligation to correct or replace the equipment. In the event the level of mercury removal is not achieved, the Company may have a "make right" obligation within the contract limits. The Company assesses the risks inherent in each applicable contract and accrues an amount that is based on estimated costs that may be incurred over the performance period of the contract. Such costs are included in the Company's accrued warranty and other liabilities in the consolidated balance sheets. Any warranty costs paid out in the future will be charged against the accrual. The adequacy of warranty accrual balance is assessed at least quarterly based on the then current facts and circumstances and adjustments are made as needed. The changes in the carrying amount of the Company's performance guaranties are as follows:

	As of December 31,	
	2012	2011
	(in thousands)	
Beginning balance	$547	$ 612
Performance guaranties accrued	151	88
Expenses paid	(30)	(153)
Ending balance	$668	$ 547

In some cases, a letter of credit is obtained and held to cover the period of the warranty that can be used to satisfy the obligation.

Purchase Obligations – As of December 31, 2012, the Company expects to pay purchase obligations totaling approximately $6.2 million primarily for the purchase of components and services related to our Emission Control Segment.

Operating Lease Obligations – ADA leases office and two warehouse facilities under non-cancellable operating lease agreements. Our facilities leases generally provide for periodic rent increases and renewal options. Clean Coal entered into a sub-lease agreement for office space in 2012 with an entity related to NexGen that expires in February 2021.

ADA's lease covering approximately 30,000 square feet of office space in Highlands Ranch, Colorado expires in February 2019 with the option to renew for two additional five-year periods. The lease includes abatement of base rent and operating expenses for the first six months and abatement of base rent for an additional thirteen months. The lease also included a one-time tenant improvement allowance in an amount up to approximately $480,000.

ADA leases approximately 150,000 square feet of warehouse space in Highlands Ranch, Colorado which expires in October 2017 with the option to renew for two additional three-year periods.

ADA also leases approximately 15,000 square feet of warehouse space in Highlands Ranch, Colorado which expires in February 2019 and includes the option to renew for two additional five-year periods. The lease also included a one-time tenant improvement allowance of approximately $150,000.

Annual minimum commitments under the leases are as follows:

Years Ending December 31,	Operating Lease Commitments (in thousands)
2013	$ 477
2014	768
2015	789
2016	810
2017	795
Thereafter	931
Total	$4,570

Rental expense incurred for the years ended December 31, is as follows:

	Years Ended December 31,		
	2012	2011	2010
	(in thousands)		
Rent expense	$1,032	$395	$339

Clean Coal – The Company also has certain obligations in connection with the activities of Clean Coal. The Company, NexGen and two entities affiliated with NexGen have provided GS RC with joint and several guaranties (the “CCS Party Guaranties”) guaranteeing all payments and performance due under the related transaction agreements. The Company also entered into a contribution agreement with NexGen under which any party called upon to pay on a CCS Party Guaranty is entitled to receive contribution from the other party equal to 50% of the amount paid.

The parent of the lessee in the first two RC facilities lease transactions has provided Clean Coal with a guaranty as to the payment only of all the initial term fixed rent payments and the renewal term fixed rent payments under the related leases, which, although terminable at any time, cannot be terminated without the substitution of such guaranty with another guaranty on similar terms from a creditworthy guarantor.

Arbitration Award Liabilities – As previously reported in various filings, ADA had been engaged in litigation with Norit Americas, Inc. and Norit International N.V. f/k/a Norit N.V (“Norit”). The Norit lawsuit initially filed in Texas was moved to arbitration, and on April 8, 2011, the arbitration panel issued an interim award holding ADA liable for approximately $37.9 million for a non-solicitation breach of contract claim and held ADA and certain other defendants liable for royalties of 10.5% for the first three years beginning in mid-2010 and 7% for the following five years based on adjusted sales of AC from the Red River plant. The Company recorded $2.3 million and $1.5 million in royalty expense for the years ended December 31, 2012 and 2011, respectively, related to this award.

On August 29, 2011, ADA and Norit entered into a settlement agreement whereby the Company paid a lump-sum payment to Norit totaling $33 million on August 30, 2011. In addition, the Company agreed to pay an additional $7.5 million over a three-year period commencing on June 1, 2012, payable in three installments without interest of $2.5 million. Under the terms of the settlement agreement, ADA is also required to pay the royalty noted above and a lesser royalty on certain treated activated carbons. Payments of amounts due under the royalty award for each quarter are payable three months after such quarter ends. On October 18, 2011, the arbitration panel endorsed and confirmed the terms of the settlement agreement.

The Company has accrued a current liability of $3.3 million which is included in settlement awards and related accrued liabilities and a long-term liability of $2.5 million which is included in settlement awards and indemnity liability in the consolidated balance sheets related to this agreement.

Indemnity Liability Settlement – As previously reported in various filings, in November 2011, ADA entered into an Indemnity Settlement Agreement whereby ADA agreed to settle certain indemnity obligations asserted against ADA related to the Norit litigation. Under the terms of the Indemnity Settlement Agreement, ADA paid Carbon Solutions a $2 million payment on November 28, 2011 and agreed to make 16 additional monthly payments of $100,000 with the first one paid on November 28, 2011, and the remaining 15 payments commencing on December 1, 2011, relinquished all of its equity interest in Carbon Solutions to Carbon Solutions and amended the Intellectual Property License Agreement dated October 1, 2008 between ADA and Carbon Solutions.

The Company has accrued a current liability of $200,000 which is included in settlement awards and related accrued liabilities in the consolidated balance sheets related to this agreement.

11. Clean Coal Leasing Activities

Clean Coal leased two RC Facilities in June 2010 to GS RC. The leases had initial terms that ran through December 31, 2012 and automatically renewed for annual terms through the end of 2019. Clean Coal received $9 million at the inception of the leases, which was recorded as deferred revenue and was amortized into revenue under the straight-line method over the initial term of the leases through December 31, 2012. As discussed in Note 7 above, in November and December 2011, the two leased RC facilities were exchanged with newly constructed, redesigned RC facilities which resulted in termination of the original leases and issuance of new lease agreements. The new leases carried over many of the substantive terms and conditions of the initial leases, had initial terms that ran through December 31, 2012 and automatically renewed for annual terms through 2021, subject to a number of termination clauses.

In December 2012, the terms of these equipment leases were amended. The amendments provided that, as of December 31, 2012, the leases renew on a month-to-month basis and that, upon written notice, the leases could either be terminated or converted to yearly leases.

In March 2013 the parties amended and restated the lease agreements to change the lease payments from a combination of fixed and contingent rent payments to fixed payments payable quarterly in advance and subject to adjustment only for inflation for the remaining period of the leases. As amended and restated, the leases have initial terms of two years and will automatically renew for up to seven additional one year terms unless sooner terminated by the parties, which may be done by GS RC effective as of the end of any term by providing three months' prior written notice. The parties also amended and restated the two Operating and Maintenance Agreements to provide for the payment of a fixed fee under the agreements instead of variable payments based on the production of RC.

Clean Coal leased a third RC facility in the first quarter of 2012 to another entity related to GS. The lease has a preliminary lease term that renews every fifteen days and will continue to renew until the initial lease term (as defined in the lease agreement) commences once certain conditions are satisfied. Clean Coal received $6.3 million in prepaid rents at the inception of the lease that will be amortized into revenue once the initial lease term commences which is included in deposits in the consolidated balance sheets. The initial lease term runs through January 31, 2014, subject to certain termination clauses. The lessee has until November 30, 2013 to provide notice to renew or terminate the lease.

A fourth RC facility was leased to a third party investor in August 2012. Clean Coal received $1.5 million as prepaid rent under the lease agreement which is included in deferred revenue in the consolidated balance sheet and is being amortized under the straight-line method through August 2013. The lease contains an initial three year term, with additional automatic renewal terms for six successive one year terms ending in 2021, subject to certain termination clauses.

In addition, subsequent to year end, in February 2013 Clean Coal finalized a contract for the sale of a fifth RC facility with a new third party investor. The structure of the sale agreement was similar to that of the initial leases and provides the buyer with the right to require Clean Coal to repurchase the facility for a nominal fee in certain situations. The terms of the sale included an upfront contribution of $25 million, with $20 million paid immediately, the remaining $5 million to be paid when certain events are completed and a combination of fixed and variable payments going forward.

During the years ended December 31, 2012, 2011 and 2010, $3.6 million, $3.6 million and $1.8 million, respectively, of deferred revenue was recognized. Contingent rental income received during 2012, 2011 and 2010 totaled $14.9 million, $8.6 million and $6 million, respectively. Future minimum lease payments shown below do not include contingent rentals, which are based on the production of RC.

The following is a schedule, by year, of total fixed lease payments to be received, if all term extension options are exercised, through December 31, 2021.

Years Ending December 31,	Lease Payments Expected
	(in thousands)
2013	$ 40,442
2014	43,346
2015	44,339
2016	45,202
2017	46,710
Thereafter	186,650
Total minimum lease payments	$406,689

12. Major Customers

Sales to unaffiliated customers who represent 10% or more of the Company's sales were as follows:

Customer	As of December 31, 2012	2011
A	16%	38%

The Company's receivables were as follows:

Receivables as of:	Number of Customers That Make up Percentage of Balance	Percentage of Balance
December 31, 2012	3	67%
December 31, 2011	2	63%

13. Income Taxes

Income taxes are accounted for under the asset and liability approach. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of differences between the carrying amounts of assets and liabilities and their respective tax bases using the enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided if and when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the change is enacted. At each reporting date, management reviews existing income tax assessments and, if necessary, revises them to reflect changed circumstances. In a situation where recent losses have been incurred, the accounting standards require convincing evidence that there will be sufficient future taxable income to realize deferred tax assets.

The Company has provided a full valuation allowance against the deferred tax assets of $39.5 million and $18.6 million as of December 31, 2012 and 2011 respectively, to reflect the estimated amount of deferred tax assets that may not be realized. The ultimate realization of deferred tax assets is dependent upon generation of future taxable income during the periods in which those temporary differences become deductible. Management considers both positive and negative evidence and tax planning strategies in making this assessment. See Note 16 for additional discussion.

The tax benefit included in the consolidated statement of operations for fiscal year ended December 31, 2011 was recorded as a result of the sale of the equity interest in Clean Coal to GSFS in May 2011. Since the transaction did not result in a change in control of Clean Coal, the $10.4 million tax effect of the amount received from this transaction was recorded to stockholders' deficit.

The Company's income tax benefit (expense) from continuing operations consists of the following:

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Current	$—	$ —	$ —
Deferred	—	10,400	(7,093)
Income tax benefit (expense)	$—	$10,400	$(7,093)

The following lists the Company's deferred tax assets and liabilities:

	As of December 31,	
	2012	2011
	(in thousands)	
Deferred tax assets		
Deferred warranty, settlements and other	$ 2,136	$ 3,439
Allowance for doubtful accounts	2	4
Property and equipment	—	48
Deferred revenues, compensation and other	1,542	1,174
Net operating loss carryforward	22,300	13,944
Tax credits	18,695	2,210
Total tax assets	44,675	20,819
Deferred tax liabilities		
Prepaid expenses	190	129
Intangible assets and other	67	21
Property and equipment	696	—
Net equity in net income/loss of joint venture and unconsolidated entities	4,199	2,044
Total tax liabilities	5,152	2,194
Deferred tax assets, net of liabilities	39,523	18,625
Valuation allowance	(39,523)	(18,625)
Net deferred tax assets	$ —	$ —

A reconciliation of expected federal income taxes on income from operations at statutory rates with the benefit (expense) for income taxes follows:

	Years Ended December 31,		
	2012	2011	2010
		(percent)	
Expected income tax rate	34	34	34
Valuation allowance	(191)	(12)	(77)
Non-controlling interest	6	11	6
Permanent differences	(3)	<1	<1
Tax credits	150	6	1
State income taxes	2	2	2
Other	2	—	(1)
Actual effective income tax rate	—	41	(35)

We believe that our income tax filing positions reflected in the various tax returns are more-likely-than not to be sustained on audit and thus there are no anticipated adjustments that would result in a material change to our consolidated financial position, results of operations and cash flows. Therefore, no reserves for uncertain income tax positions have been recorded.

The primary jurisdictions in which the Company files income tax returns are the U.S. federal government and State of Colorado. The Company is no longer subject to U.S. federal examinations by tax authorities for years before 2009 and Colorado state examinations for years before 2008.

The Company has a federal net operating loss carryforward of $54.8 million that will expire in the years ranging from 2029 to 2032 and a state net operating loss carryforward of $45.2 million that will expire in years ranging from 2016 to 2032. The Company has federal tax credit carryforwards of $18.7 million that will expire in the years ranging from 2025 to 2032.

14. Related Party Transactions

In June 2010, the Company entered into a Development and License Agreement and executed a Securities Subscription and Investment Agreement with Arch Coal, Inc. (“Arch”) in which the Company licensed, on an exclusive non-transferable basis, the use of certain of its technology to enhance coal by a proprietary treatment process and received a non-refundable license fee of $2 million in cash which was recognized as revenue in 2011 and 2010. As part of the agreement, Arch is required to purchase from the Company the chemicals required to enhance the coal.

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Revenues recognized from activities with Arch	$—	$1,402	$784

Robert E. Shanklin is the Vice President of Coal Technology of Arch and is a member of the Company’s Board of Directors (the “Board”). The appointment of Mr. Shanklin to the Board was made pursuant to a 2003 Subscription and Investment Agreement with Arch whereby the Company’s management agreed to make available one seat on our Board for an Arch designee and to vote all shares and proxies they are entitled to vote in favor of such designee for so long as Arch continues to hold at least 100,000 shares of our common stock. In addition, as required by our related-party transaction policy, the above noted agreements were approved by the Company’s audit committee before being recommended to the Board for approval and were then approved by the disinterested members of the Board.

15. **Business Segment Information**

The following information relates to the Company's three reportable segments: RC, EC and CC. All assets are located in the U.S. and are not evaluated by management on a segment basis. All significant customers are U.S. companies and the U.S. Government.

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Revenue			
RC			
Rental income	$ 36,855	$20,110	$10,111
Coal sales	157,898	19,952	—
Other revenues	147	191	272
	194,900	40,253	10,383
EC			
Systems and equipment	9,578	4,141	5,546
Consulting and development	4,227	4,900	3,625
Chemicals	798	926	654
	14,603	9,967	9,825
CC	3,020	3,096	2,073
Total	$212,523	$53,316	$22,281
Segment profit			
RC	$ 14,214	$17,984	$ 7,842
EC	277	1,350	2,114
CC	210	241	895
Total	$ 14,701	$19,575	$10,851

A reconciliation of the reported total segment profit to net income for the periods shown above is as follows:

	Years Ended December 31,		
	2012	2011	2010
		(in thousands)	
Total segment profit	$ 14,701	$ 19,575	$ 10,851
Non-allocated general and administrative expenses	(17,852)	(14,980)	(30,884)
Depreciation and amortization	(5,277)	(1,568)	(917)
Interest and other income	305	2,218	2,510
Interest expense	(1,461)	(1,584)	(16)
Settlement of litigation and arbitration award, net	(2,301)	(21,932)	6,072
Net equity in net income (loss) of unconsolidated entities	760	(6,967)	(8,037)
Deferred income tax benefit (expense)	—	10,400	(7,093)
Net (income) loss attributable non-controlling interest	(1,946)	(7,981)	(3,613)
Net loss attributable to ADA-ES, Inc.	$(13,071)	$(22,819)	$(31,127)

Non-allocated general and administrative expenses include costs that benefit the business as a whole and are not directly related to one of our segments. Such costs include but are not limited to accounting and human resources staff, information systems costs, legal fees, facility costs, audit fees and corporate governance expenses.

16. **Restatements**

Subsequent to filing the Company's Annual Reports on Form 10-K for the fiscal years ended December 31, 2011 and 2010, the Company determined that a full valuation allowance on its net deferred tax assets should have been maintained as of December 31, 2011 and 2010. Management determined that it was necessary to maintain the valuation allowance against its deferred tax assets after considering information that should have been used to measure the positive and negative evidence regarding the ultimate realization of the net deferred tax assets in the original assessment.

Realization of the net deferred tax assets is dependent upon the Company's ability to generate future taxable income. In its reassessment, management concluded that objective and verifiable negative evidence represented by historic losses outweighed more subjective positive evidence of anticipated future income. As a result, the Company determined it necessary to maintain a full valuation allowance against its net deferred tax assets as of December 31, 2011 and 2010.

In addition, after completion of a review and evaluation of the operating agreement of Clean Coal and the members' rights and obligation thereunder and accounting authoritative literature, management determined that GSFS' interest in Clean Coal would be more appropriately classified as temporary equity because of a provision in the agreement that permits GSFS to require redemption of the unreturned portion of its initial investment plus a return of 15% under certain limited circumstances.

As a result, the Company restated its financial statements and filed amended Annual Reports on Form 10-K for the fiscal years ended December 31, 2011 and 2010 on October 19, 2012. Additional information related to the restatements is included in Note 16 and Note 15 of the consolidated financial statements included in the Annual Reports on Form 10-K/A for the fiscal years ended December 31, 2011 and 2010, respectively.

In order to implement the reorganization proposal, we need shareholders to adopt and approve the related reorganization agreement. Our board of directors has carefully considered the reorganization agreement, which provides for the merger of ADA-ES and a subsidiary of ADES called ADA Merger Corp. and the related transactions described in this proxy statement/prospectus, and believes that it is advisable, fair to and in the best interest of our shareholders, and recommends that you vote **FOR** the reorganization proposal, **FOR** proposals 1, 3, and 5 and "**1 YEAR**" for proposal 4, as described in this proxy statement/prospectus. Because adoption of the reorganization proposal requires the affirmative vote of holders of a majority of the outstanding shares entitled to vote at the Annual Meeting, your vote is important, no matter how many or how few shares you may own. Whether or not you plan to attend the Annual Meeting, please take the time to vote by completing, signing and mailing the enclosed proxy card in the postage-paid envelope provided or by voting by telephone or over the Internet.

Your board of directors and management look forward to greeting those of you who are able to attend the Annual Meeting. The accompanying notice of meeting and this proxy statement/prospectus provide specific information about the Annual Meeting and explain the various proposals. Please read these materials carefully. **In particular, you should consider the discussion of risk factors beginning on page 8 before voting on the reorganization proposal.**

Thank you for your continued support of and interest in ADA-ES.

Dr. Michael Durham
President and Chief Executive Officer

Neither the SEC nor any state securities commission has approved or disapproved of the securities to be issued under this proxy statement/prospectus or determined if this proxy statement/prospectus is accurate or adequate. Any representation to the contrary is a criminal offense.

This proxy statement/prospectus is dated April 25, 2013 and is being first mailed to ADA-ES shareholders on or about April 29, 2013.

ADA-ES, INC.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
(888) 822-8617

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD JUNE 13, 2013

To Our Shareholders:

The Annual Meeting of Shareholders of ADA-ES, Inc. ("ADA-ES" or the "Company"), a Colorado corporation, will be held at 9:00 a.m. (local time) on June 13, 2013 at the Company's offices located at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129, or at any postponement or adjournment thereof, for the following purposes:

1. To elect nine directors of the Company;
2. To consider and vote upon a proposal (the "reorganization proposal" or the "reorganization") approving the Agreement and Plan of Merger, dated as of March 25, 2013 (the "Reorganization Agreement"), by and among ADA-ES, Advanced Emissions Solutions Inc., a Delaware corporation and a wholly owned subsidiary of ADA-ES ("ADES" or the "Delaware Company") and ADA Merger Corp., a Colorado corporation ("MergerCo") and a wholly owned subsidiary of the Delaware Company;
3. To ratify the Audit Committee's selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2013;
4. To consider an advisory vote on the frequency upon which the Company will seek an advisory vote to approve the company's compensation paid to named executive officers of ADA-ES;
5. To consider an advisory vote on the compensation of the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion as set forth under the Executive Compensation section of this proxy statement/prospectus; and
6. To consider and vote upon such other matters as may properly come before the Annual Meeting or any postponement or adjournment thereof.

Shareholders of record at the close of business on April 10, 2013 are entitled to notice of and to vote at the Annual Meeting.

Our shareholders are cordially invited to attend the Annual Meeting in person. Whether or not you plan to attend the Annual Meeting, we urge you to vote your shares by telephone or Internet, or by completing, signing and dating the enclosed proxy card and returning it promptly in the accompanying postage prepaid (if mailed in the U.S.) return envelope.

Please call on our toll-free number (888-822-8617) if you require directions or have other questions concerning the meeting.

By Order of the Board of Directors,

Mark H. McKinnies
Secretary

April 25, 2013

ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about ADA-ES from our Annual Report on Form 10-K for the year ended December 31, 2012 and from other documents that are not included in or being delivered with this proxy statement/prospectus. The incorporated information that is not included in or being delivered with this proxy statement/ prospectus is available to you without charge upon your written or oral request. You can obtain any document that is incorporated by reference in this proxy statement/prospectus, excluding all exhibits that have not been specifically incorporated by reference, on the investor relations page of our website at www.adaes.com or by requesting it in writing or by telephone from us at the following address or telephone number:

ADA-ES, Inc.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: 888-822-8617

If you would like to request any documents, please do so no later than five business days before the date you must make your investment decision or by June 6, 2013 in order to receive them before the annual meeting.

In addition, if you have any questions about the proposals, you may contact:

Georgeson Inc.
480 Washington Boulevard, 26th Floor
Jersey City, NJ 07310
Shareholders call toll-free: 888-658-5755
Banks and brokers call collect: 212-440-9800

You should rely only on the information contained or incorporated by reference in this proxy statement/ prospectus and the registration statement of which this proxy statement/prospectus is a part to vote on the proposals being presented at the Annual Meeting. No person has been authorized to provide you with information that is different from what is contained in this document or in the incorporated documents.

This proxy statement/prospectus is dated April 25, 2013. You should not assume the information contained in this proxy statement/prospectus is accurate as of any date other than this date, and neither the mailing of this proxy statement/prospectus to shareholders nor the issuance of the ADES common stock in the reorganization implies that information is accurate as of any other date.

PROXY STATEMENT/PROSPECTUS

ADA-ES, INC.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: (888) 822-8617

ANNUAL MEETING OF SHAREHOLDERS TO BE HELD JUNE 13, 2013

This proxy statement/prospectus is furnished to the shareholders of ADA-ES, Inc. ("ADA-ES" or the "Company"), a Colorado corporation, in connection with the solicitation of proxies by the Company's Board of Directors (the "Board"), to be voted at our annual meeting of shareholders ("Annual Meeting" or "meeting") to be held on Thursday, June 13, 2013, at the Company's offices located at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129, and any postponements or adjournments thereof. This proxy statement and accompanying form of proxy is first being mailed or given to our shareholders on or about April 29, 2013. The shares represented by all proxies that are properly executed and submitted will be voted at the meeting in accordance with the instructions indicated thereon, and if no instructions are given, then to the extent permitted by law, in the discretion of the proxy holder. Throughout this proxy statement/prospectus, the terms "we," "us" "our" and "our Company" refer to ADA-ES, Inc., and unless the context indicates otherwise, our consolidated subsidiaries.

VOTING RIGHTS AND VOTE REQUIRED

Our Board has fixed the close of business on April 10, 2013, as the record date (the "Record Date") for determination of shareholders entitled to notice of and to vote at the meeting. On the Record Date, 10,062,242 shares of our common Stock were issued and outstanding, each of which entitles the holder thereof to one vote on all matters that may come before the Annual Meeting. We do not have any class of voting securities outstanding other than our common Stock. An abstention or withholding authority to vote will be counted as present for determining whether the quorum requirement is satisfied. If a quorum exists, actions or matters other than the election of the Board and the reorganization proposal are approved if the votes cast in favor of the action exceed the votes cast opposing the action unless a greater number is required by the Colorado Business Corporation Act (the "CBCA") or our Articles of Incorporation. The required vote for the reorganization proposal is the affirmative vote of holders of at least a majority of the outstanding shares entitled to vote at the Annual Meeting. The nine nominees receiving the highest number of votes cast will be elected as directors. Abstentions will not affect the election of directors or the vote on the reorganization proposal.

If as of the Record Date your shares were held in an account at a brokerage firm, bank, dealer, or other similar organization, then that firm or organization is the shareholder of record for purposes of voting at the Annual Meeting and you are considered the beneficial owner of shares held in "street name." If you are a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares held in your account. If you do not instruct your broker on how to vote your shares, your brokerage firm, in its discretion, may vote your shares on routine matters or they may elect not to vote your shares. The proposal to ratify the appointment of our independent registered public accounting firm for the current fiscal year is considered a "routine matter," but the other proposals being voted on at the Annual Meeting are not considered "routine matters" and brokers will not be entitled to vote on those proposals absent specific instructions and authorization from the beneficial owners of the shares. If you hold shares beneficially in street name and do not provide your broker with voting instructions, your shares may constitute "broker non-votes." A broker non-vote occurs when a nominee holding shares for a beneficial holder does not have discretionary voting power and does not receive voting instructions from the beneficial owner. Broker non-votes on a particular proposal are considered present for purposes of determining a quorum, but will not be treated as shares present and entitled to vote on any proposal other than the ratification of our public accounting firm and accordingly will have no effect on such vote.

We invite beneficial owners to attend the Annual Meeting. If you are a beneficial owner and not a shareholder of record, you may not vote your shares in person at the Annual Meeting unless you request and obtain a valid proxy from your broker or other agent and bring such proxy to the Annual Meeting. If you want to attend the meeting, but not vote, you must provide proof of beneficial ownership as of the Record Date, such as your most recent account statement prior to April 10, 2013, a copy of the voting instruction card provided by your broker or other agent or other similar evidence of ownership.

A minimum of one-third of the shares of common stock issued and outstanding must be represented at the meeting in person or by proxy in order to constitute a quorum. Cumulative voting is not allowed for any purpose.

Unless instructions to the contrary are marked, or if no instructions are specified, shares represented by proxies will be voted:

- FOR the persons nominated by the Board for directors, being Kim B. Clarke, Michael D. Durham, Alan Bradley Gabbard, Derek C. Johnson, W. Phillip Marcum, Mark H. McKinnies, Robert E. Shanklin, Jeffrey C. Smith and Richard J. Swanson;
- FOR the approval of the reorganization proposal and the Reorganization Agreement;
- FOR the ratification of the Audit Committee's selection of KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2013;
- FOR the advisory vote on the frequency of future advisory votes on executive compensation; and
- FOR the approval, on an advisory basis, of the compensation of the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion as set forth under the Executive Compensation section of this proxy statement/prospectus.

We do not know of any other matter or motion to be presented at the meeting. If any other matter or motion should be presented at the meeting upon which a vote must be properly taken, to the extent permitted by law, the persons named in the accompanying form of proxy intend to vote such proxy in accordance with that person's judgment, including any matter or motion dealing with the conduct of the meeting.

Voting by Mail, via the Internet or by Telephone

Shareholders whose shares are registered in their own names may vote by mailing a completed proxy card, via the Internet or by telephone. Instructions for voting via the Internet or by telephone are set forth on the enclosed proxy card. To vote by mailing a proxy card, sign and return the enclosed proxy card in the enclosed prepaid and addressed envelope and your shares will be voted at the Annual Meeting in the manner you direct. If no directions are specified, your shares will be voted as described above.

If your shares are registered in the name of a bank or brokerage firm, you may be eligible to vote your shares over the Internet or by telephone rather than by mailing a completed voting instructions card provided by the bank or brokerage firm. Please check the voting instructions card provided by your bank or brokerage house for availability and instructions. If Internet or telephone voting is unavailable from your bank or brokerage house, please complete and return the enclosed voting instructions card in the self-addressed postage paid envelope provided.

Any shareholder who completes a proxy or votes via the Internet or by telephone may revoke the action at any time before it is exercised at the Annual Meeting by delivering written notice of such revocation to the Company (c/o Mark H. McKinnies, Secretary), 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado, 80129, by submitting a new proxy executed at a later date, or by attending the Annual Meeting and voting in person.

EXPENSES OF SOLICITATION

The accompanying proxy is solicited by and on behalf of the Board, and the cost of such solicitation will be borne by the Company. Georgeson Inc. will distribute proxy materials to beneficial owners, may solicit proxies by personal interview, mail, telephone, and electronic communications, and will request brokerage houses and other custodians, nominees, and fiduciaries to forward soliciting material to the beneficial owners of the Company's common stock held on the record date by such persons. The Company will pay Georgeson Inc. $8,000 for its proxy solicitation services plus related fees for any additional services and will reimburse Georgeson Inc. for payments made to brokers and other nominees for their expenses in forwarding solicitation materials. Solicitations may also be made by personal interview, telephone, and electronic communications by directors, officers and other employees of the Company without additional compensation.

QUESTIONS AND ANSWERS ABOUT THE REORGANIZATION PROPOSAL

What is the reorganization proposal?

We are asking you to approve the Reorganization Agreement, by and among ADA-ES, ADES and MergerCo, that would result in your owning shares in ADES. Under the Reorganization Agreement, ADA-ES will merge with MergerCo, with ADA-ES surviving the merger as a wholly owned subsidiary of ADES.

Upon completion of the reorganization, ADES will, in effect, replace our present company as the publicly held corporation. ADES and its subsidiaries will conduct all of the operations we currently conduct. As a result of the reorganization, the current shareholders of ADA-ES will become stockholders of ADES with the same number and percentage of shares of ADES as they hold of ADA-ES shares immediately prior to the reorganization. The Reorganization Agreement, which sets forth the plan of reorganization and is the primary legal document that governs the reorganization, is attached as Annex I to this proxy statement/prospectus. You are encouraged to read the Reorganization Agreement carefully.

Why have you formed a holding company?

We formed a holding company in Delaware to:

- better align our corporate structure with our business operations;
- provide us with greater strategic, business and administrative flexibility, which may allow us to acquire or form other businesses, if and when appropriate and feasible, that may be owned and operated by us, but which could be separate from our current businesses; and
- take advantage of the benefits of Delaware corporate law.

To review the reasons for our reorganization in greater detail, see "Reasons for the Reorganization; Recommendation of our Board."

What will happen to my stock?

In the reorganization, your shares of common stock will automatically be converted into the same number of shares of common stock of ADES. As a result, you will become a stockholder of ADES and will own the same number and percentage of shares of ADES common stock that you own of ADA-ES common stock. We expect that ADES common stock will be listed on the NASDAQ Capital Market under the same symbol as ADA-ES's current symbol, which is "ADES."

How will being an ADES stockholder be different from being an ADA-ES shareholder?

After the reorganization, you will own the same number and percentage of shares of ADES common stock that you owned of ADA-ES common stock immediately prior to the reorganization. You will own shares of

a Delaware holding company that owns our operating businesses. In addition, as a stockholder of ADES, your rights will be governed by Delaware corporate law and the charter documents of the Delaware corporation. Your rights as a stockholder of ADES will be similar to your rights as a shareholder of ADA-ES, including rights as to voting and dividends, except as described in "Description of ADES Capital Stock," "Description of ADA-ES Capital Stock" and "Comparative Rights of Holders of ADES Capital Stock and ADA-ES Capital Stock" below.

Will the management or the business of the Company change as a result of the reorganization?

The management of the operating company ADA-ES will stay the same. The new holding company ADES expects that its executive officers following the reorganization will be the following executive officers of ADA-ES immediately prior to the reorganization: President and Chief Executive Officer, Senior Vice President, Chief Financial Officer and Secretary, Executive Vice President, Chief Operating Officer, Chief Technology Officer, Vice President and General Counsel and Vice President of Investor Relations. We believe that this simplified top-level management structure will best serve the holding company and allow for continued growth. Management and business operations of the operating company will remain substantially the same.

What will the name of the public company be following the reorganization?

The name of the public company following the reorganization will be "Advanced Emissions Solutions, Inc."

Will the public company's CUSIP number change as a result of the reorganization?

Yes. Following the reorganization the public company's CUSIP number will be 00770C 101.

Will I have to turn in my stock certificates?

No. Do not turn in your stock certificates. We will not require you to exchange your stock certificates as a result of the reorganization. After the reorganization, your ADA-ES common stock certificates will represent the same number of shares of ADES common stock.

Will the reorganization affect my U.S. federal income taxes?

The proposed reorganization is intended to be a tax-free transaction under U.S. federal income tax laws. We expect that you will not recognize any gain or loss for U.S. federal income tax purposes upon your receipt of ADES common stock in exchange for your shares of ADA-ES common stock in the reorganization; however, the tax consequences to you will depend on your own situation. You should consult your own tax advisors concerning the specific tax consequences of the reorganization to you, including any state, local or foreign tax consequences of the reorganization. For further information, see "Material U.S. Federal Income Tax Consequences" under "Proposal One" below.

How will the reorganization be treated for accounting purposes?

For accounting purposes, our reorganization into a holding company structure will be treated as a merger of entities under common control. Accordingly, the consolidated financial position and results of operations of ADA-ES will be included in the consolidated financial statements of ADES on the same basis as currently presented.

What vote is required to approve the reorganization proposal?

The required vote is the affirmative vote of holders of at least a majority of the outstanding shares entitled to vote at the Annual Meeting.

What percentage of the outstanding shares do directors and executive officers hold?

On the Record Date, directors, executive officers and their affiliates beneficially owned approximately 8% of our outstanding shares of common stock.

If the shareholders approve the reorganization, when will it occur?

We plan to complete the reorganization on or about July 1, 2013, provided that our shareholders approve the reorganization and all other conditions to completion of the reorganization are satisfied.

Do I have dissenters' (or appraisal) rights?

No, holders of ADA-ES's common stock do not have dissenters' rights under Colorado law as a result of the reorganization proposal.

What is the authorized capital of ADES and ADA-ES?

ADA-ES's amended and restated articles of incorporation currently authorize the issuance of 50,000,000 shares of common stock and 50,000,000 shares of preferred stock. ADES's second amended and restated certificate of incorporation ("Certificate of Incorporation"), which would govern the rights of the Company's stockholders as a result of the reorganization, to be filed prior to the effective date of the reorganization, will authorize the issuance of 100,000,000 shares of common stock and 50,000,000 shares of preferred stock. Additional authorized shares of common stock would enable us to issue common stock to raise capital expeditiously and economically for the Company's ongoing operational needs and could be used for stock splits or distributions, equity incentive plans, acquisitions, strategic alliances or other corporate purposes without the delay and expense involved in obtaining shareholder approval, when the Board of Directors and management believes that such issuance is appropriate. Upon completion of the reorganization, the number of shares of ADES common stock that will be outstanding will be equal to the number of shares of ADA-ES common stock outstanding immediately prior to the reorganization.

Whom do I contact if I have questions about the reorganization proposal?

You may contact our proxy solicitor:

Georgeson Inc.
480 Washington Boulevard, 26th Floor
Jersey City, NJ 07310
Shareholders call toll-free: 866- 658-5755
Banks and brokers call collect: 212-440-9800

or us:
ADA-ES, Inc.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, CO 80129
Telephone: 888-822-8617
Attn: Vice President of Investor Relations

SUMMARY OF THE REORGANIZATION PROPOSAL

This section highlights key aspects of the reorganization proposal, including the Reorganization Agreement, that are described in greater detail elsewhere in this proxy statement/prospectus. It does not contain all of the information that may be important to you. To better understand the reorganization proposal, and for a more complete description of the legal terms of the Reorganization Agreement, you should read this entire document carefully, including the Annexes, and the additional documents to which we refer you. You can find information with respect to these additional documents in "Where You Can Find More Information."

The Principal Parties

ADA-ES, Inc.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: 888-822-8617

ADA-ES, Inc. ("ADA-ES") is a leader in clean coal technology and the associated specialty chemicals, serving the coal-fueled power plant industry. Our proprietary environmental technologies and specialty chemicals enable power plants to enhance existing air pollution control equipment, minimize mercury, CO_2 and other emissions, maximize capacity, and improve operating efficiencies, to meet the challenges of existing and pending emission control regulations.

With respect to mercury emissions:

- Through our consolidated subsidiary, Clean Coal Solutions, LLC ("CCS"), we provide our patented Refined Coal ("RC") CyClean™ technology to enhance combustion of and reduce emissions of NOx and mercury from coals in cyclone boilers and our patent pending M-45™ and M-45-PC™ technologies for Circulation Fluidized Boilers and Pulverized Coal boilers respectively.
- We supply Activated Carbon Injection ("ACI") and Dry Sorbent Injection ("DSI") systems, mercury measurement instrumentation, and related services.
- Under an exclusive development and licensing agreement with Arch Coal, Inc., we are developing and commercializing an enhanced Powder River Basin ("PRB") coal with reduced emissions of mercury and other metals.

In addition, we are developing CO_2 emissions technologies under projects funded by the U.S. Department of Energy ("DOE") and industry participants.

In connection with the reorganization, ADA-ES will merge with MergerCo, with ADA-ES surviving the merger as a wholly owned subsidiary of ADES. After the reorganization, ADA-ES will continue to engage in the business currently conducted by ADA-ES, and all of ADA-ES's contractual, employment and other business relationships will generally continue unaffected by the reorganization.

We are a Colorado corporation. Our headquarters are located at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129, and the telephone number at this location is (888) 822-8617. Information about us is available on our website at www.adaes.com. The content of our website is not incorporated by reference herein and is not deemed to be part of this proxy statement/prospectus.

Advanced Emissions Solutions, Inc.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: 888-822-8617

ADES, a Delaware corporation, was formed as a wholly owned subsidiary of ADA-ES in order to effect the reorganization. Prior to the reorganization, ADES will have no assets or operations other than those incident to its formation.

ADA Merger Corp.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: 888-822-8617

MergerCo, a Colorado corporation, was formed as a wholly owned subsidiary of ADES in order to effect the reorganization. Prior to the reorganization, MergerCo will have no assets or operations other than those incident to its formation.

What You Will Receive in the Reorganization

In the reorganization, each outstanding share of common stock of ADA-ES will be converted automatically into one share of common stock of ADES. In addition, each outstanding option to purchase shares of ADA-ES common stock, if not exercised before the completion of the reorganization, will become an option to acquire, at the same exercise price, an identical number of shares of ADES common stock. Each outstanding restricted stock award (or any performance award payable in restricted stock) of shares of ADA-ES common stock will become an award of restricted stock (or a performance award payable in restricted stock) in an identical number of shares of ADES common stock. Finally, participants in the Company's equity incentive plans and 401(k) plan will be entitled to receive shares of ADES common stock in accordance with the terms of the plans, and shares of common stock of ADA-ES currently held in the plans will be converted into shares of common stock of ADES.

On the Record Date, there were outstanding 10,062,242 shares of ADA-ES common stock including 106,775 unvested shares of ADA-ES restricted stock, as well as options representing 185,516 shares of ADA-ES common stock.

Conditions to Completion of the Reorganization

The completion of the reorganization depends on the satisfaction of a number of conditions, including, but not limited to, the following:

- absence of any stop order suspending the effectiveness of the registration statement, of which this proxy statement/prospectus forms a part, relating to the shares of ADES common stock to be issued in the reorganization;
- approval of the Reorganization Agreement by ADA-ES's shareholders;
- receipt of approval for listing on the NASDAQ Capital Market of shares of ADES common stock to be issued in the reorganization; and
- absence of any order or proceeding that would prohibit or make illegal completion of the reorganization.

Termination of the Reorganization Agreement

We may terminate the Reorganization Agreement, even after approval by our shareholders, if our Board determines that the reorganization would not be in the best interests of ADA-ES or its shareholders or that the reorganization would have material adverse consequences to ADA-ES or its shareholders.

Board of Directors and Executive Officers of ADES Following the Reorganization

The board of directors of ADES presently consists of Dr. Michael Durham and Mr. Mark McKinnies. Upon consummation of the Reorganization, the ADES board of directors will be the same as the directors elected by the shareholders of ADA-ES at the 2013 Annual Meeting. ADES expects that its executive officers following the reorganization will be the following executive officers of ADA-ES immediately prior to the reorganization: President and Chief Executive Officer, Senior Vice President, Chief Financial Officer and Secretary, Executive Vice President, Chief Operating Officer, Chief Technology Officer, Vice President and General Counsel and Vice President of Investor Relations. We believe that this simplified top-level management structure will best serve the holding company and allow for continued growth. Management and business operations of the operating company will remain substantially the same.

Markets and Market Prices

ADES common stock is not currently traded or listed on any stock exchange or market. ADA-ES common stock is traded under the symbol "ADES" on the NASDAQ Capital Market, and we expect ADES common stock to trade on the NASDAQ Capital Market under the same symbol "ADES" following the reorganization. On March 22, 2013, the last trading day before the announcement of the reorganization proposal, the closing price per ADA-ES share was $26.33. On April 24, 2013, the most recent trading day for which prices were available, the closing price per ADA-ES share was $26.09.

Certain Financial Information

We have not included pro forma financial comparative per share information concerning ADA-ES that gives effect to the reorganization because, immediately after the completion of the reorganization, the consolidated financial statements of ADES will be the same as ADA-ES's consolidated financial statements immediately prior to the reorganization, and the reorganization will result in the conversion of each share of ADA-ES common stock into one share of ADES common stock. In addition, we have not provided financial statements of ADES because, prior to the reorganization, it will have no assets, liabilities or operations other than those incident to its formation.

RISK FACTORS

In considering whether to vote in favor of the reorganization proposal, you should consider all of the information we have included in this proxy statement/prospectus, including its Annexes, and all of the information included in the documents we have incorporated by reference, including our Annual Report on Form 10-K for the year ended December 31, 2012 and the risk factors described in the other documents incorporated by reference. In addition, you should pay particular attention to the risks described below.

Our Board may choose to defer or abandon the reorganization.

Completion of the reorganization may be deferred or abandoned, at any time, by action of our Board, whether before or after the Annual Meeting. While we currently expect the reorganization to take place on or about July 1, 2013, assuming that the reorganization proposal is approved at the Annual Meeting, the Board may defer completion of or may abandon the reorganization because of any determination by our Board that the reorganization would not be in the best interests of ADA-ES or its shareholders or that the reorganization would have material adverse consequences to ADA-ES or its shareholders.

We may not obtain the expected benefits of our reorganization into a holding company.

We believe our reorganization into a holding company will provide us with benefits in the future. These expected benefits may not be obtained if market conditions or other circumstances prevent us from taking advantage of the strategic, business and financing flexibility that we believe it will afford us. As a result, we may incur the costs of creating the holding company without realizing the possible benefits.

As a holding company, ADES will depend in large part on dividends from its operating subsidiaries to satisfy its obligations.

After the completion of the reorganization, ADES will be a holding company with no business operations of its own. Its only significant assets will be the outstanding capital stock of its subsidiaries, which will initially be ADA-ES and its subsidiaries. As a result, ADES will rely on funds from ADA-ES and any subsidiaries that it may form in the future to meet its obligations.

The market for ADES shares may differ from the market for ADA-ES shares.

Although it is anticipated that the ADES shares of common stock will be authorized for listing on the NASDAQ Capital Market, the market prices, trading volume and volatility of the ADES shares could be different from those of the ADA-ES shares.

Anti-takeover provisions in ADES's Certificate of Incorporation and bylaws may delay or prevent a third party acquisition of ADES, which could decrease the value of ADES's common stock.

The Certificate of Incorporation and bylaws of ADES contain provisions that could make it more difficult for a third party to acquire it without the consent of its board of directors. These provisions, the first three of which are also currently in effect with respect to ADA-ES, will:

- limit the business at special meetings to the purpose stated in the notice of the meeting;
- authorize the issuance of "blank check" preferred stock, which is preferred stock with voting or other rights or preferences that could impede a takeover attempt and that the board of directors can create and issue without prior stockholder approval;
- establish advance notice requirements for submitting nominations for election to the board of directors and for proposing matters that can be acted upon by stockholders at a meeting; and

- require the affirmative vote of the “disinterested” holders of a majority of our common stock to approve certain business combinations involving an “interested stockholder” or its affiliates, unless either minimum price criteria and procedural requirements are met, or the transaction is approved by a majority of our “continuing directors” (known as “fair price provisions”).

Although we believe all of these provisions will make a higher third-party bid more likely by requiring potential acquirers to negotiate with the board of directors, these provisions will apply even if an initial offer may be considered beneficial by some stockholders and therefore could delay and/or prevent a deemed beneficial offer from being considered. For more information, see “Description of ADES Capital Stock” and “Comparative Rights of Holders of ADES Capital Stock and ADA-ES Capital Stock” below.

As a stockholder of a Delaware corporation, your rights after the reorganization will be different from, and may be less favorable than, your current rights as a shareholder of a Colorado corporation.

After the completion of the reorganization, you will become a stockholder of a public company incorporated in Delaware instead of Colorado. As a result, your rights as a stockholder will be governed by Delaware corporate law as opposed to Colorado corporate law. Because they are separate bodies of law, Delaware corporate law will be different from Colorado corporate law. Although many of these differences will not have a significant impact on the rights of stockholders, some of these differences may be less favorable to stockholders. Some of the differences between Delaware and Colorado corporate law that may be less favorable to stockholders after the completion of the reorganization include the following:

- under Delaware corporate law, fewer corporate transactions give rise to dissenters’ rights than under Colorado corporate law; and
- under Delaware corporate law and ADES’s bylaws, holders of 20% of the voting shares of ADES will have the right to call a special meeting of stockholders, as opposed to Colorado corporate law and ADA-ES’s bylaws, which give holders of 10% of the voting shares the right to call a special meeting.

These differences may limit the significance of your rights as a stockholder in these contexts. For a discussion of these and other differences between Delaware and Colorado corporate law, see “Description of ADES Capital Stock,” “Description of ADA-ES Capital Stock” and “Comparative Rights of Holders of ADES Capital Stock and ADA-ES Capital Stock” below.

The proposed reorganization into a holding company may result in substantial direct and indirect costs whether or not completed.

The reorganization may result in substantial direct costs. These costs and expenses are expected to consist primarily of attorneys’ fees, accountants’ fees, filing fees and financial printing expenses and will be substantially incurred prior to the vote of our shareholders. A substantial portion of these costs were incurred in 2011 and 2012 when we initially proposed the reorganization. Therefore, we expect our attorneys’ and filing fees to be substantially less than previously incurred. The Company has also paid minimal Delaware franchise taxes for ADES since its incorporation in 2011; upon filing of the Certificate of Incorporation, which will occur prior to the closing date of the reorganization, the franchise taxes due to Delaware will substantially increase due to the increase in authorized stock provided by the Certificate of Incorporation. The reorganization may also result in certain indirect costs by diverting the attention of our management and employees from our business and by increasing our administrative costs and expenses. These administrative costs and expenses will include keeping separate records and in some cases making separate regulatory filings for each of ADES and ADA-ES. The reorganization may also result in certain state sales taxes and other transfer taxes.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements in this proxy statement/prospectus and in documents incorporated by reference in this proxy statement/prospectus contain various forward-looking statements, which represent our management's beliefs and assumptions concerning future events. When used in this proxy statement/prospectus and in documents incorporated herein by reference, forward-looking statements include, without limitation, statements regarding financial forecasts or projections, and our expectations, beliefs, intentions or future strategies that are signified by the words "expects," "anticipates," "intends," "plans," "believes," "estimates," "predicts," "potential," "may," "will," "should" or the negative of these terms or other comparable terminology. These forward-looking statements include statements regarding the costs, benefits and results related to the reorganization including the holding company structure and the impact of Delaware law; the timing and completion of the reorganization; the trading symbol of ADES's stock and on what exchange it will trade after the reorganization; who the directors and executive officers of ADES will be after the reorganization; the transfer agent of ADES's stock after the reorganization; the tax implications of the reorganization; the impact, cost, structure and use of the ADA-ES Plans (as defined below) and ADA-ES's compensation policies both after the reorganization and if the reorganization is not consummated; ADA-ES's reporting requirements after the reorganization; and the Annual Meeting, including whether a director nominee will accept election to the Board. These statements are subject to risks, uncertainties and assumptions that could cause our actual results and the timing of certain events to differ materially from those expressed in the forward-looking statements.

You should understand that many important factors, in addition to those discussed or incorporated by reference in this proxy statement/prospectus, could cause our results to differ materially from those expressed in the forward-looking statements. Potential factors that could affect our results include those described in this proxy statement/prospectus under "Risk Factors," and those identified in our Annual Report on Form 10-K for the year ended December 31, 2012 and in the other documents incorporated by reference. In light of these risks and uncertainties, the forward-looking results discussed or incorporated by reference in this proxy statement/ prospectus may not occur.

PROPOSAL ONE

ELECTION OF DIRECTORS

As of the date of the 2013 Annual Meeting, our Board of Directors (the "Board") will consist of nine members due to the retirement of two current members of the Board, and the Board plans to reduce the size of the Board from eleven directors to nine to reflect these retirements effective as of the date of the Annual Meeting. Our Nominating and Governance Committee recommended to our Board the slate of nine directors for re-election by our shareholders, and the Board approved the recommendation and the slate of directors. Each director will hold office until the next Annual Meeting of Shareholders and thereafter until a successor is elected and qualified. If the reorganization proposal is approved and the Reorganization Agreement is effected, the directors will serve as the directors of the new holding company ADES. Cumulative voting is not permitted in the election of directors. IN THE ABSENCE OF INSTRUCTIONS TO THE CONTRARY, THE INDIVIDUALS NAMED IN THE ACCOMPANYING PROXY WILL VOTE IN FAVOR OF THE ELECTION OF THE FOLLOWING PERSONS NAMED AS OUR NOMINEES FOR DIRECTORS: KIM B. CLARKE, MICHAEL D. DURHAM, ALAN BRADLEY GABBARD, DEREK C. JOHNSON, W. PHILLIP MARCUM, MARK H. MCKINNIES, ROBERT E. SHANKLIN, JEFFREY C. SMITH and RICHARD J. SWANSON.

All of the nominees are currently members of the Board. Each of the nominees has consented to be named herein and to serve if elected. We do not anticipate that any nominee will become unable or unwilling to accept nomination or election, but if this should occur, the persons named in the proxy intend to vote for the election in his or her stead of such other person as the Board may recommend. It is the policy and practice of the Company that all directors who reside in the metropolitan Denver, Colorado area attend the Annual Meeting. Six of our directors serving at the time of our 2012 Annual Meeting of Shareholders attended that meeting.

The following table sets forth certain information as to each nominee (and current director) of the Company:

Name	Age	Position and Offices	Director Since
Kim B. Clarke	57	Director, Member of the Compensation and Nominating and Governance Committees	2013
Michael D. Durham	63	Director, President and Chief Executive Officer	2003
Alan Bradley Gabbard (4)	58	Director, Member of the Audit and Compensation Committees	2012
Derek C. Johnson (2)	52	Director, Member of the Audit and Nominating and Governance Committees	2006
W. Phillip Marcum (3)	69	Chairman of the Board of Directors, Member of the Compensation and Nominating and Governance Committees	2008
Robert E. Shanklin (1)	41	Director, Member of the Nominating and Governance Committee	2011
Mark H. McKinnies	61	Director, Senior Vice President, Chief Financial Officer and Secretary	2003
Jeffrey C. Smith	61	Director, Chairman of the Nominating and Governance Committee and Member of the Compensation Committee	2003
Richard J. Swanson	77	Director, Chairman of the Audit Committee, Member of the Compensation Committee	2006

(1) Mr. Shanklin is the Vice President of Coal Technology of Arch Coal, Inc., a public company located in St. Louis, Missouri (NYSE: ACI). The initial appointment of Mr. Shanklin to our Board was made pursuant to a 2003 Subscription and Investment Agreement with Arch Coal, Inc. whereby our management agreed to make available one seat on the Board for an Arch Coal designee and to vote all shares and proxies they are entitled to vote in favor of such designee for so long as Arch Coal continues to hold at least 100,000 shares of our common stock.

(2) Mr. Johnson has served as a director of Qualmark Corporation, a public company (OTC.PK: QMRK), since 2008.

(3) Mr. Marcum has served as a chairman of the board of Applied Natural Gas Fuels, Inc., a public company located in Westlake Village, California (OTC: AGAS) since 2008. He has served as a director of Key Energy Services, Inc., a public company located in Houston, Texas (NYSE: KEG) since 1996 and Recovery Energy, Inc., located in Denver, Colorado (NASDAQ: RECV) since July 2011.

(4) Mr. Gabbard has served as a director of Recovery Energy, Inc., a public company (NASDAQ: RECV), since 2012.

Other than as set forth in footnote (1) above with respect to Mr. Shanklin, there are no arrangements or understandings between any directors or executive officers and any other person or persons pursuant to which they were selected as directors or executive officers.

EXPERIENCE AND QUALIFICATIONS OF DIRECTOR NOMINEES

The Nominating and Governance Committee seeks directors with strong reputations and experience in areas relevant to our strategy and operations, such as mining, environmental and chemical technologies, government regulation and relations and supply chain management. Each of the nominees for election as director holds or has held senior executive positions in complex organizations and has operating experience that meets this objective, as described below. In these positions, the nominees have also gained experience in core management skills, such

as strategic and financial planning, public company financial reporting, corporate governance, executive compensation, risk management and leadership development. The Nominating and Governance Committee also believes that each of the nominees has other key attributes that are critical to the composition of an effective Board: integrity and demonstrated impeccable ethical standards, sound judgment, analytical skills, the ability to work together in a constructive and collaborative fashion and the commitment to devote significant time and energy to service on the Board and its Committees.

The specific experience, qualifications and background of each nominee follows:

Ms. Clarke is currently the Senior Vice President ("SVP") and Chief Administrative Officer ("CAO") of Key Energy Services, Inc. (NYSE: KEG); she has served as SVP and CAO since 2008 and served as Vice President and Chief People Officer from 2004 through 2007. Prior to Key Energy Services, Inc., she served as the Vice President of Human Resources of GC Services Limited Partnership and 1st National Bank in Houston, Texas from 1999 to 2004. Ms. Clarke received a B.S. degree in human resources from the University of Houston in 1982 and completed the Director Development Program at the Kellogg School of Management at Northwestern University. She currently serves as Chairperson of the University of Houston College of Technology Dean's Board of Advisors. Ms. Clarke has served as a director of the Company for less than one year.

Director Qualifications:

- Leadership Experience – SVP and CAO of Key Energy Services, Inc.; Vice President of Human Resources of GC Services Limited Partnership and First National Bank in Houston, Texas; Vice President of Human Resources of BFI; Director Development Program at the Kellogg School of Management at Northwestern University.
- Industry and Human Resources Experience – 35 years of experience in human resources, a majority of which were at energy and service companies. She has over ten years of experience in the safety and environmental and information technologies industries.

Dr. Durham was a co-founder in 1985 of ADA Technologies, Inc., an Englewood, Colorado private company which contracted to the federal government and others for development of emission technologies. ADA Environmental Solutions, LLC, our wholly owned subsidiary, was originally spun-out of ADA Technologies in 1996. Dr. Durham has been President, CEO and a director of the Company since 2003 and President of ADA Environmental Solutions, LLC, a wholly owned subsidiary, since its formation in 1996. In 2009, Dr. Durham served as a manager of ADA Carbon Solutions, LLC ("ADA-CS"), a former joint venture of ADA-ES with Energy Capital Partners I, LP and its affiliated funds. Dr. Durham has a B.S. in Aerospace Engineering from Pennsylvania State University, an M.S. and Ph.D. in Environmental Engineering from the University of Florida and an Executive M.B.A. from the University of Denver. Dr. Durham is a member of the Board of the American Coal Council, a trade association of companies that sell, use and provide services related to coal, a Board member of the Institute of Clean Air Companies ("ICAC"), a trade association of companies that provide equipment to measure and control air pollution, and was appointed a member of the National Coal Council, which advises the Secretary of Energy on coal-related issues. From 2011 to 2012, he served as vice president of ICAC. Dr. Durham has been a director of the Company for over nine years.

Director Qualifications:

- Leadership Experience – President, CEO and a director of ADA-ES since 2003; Co-founder of ADA Technologies Inc.; President of ADA Environmental Solutions, LLC; Manager of ADA-CS; Executive M.B.A. from the University of Denver.
- Industry Experience – M.S. and Ph.D. in Environmental Engineering from the University of Florida; Member of the Board of American Coal Council; Board member and officer of the Institute of Clean Air Companies; Member of the National Coal Council. Senior manager of technical projects and intellectual property development at the entities and in the capacities described above.

Mr. Gabbard joined our Board in November 2012. He currently serves as a director, President and Chief Financial Officer ("CFO") of Recovery Energy, Inc. (Nasdaq: RECV), a Denver, Colorado-based energy company with operations focused in the Denver Julesburg basin; he was appointed as CFO in July 2011, as a director in August 2012 and as President in November 2012. Prior to Recovery Energy, Mr. Gabbard served as an officer of Applied Natural Gas Fuels, Inc., serving from September 2009 to May 2010 as Vice President-Special Projects and from May 2010 through June 2011 as its CFO. From April 2007 through September 2009, he co-owned and managed MG Advisors, LLC with Mr. Marcum, where he provided management and financial consulting services to companies involved in oil and gas and energy related businesses. From 1991 to April 2007, Mr. Gabbard co-founded and then served as a director, Executive Vice President and CFO of PowerSecure International, Inc. (Nasdaq: POWR; f/k/a Metretek Technologies, Inc.), a developer of energy and smart grid solutions for electric utilities and their commercial, institutional, and industrial customers. He received a bachelor of accountancy degree from the University of Oklahoma in 1977 and is a CPA. Mr. Gabbard has been a director of the Company for less than one year.

Director Qualifications:

- Leadership Experience – Director, President and CFO of Recovery Energy, Inc.; CFO of Applied Natural Gas Fuels, Inc.; Director, Executive Vice President and CFO of PowerSecure International, Inc.
- Industry Experience – 35 years of experience in the management and operations of traditional and alternative energy companies, including those that primarily serve utilities, and small, publicly held companies.
- Finance Experience – CPA; Accounting degree from University of Oklahoma; CFO of Recovery Energy, Inc.; Former CFO of Applied Natural Gas Fuels, Inc. and PowerSecure International, Inc.; provided management and financial consulting services at MG Advisors, LLC; worked with the national accounting firm Ernst & Young.

Mr. Derek Johnson serves as the President of Visual Merchandising, Inc., a specialty supplier to the retail industry, and has held that position since September 2009 and previously from November 2005 to October 2008. Mr. Johnson previously served as the Vice President of new business development for Kennametal, a public company based in Pittsburgh, PA, a global provider of metalworking solutions using tungsten carbide inserts. Mr. Johnson held this position from October 2008 to August 2009. Since 2008, Mr. Johnson has served as a Director of Qualmark Corporation (OTC.PK: QMRK), a company that designs, manufactures, and markets proprietary equipment that rapidly and efficiently exposes product design and manufacturing-related defects for the purpose of improving product quality and reliability. From 1984 to 2005, Mr. Johnson was employed in various positions, including as President and Chief Operating Officer, by CoorsTek, a manufacturer of technical products, supplying critical components and assemblies for mining, automotive, semiconductor, aerospace, electronic, power generation, telecommunication and other high-technology applications on a global basis. He has a Higher National Certificate from Kirkcaldy College in Scotland and an Executive M.B.A. from the University of Denver. Mr. Johnson has been a director of the Company for over six years.

Director Qualifications:

- Leadership Experience – President of Fusion Specialties; Vice President of Kennametal; Director of Qualmark Corporation; President and Chief Operating Officer of CoorsTek; Executive M.B.A. from the University of Denver.
- Industry Experience – Senior management and experience in the development and manufacturer of technical products in diverse international markets at the entities and in the capacities described above.

Mr. Marcum was appointed a director of the Company in January 2008. Mr. Marcum has served as a chairman of the board of Applied Natural Gas Fuels, Inc., a liquefied natural gas producer based in Westlake Village,

California (OTC: AGAS) since 2008. He has served as a director of Key Energy Services (NYSE: KEG), an oilfield services company based in Houston, Texas, since 1996. Prior to his appointment to the Board of Key Energy Services, he was the non-executive Chairman of the Board of WellTech, Inc., an energy production services company, from 1994 until March 1996, when WellTech was merged into Key Energy Services. In July 2011, Mr. Marcum was appointed as a director of Recovery Energy, Inc., a Denver, Colorado-based oil and gas company. From January 1991 to April 2007, Mr. Marcum was Chairman of the Board, President and Chief Executive Officer of Metretek Technologies, Inc., currently known as PowerSecure International (NASDAQ: POWR), which develops energy and smart grid solutions for electric utilities, and their commercial, institutional, and industrial customers. He retired in April 2007. Mr. Marcum has been a principal in MG Advisors, LLC since April 2007. He holds a bachelor's degree in Business Administration from Texas Tech University. Mr. Marcum has served as Chairman of the Board since June 2009. He has been a director of the Company for over five years.

Director Qualifications:

- Leadership Experience – Chairman of the Board of Applied Natural Gas Fuels; Director of Key Energy Services; Director of Recovery Energy; Non-executive Chairman of WellTech; Chairman, President and CEO of Metretek Technologies; Chairman of the Board of ADA-ES.
- Industry Experience – Extensive experience in oil and gas development stage and public companies at the entities and in the capacities described above.

Mr. McKinnies has served as our Chief Financial Officer and Secretary since 2003 and was appointed as Senior Vice President in September 2005. Mr. McKinnies was employed by Earth Sciences from 1978 through 2000. A CPA, Mr. McKinnies worked for Peat, Marwick, Mitchell & Co., a national accounting firm, before commencing employment at Earth Sciences in 1978. Mr. McKinnies holds a bachelor's degree in Accounting from the University of Denver. He has been a director of the Company for over nine years.

Director Qualifications:

- Leadership Experience – Senior Vice President, Chief Financial Officer and Director of ADA-ES; Former Manager of ADA-CS and Clean Coal.
- Industry Experience – Served in various capacities at Earth Sciences (the predecessor of ADA-ES) and at ADA-ES for over 30 years.
- Finance Experience – CPA and worked at the national accounting firm Peat, Marwick, Mitchell & Co; Accounting degree from University of Denver; CFO of ADA-ES.

Mr. Shanklin joined Arch Coal, a public company headquartered in St. Louis, Missouri (NYSE: ACI) and one of the nation's largest and most efficient coal producers, in June 2007 as Vice President of Coal Technology. He also serves on the boards of directors for two privately held companies in which Arch Coal is an investor. Prior to his time with Arch Coal, Mr. Shanklin served as Vice President of Marketing & Development for Aquila, Inc. in Kansas City, Missouri. He also held various leadership positions with subsidiaries of Aquila, Inc., including President and Chairman of Aquila Merchant Services. Mr. Shanklin was selected as a 2010 Eisenhower Fellow. He holds a B.S. degree in Electrical Engineering from Kansas State University and an M.B.A. degree from the University of Missouri, Kansas City. Mr. Shanklin has been a director of the Company for more than one year.

Director Qualifications:

- Leadership Experience – Vice President of Coal Technology for Arch Coal, Inc. and various positions in energy project development and asset and commodity management with Aquila Inc.

- Industry Experience – In his capacity as Vice President of Arch Coal, understands coal industry and market and related coal industry product development as well as international markets, which the company plans to pursue. Arch Coal serves many of the same customers as ADA-ES.

Mr. Smith was appointed a director of the Company in August 2003. He has unique experience with the air pollution control industry, the industry in which the Company operates, which has given him keen insight into clean air rules, as well as market dynamics and corporate decision-making within the industry. For over 17 years, as the Executive Director of ICAC, he led strategy discussions on government affairs with top management of scores of companies in the air pollution control industry. He has testified over ten times before the U.S. Congress and dozens of times before state clean air regulators. He has also written testimony on nearly 100 proposed clean air rules. He has spoken at conferences (often as the keynote speaker) focused on clean air rules and policy. Most of these national and international conferences were sponsored by organizations of industrial and utility companies who purchase air pollution controls. He is the author of over a dozen articles on clean air policy, and has been quoted widely in clean air trade journals, as well as *The Washington Post, New York Times, and Wall Street Journal*. Early in his career Mr. Smith served as an appellate litigation attorney for the U.S. Environmental Protection Agency, for which he received two special bonus awards for negotiation and brief-writing in matters involving the utility and coal industries. Mr. Smith also was a founder and acted as managing partner in ESI International from 1981 until April 2003. ESI is a consulting company that employs attorneys, engineers and scientists, and ESI's primary client base is companies in the air pollution control field. After leaving ESI in 2005, Mr. Smith had his own consulting firm, the Law Offices of Jeffrey C. Smith, until December 2009, representing members of the air pollution control industry on government affairs. He retired in 2010. Mr. Smith holds a B.A., *magna cum laude*, in economics from Duke University, where he was elected to Phi Beta Kappa. He also has a J.D. from The University of Michigan Law School. Mr. Smith is chairman of the Nominating and Governance Committee, a position he has held since October 13, 2010. He served on the Company's Audit Committee from January 1 to October 13, 2010 and as our Chairman of the Board from March 2006 until June 2009. Mr. Smith has been a director of the Company for over nine years.

Director Qualifications:

- Leadership Experience – Executive Director of ICAC; Founder and Managing Partner of ESI and the Law Offices of Jeffrey Smith; Chairman of ADA-ES.
- Industry Experience – Extensive and varied experience within the air pollution control industry and author of over a dozen articles on clean air policy.
- Government Experience – Testified before Congress and state regulators; Appellate litigation attorney for the EPA.

Mr. Swanson was appointed a director of the Company in July 2006. Mr. Swanson has been an advisor and performance coach to CEOs and business owners in Colorado for 15 years through an affiliation with Vistage International, Inc. (formerly the Executive Committee), the world's leading CEO membership organization. Previously he was with Accenture, an international consulting firm, was the CFO of the Denver Regional Transportation District ("DRTD"), a $200 million company, and was the founder and president of Real Estate Associates, Inc. ("REA"), a commercial real estate investment and development company in Denver, Colorado. He has accomplished corporate turnaround projects, has served on a number of private company boards, and from 2007 through 2012 was a director and Audit Committee Chairman of Ascent Solar Technologies Inc. (NASDAQ: ASTI), a developer and manufacturer of solar technology. He has a B.A. in History from the University of Colorado and an M.B.A. from Harvard Business School. Mr. Swanson is Chairman of the Audit Committee. Mr. Swanson has been a director of the Company for over six years.

Director Qualifications:

- Leadership Experience – Advisor and performance coach to CEO's and business owners in Colorado for 15 years through an affiliation with Vistage International, Inc.; CFO of the DRTD and founder and president of REA; M.B.A. from Harvard Business School; Director and Audit Committee Chairman of ADA-ES and Ascent Solar Technologies Inc.
- Finance Experience – Consultant at Accenture and experience in the senior finance positions at the entities and in the capacities described above.

No family relationship exists between any directors or executive officers.

CORPORATE GOVERNANCE

Director Independence

The Board maintains audit, compensation and nominating and governance committees. In our fiscal year 2012 all directors other than Dr. Durham and Mr. McKinnies qualified as "independent directors" as defined in NASD Rule 4200(a)(15), and each Board committee was comprised solely of independent directors. The charters of each committee are available on our website at www.adaes.com under "Investor Relations."

Board Meetings and Committees

Our Board is responsible for establishing broad corporate policies and monitoring the overall performance of the Company. However, in accordance with corporate legal principles, the Board is not involved in day-to-day operating matters. Members of the Board are kept informed of the Company's business by participating in Board and committee meetings, by reviewing analyses and reports sent to them weekly and monthly, and through discussions with the President and other officers.

The Board of Directors met nine times in 2012. At each of the Board of Directors meetings the independent directors were polled to determine if they believed an Executive Session was needed. On one occasion such session was held where management of the Company was excluded. The Audit Committee met eight times in 2012. The Compensation Committee met 11 times in 2012. The Nominating and Governance Committee met six times in 2012. All of the directors were present for more than 75% of the meetings of the Board of Directors and the committees of which they were members held during their individual terms.

Audit Committee

Our Board has an Audit Committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which consists of Messrs. Alan Bradley Gabbard, Derek Johnson, Ronald Johnson and Richard Swanson. Mr. Swanson serves as the chairman of the Audit Committee. Mr. Ronald Johnson is not standing for reelection as a director of the Company at our Annual Meeting. Our Board has determined that Messrs. Swanson and Gabbard are Audit Committee Financial Experts. Mr. Swanson is "independent" as that term is used in the listing requirements for the NASDAQ Stock Market, and a brief listing of his relevant experience is stated in his biography above under the caption entitled "Experience and Qualifications of Director Nominees."

The role and functions of the Audit Committee are set out in the Audit Committee Charter, as amended, originally adopted by the Company's Board and most recently amended on September 22, 2005. The role of the Audit Committee is one of oversight of the services performed by the Company's independent registered public accounting firm and internal audit consultants, evaluating the Company's accounting and financial reporting

processes, system of internal controls and audits of our financial statements. The Audit Committee's functions include the following: reviewing and assessing the Audit Committee Charter annually; overseeing the Company's compliance with legal, ethical and regulatory requirements; overseeing the Company's processes to identify and manage business and financial risk; appointing, approving the compensation of and reviewing the Company's relationships with its independent registered public accounting firm and/or other auditors and assessing the impact such relationships may have on the auditors' objectivity and independence; taking other appropriate action to oversee the independence of the outside auditors; reviewing and considering the matters identified in Statement on Auditing Standards No. 61 with the outside auditors and management; reviewing and discussing the Company's financial statements and report on internal control with the outside auditors and management; recommending whether the Company's audited financial statements should be included in the Company's Annual Report on Form 10-K for filing with the Securities and Exchange Commission ("SEC"); and reporting to the Board on all such matters. In performing its oversight function, the Audit Committee relies upon advice and information received in its discussions with the Company's management and independent registered public accounting firm.

Report of the Audit Committee

The Audit Committee has (i) reviewed and discussed the Company's audited financial statements for the fiscal year ended December 31, 2012 with the Company's management; (ii) discussed with the Company's independent registered public accounting firm the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, as adopted by the Public Company Accounting Oversight Board ("PCAOB") regarding communication with audit committees (AICPA Professional Standards, Vol. 1, AU section 380); and (iii) received the written disclosures and the letter from the Company's independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence and has discussed with the Company's independent accountants the independent accountants' independence.

Based on the review and discussions with management and the Company's independent registered public accounting firm referred to above, the Audit Committee recommended to the Board that the audited consolidated financial statements as of and for the years ended December 31, 2012, 2011 and 2010 be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012 for filing with the SEC.

Respectfully submitted,

The Audit Committee: Richard Swanson, Chairman
Alan Bradley Gabbard
Derek Johnson
Ronald Johnson

Nominating and Governance Committee

Our Board has appointed a Nominating and Governance Committee consisting of Ms. Clarke and Messrs. Caruso, Derek Johnson, Marcum, Shanklin and Smith. Mr. Smith serves as the chairman of the Nominating and Governance Committee. Mr. Caruso is not standing for reelection as a director of the Company at our Annual Meeting. The responsibilities of the Committee, as set forth in the Nominating and Governance Committee Charter, most recently amended on July 11, 2011, include selecting director nominees for the Board, reviewing director compensation and benefits and submitting the same to the entire Board for approval, overseeing the annual self-evaluation of the Board and its committees, recommending the structure and composition of Board committees to the entire Board for approval and monitoring in conjunction with the Audit Committee compliance with our Code of Ethics and Business Conduct and granting any waivers thereto with respect to directors and

executive officers, recommending individuals to serve as Chairperson of the Board and Chief Executive Officer and reviewing the Chief Executive Officer's recommendations for individuals to serve as executive officers and analyzing and recommending such persons to the Board.

Criteria established for the selection of candidates for the Board include:

a. An understanding of business and financial affairs and the complexities of an organization that operates as a public company in the business of the Company;

b. A genuine interest in representing all of our shareholders and the interests of the Company overall;

c. A willingness and ability to spend the necessary time required to function effectively as a director;

d. An open-minded approach to matters and the resolve and ability to independently analyze matters presented for consideration;

e. A reputation for honesty and integrity that is above reproach;

f. Any qualifications required of independent directors by the NASDAQ Stock Market and applicable law; and

g. As to any candidate who is an incumbent director (who continues to be otherwise qualified), the extent to which the continuing service of such person would promote stability and continuity in the Boardroom as a result of such person's familiarity and insight into the Company's affairs, and such person's prior demonstrated ability to work with the Board as a collective body.

Director nominees are generally identified by our officers, directors or shareholders based on industry and business contacts. Regardless of the source of the nomination, nominees are interviewed and evaluated by the Nominating and Governance Committee, other members of the management team and the Board as deemed appropriate by the Nominating and Governance Committee. The Nominating and Governance Committee then presents qualified candidates to the Board for a final discussion and vote.

We do not have a formal policy with respect to the consideration of diversity in the identification of director nominees, but the Nominating and Governance Committee strives to select candidates for nomination to the Board with a variety of complementary skills so that, as a group, the Board possesses the appropriate talent, skills and expertise to oversee the Company's businesses.

Under the Nominating and Governance Committee Charter, the Nominating and Governance Committee will consider nominees submitted by our shareholders. Recommendations of individuals that meet the criteria set forth in the Nominating and Governance Committee Charter for election at our 2014 annual meeting of shareholders may be submitted to the Committee in care of Mark H. McKinnies, Secretary, at 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129 no later than December 13, 2013.

The Committee has recommended to our Board the slate of directors for this Annual Meeting as set forth above. No third party was used in identifying or evaluating nominees, and we received no shareholder recommendations for nominees. The initial appointment of Mr. Shanklin to our Board was made pursuant to a 2003 Subscription and Investment Agreement with Arch Coal, Inc. whereby our management agreed to make available one seat on the Board for an Arch Coal designee and to vote all shares and proxies they are entitled to vote in favor of such designee for so long as Arch Coal continues to hold at least 100,000 shares of our common stock.

Compensation Committee

Our Board has appointed a Compensation Committee consisting of Ms. Clarke and Messrs. Caruso, Gabbard, Ronald Johnson, Marcum, Smith and Swanson. Mr. Caruso currently serves as the chairman of the Compensation Committee. Messrs. Caruso and Ronald Johnson are not standing for reelection as a director of the Company at

our Annual Meeting. The responsibilities of the Compensation Committee, as set forth in the Compensation Committee Charter, most recently amended on July 11, 2011, include reviewing our executive compensation programs to analyze their alignment with attracting, retaining and motivating our executive officers to achieve our business objectives; establishing annual and long-term performance goals for our executive officers and evaluating their performance in light of such goals, reviewing and making recommendations concerning our long-term incentive plans and shareholder proposals related to compensation and administering our equity-based and employee benefit plans. See "Executive Compensation" below for additional information.

Compensation Committee Interlocks and Insider Participation

Ms. Clarke and Messrs. Caruso, Gabbard, Ronald Johnson, Marcum, Smith and Swanson served as a member of the Company's Compensation Committee during the fiscal year ended December 31, 2012. No member of the Compensation Committee is or was an officer of the Company or had a relationship requiring disclosure under Item 404 of Regulation S-K.

Compensation Committee Report

The Compensation Committee has reviewed and discussed the Company's Compensation Discussion and Analysis for the fiscal year ended December 31, 2012 with the Company's management.

Based on the review and discussions with management, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis for the year ended December 31, 2012 be included in this proxy statement/prospectus for filing with the SEC.

Respectfully submitted,

The Compensation Committee:	Robert N. Caruso, Chairman Kim B. Clarke Alan Bradley Gabbard Ronald B. Johnson W. Phillip Marcum Jeffrey C. Smith Richard J. Swanson

Shareholder Communications to Directors

Any shareholder may communicate directly with the Board (or any individual director) by writing to the Chairman of the Board, ADA-ES, Inc., 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129 or by emailing the Board through the "Contact the Board" link on our website at www.adaes.com. Any such communication should state the number of shares beneficially owned by the shareholder making the communication. Provided that such communication addresses a legitimate business issue, the Company or the Chairman will forward the shareholder's communication to the appropriate director. For any communication relating to accounting, auditing or fraud, such communication will be forwarded promptly to the Chairman of the Audit Committee.

Code of Ethics and Business Conduct

We have adopted a Code of Ethics and Business Conduct that applies to our officers, directors and employees, including the principal executive officer, principal financial officer, principal accounting officer or controller or other persons performing similar functions, which includes a code of ethics as defined in Item 406(b) of SEC

Regulation S-K. A copy of our Code of Ethics and Business Conduct, which was most recently amended on October 18, 2011, is available on our website at www.adaes.com. We intend to disclose any amendments to certain provisions of our Code of Ethics and Business Conduct, or waivers of such provisions granted to executive officers and directors, on our website.

Board Leadership Structure and Role in Risk Oversight

We have a policy of keeping the roles of Chief Executive Officer and Chairman of the Board separate, and the roles are currently filled by two different individuals. We believe this arrangement is appropriate as it recognizes the distinction between the role played by the Chief Executive Officer, which is a position being more heavily oriented towards day-to-day management, while the Chairman's functions as an independent director whose role is to oversee the Board of Directors and is also able to participate in and chair executive sessions of the Board.

The Board has designated the Audit Committee to take the lead in overseeing risk management, and the Audit Committee periodically reports to the Board regarding briefings provided by management and advisors as well as the Committee's own analysis and conclusions regarding the adequacy of the Company's risk management processes. In addition to this compliance program, the Board encourages management to promote a corporate culture that incorporates risk management into the Company's strategy and day-to-day business operations. The Board and management, including our Vice President and General Counsel, continually work together to assess and analyze our most likely areas of risk.

Board Recommendation

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE PERSONS NOMINATED BY THE BOARD FOR DIRECTORS, BEING KIM B. CLARKE, MICHAEL D. DURHAM, ALAN BRADLEY GABBARD, DEREK C. JOHNSON, W. PHILLIP MARCUM, MARK H. MCKINNIES, ROBERT E. SHANKLIN, JEFFREY C. SMITH AND RICHARD J. SWANSON.

PROPOSAL TWO

THE REORGANIZATION PROPOSAL

This section of the proxy statement/prospectus describes the reorganization proposal. Although we believe that the description in this section covers the material terms of the reorganization proposal, this summary may not contain all of the information that is important to you. The summary of the material provisions of the Reorganization Agreement provided below is qualified in its entirety by reference to the Reorganization Agreement, which we have attached as Annex I to this proxy statement/prospectus and which we incorporate by reference into this proxy statement/prospectus. You should carefully read the entire proxy statement/prospectus and the Reorganization Agreement for a more complete understanding of the reorganization proposal. Your approval of the reorganization proposal will constitute your approval and adoption of the Reorganization Agreement, the reorganization, the Certificate of Incorporation of ADES and the bylaws of ADES.

Reasons for the Reorganization; Recommendation of our Board

At a meeting of the ADA-ES Board of Directors (the "Board") held on January 25, 2011 and in an action by written consent of the Board dated March 11, 2011, the Board concluded that the reorganization is advisable, determined that the terms of the Reorganization Agreement are fair to and in the best interest of ADA-ES and its shareholders, adopted the Reorganization Agreement and recommended that the Reorganization Agreement be approved by our shareholders. The Reorganization Proposal was tabled by the Board in April 2011 due to the arbitration award to Norit Americas Inc., which is further discussed in our filings with the Securities and Exchange Commission. At a meeting of the Board held on February 2, 2012, the Board made the above findings and re-authorized the Reorganization Proposal, which was tabled in April 2012 due to unresolved comments by the Securities and Exchange Commission on financial statements incorporated by reference in the proxy

statement/prospectus. At a meeting of the Board held on February 6, 2013, the Board again made the above findings and re-authorized the officers of ADA-ES to take the necessary steps to continue to pursue the transactions contemplated by the Reorganization Proposal.

During the course of its deliberations, our Board consulted with management and outside legal counsel and considered a number of positive factors, including the following:

- ***Possible Future Strategic and Business Flexibility of the Holding Company Structure.*** We believe the holding company structure could facilitate future expansion of our business by providing a more flexible structure for acquiring other businesses or entering into joint ventures while continuing to keep the operations and risks of our other businesses separate. In addition, if the cash generated over time by our businesses was determined by our Board to be greater than the amount necessary for the operation or capital needs of those businesses, this cash could be transferred to a separate corporate entity owned by the holding company and invested as our Board believes to be appropriate. Furthermore, implementing the holding company structure may reduce the risk that liabilities of our core businesses and other businesses, if any, that may be operated in the future by separate subsidiaries would be attributed to each other.
- ***Possible Future Financing Flexibility of the Holding Company Structure.*** We believe that a holding company structure may be beneficial to stockholders in the future because it would permit the use of financing techniques that are more readily available to companies that hold a variety of diversified businesses under one corporate umbrella, without any impact on our capital structure. For example, ADES, in addition to receiving dividends, as and when permitted, from ADA-ES and future subsidiaries, if any, would be able to obtain funds through its own debt or equity financings, and ADES's direct and indirect subsidiaries and other entities in which it holds an ownership interest would be able to obtain funds from ADES or other affiliates or through their own third party financings, which may include the issuance of debt or equity securities. However, we have no current plans to seek additional financing at this time.
- ***Predictability, Flexibility and Responsiveness of Delaware Law to Corporate Needs.*** For many years, Delaware has followed a policy of encouraging incorporation in that state and has adopted comprehensive, modern and flexible corporate laws, which are updated regularly to meet changing business needs. As a result of this deliberate policy to provide a hospitable climate for corporate development, many major public corporations have chosen Delaware for their state of incorporation. In addition, the Delaware courts have developed considerable expertise in dealing with corporate issues relating to public companies. Thus, a substantial body of case law has developed construing Delaware corporate law and establishing legal principles and policies regarding publicly held Delaware corporations. We believe that, for these reasons, Delaware law will provide greater legal predictability with respect to our corporate legal matters than we have under Colorado law. We further believe that Delaware law will provide greater efficiency, predictability and flexibility in our public Company's legal affairs than is presently available under Colorado law.
- ***Attractiveness of Delaware Law to Directors and Officers***. We believe that organizing under Delaware law will enhance our ability to attract and retain qualified directors and officers. The corporate law of Delaware, including its extensive body of case law, offers directors and officers of public companies more certainty and stability than the corporate law of Colorado. Under Delaware law, the parameters of director and officer liability are more clearly defined and better understood than under Colorado law. To date, we have not experienced difficulty in retaining directors or officers, but directors of public companies are exposed to significant potential liability. We therefore believe that providing the benefits afforded directors by Delaware law will enable us to compete more effectively with other public companies in the recruitment of talented and experienced directors and officers. At the same time, we believe that Delaware law regarding corporate fiduciary duties provides appropriate protection

for our stockholders from possible abuses by directors and officers. In addition, under Delaware law, directors' personal liability cannot be eliminated for:

- any breach of the director's duty of loyalty to the corporation or its stockholders,
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law,
- unlawful payment of dividends or unlawful repurchases or redemptions of stock, or
- any transactions from which the director derived an improper personal benefit.

In addition to the positive factors described above, our Board also considered the following potential negative factor associated with the reorganization proposal:

- ***Increased Costs and Expenses Associated with Implementing the Reorganization Proposal and Administering a Holding Company Structure.*** The reorganization may result in substantial direct costs. These costs and expenses are expected to consist primarily of attorneys' fees, accountants' fees, filing fees and financial printing expenses and will be substantially incurred prior to the vote of our shareholders. A substantial portion of these costs were incurred in 2011 and 2012 when we initially proposed the reorganization. Therefore, we expect our attorneys' and filing fees to be substantially less than previously incurred. The Company has also paid minimal Delaware franchise taxes for ADES since its incorporation in 2011; upon filing of the Certificate of Incorporation, which will occur prior to the closing date of the reorganization, the franchise taxes due to Delaware will substantially increase due to the increase in authorized stock provided by the Certificate of Incorporation. The reorganization may also result in certain indirect costs by diverting the attention of our management and employees from our business and increasing our administrative costs and expenses. These administrative costs and expenses will include keeping separate records and in some cases making separate regulatory filings for each of ADES and ADA-ES and future subsidiaries. The reorganization may also result in certain state sales taxes and other transfer taxes.

After careful consideration, our Board has determined that creation of a holding company offers a substantial net benefit to our shareholders. The Board has approved the reorganization proposal, determined that the terms of the Reorganization Agreement and the reorganization are advisable and in the best interest of our shareholders, and has adopted the Reorganization Agreement. Our Board recommends that our shareholders vote "FOR" adoption of the reorganization proposal at the Annual Meeting.

Reorganization Procedure

ADA-ES currently owns all of the issued and outstanding common stock of ADES and ADES currently owns all of the issued and outstanding common stock of MergerCo, the subsidiary formed for purposes of completing the proposed reorganization. Following the approval of the Reorganization Agreement by the ADA-ES shareholders and the satisfaction of the other conditions specified in the Reorganization Agreement (which are described below), ADA-ES will merge with MergerCo, the subsidiary of ADES. As a result of this merger:

- ADA-ES will be the surviving corporation, and the separate corporate existence of MergerCo will cease.
- Each outstanding share of ADA-ES common stock will automatically convert into one share of ADES common stock, as described below, and the shareholders of ADA-ES will become the stockholders of ADES.
- ADES will own all of ADA-ES's common stock, and each share of ADES common stock now held by ADA-ES will be cancelled.

The result of the reorganization will be that your current company, ADA-ES, will be merged with MergerCo, and ADA-ES will become a subsidiary of ADES. ADES's Certificate of Incorporation is included as Annex II to this proxy statement/prospectus, and a copy of ADES's bylaws is included as Annex III to this proxy statement/prospectus. For more information regarding your rights as a shareholder before and after the reorganization, see "Description of ADES Capital Stock," "Description of ADA-ES Capital Stock" and "Comparative Rights of ADES Capital Stock and ADA-ES Capital Stock" below.

In all other respects, your company will remain the same. Upon consummation of the reorganization, the ADES board of directors will be the same as the directors elected by the shareholders of ADA-ES at the Annual Meeting. ADES expects that its executive officers following the reorganization will be the following executive officers of ADA-ES immediately prior to the reorganization: President and Chief Executive Officer, Senior Vice President, Chief Financial Officer and Secretary, Executive Vice President, Chief Operating Officer, Chief Technology Officer, Vice President and General Counsel and Vice President of Investor Relations. We believe that this simplified top-level management structure will best serve the holding company and allow for continued growth. Management and business operations of the operating company will remain substantially the same.

What ADA-ES Shareholders Will Receive in the Reorganization

Each share of ADA-ES common stock will convert into one share of ADES common stock. After the completion of the reorganization, you will own the same number and percentage of shares of ADES common stock as you own of ADA-ES common stock.

ADA-ES Stock Options and Other Rights to Receive ADA-ES Stock

Each outstanding option to acquire shares of ADA-ES common stock will become an option to acquire, on the same terms and conditions as before the reorganization, an identical number of shares of ADES common stock. Each outstanding restricted stock award (or any performance award payable in restricted stock) of shares of ADA-ES common stock will become an award of restricted stock (or a performance award payable in restricted stock) in an identical number of shares of ADES common stock. There were outstanding options representing an aggregate of 185,516 shares of ADA-ES common stock and outstanding restricted stock awards (including the number of shares of restricted stock payable under performance awards) representing an aggregate of 106,775 shares of ADA-ES common stock on the Record Date. ADA-ES's existing stock-based compensation plans, which include the 2002 ADA-ES, Inc. Stock Option Plan, the 2004 Executive Stock Option Plan, the ADA-ES, Inc. 2005 Directors' Compensation Plan, the Amended and Restated ADA-ES, Inc. 2007 Equity Incentive Plan, as amended, the ADA-ES, Inc. Profit Sharing Retirement Plan and the Amended and Restated ADA-ES, Inc. 2010 Non-Management Compensation and Incentive Plan (collectively the "ADA-ES Plans"), plan participants will be entitled to receive shares of ADES common stock rather than shares of ADA-ES common stock, on the same terms otherwise provided for in the respective plans.

Corporate Name Following the Reorganization

The name of the public company following the reorganization will be "Advanced Emissions Solutions, Inc."

No Exchange of Stock Certificates

In the reorganization, your shares of ADA-ES common stock will automatically convert into shares of ADES common stock. Your certificates of ADA-ES common stock, if any, will represent, from and after the reorganization, an equal number of shares of ADES common stock, and no action with regard to stock certificates will be required on your part.

Conditions to Reorganization

We will complete the reorganization only if each of the following conditions is satisfied:

- absence of any stop order suspending the effectiveness of the registration statement, of which this proxy statement/prospectus forms a part, relating to the shares of ADES common stock to be issued in the reorganization;
- approval of the Reorganization Agreement by ADA-ES's shareholders;
- receipt of approval for listing on the NASDAQ Capital Market of shares of ADES common stock to be issued in the reorganization; and
- absence of any order or proceeding that would prohibit or make illegal completion of the reorganization.

Effectiveness of Reorganization

The reorganization will become effective on the date we file a statement of merger with the Secretary of State of the State of Colorado or on a later date that we specify therein. We will file the statement when the conditions to the reorganization described above have been satisfied. We expect that we will specify in the statement that the reorganization will be effective on or about July 1, 2013.

Termination of Reorganization Agreement

The Reorganization Agreement may be terminated at any time prior to the completion of the reorganization (even after approval by our shareholders) by action of the Board if it determines that for any reason the completion of the transactions provided for therein would be inadvisable or not in the best interest of our Company or our shareholders.

Amendment of Reorganization Agreement

The Reorganization Agreement may, to the extent permitted by the CBCA and Delaware General Corporation Law ("DGCL"), be supplemented, amended or modified at any time prior to the completion of the reorganization (even after approval by our shareholders), by the mutual consent of the parties thereto.

Material U.S. Federal Income Tax Consequences

The following discussion summarizes the material U.S. federal income tax consequences of the reorganization to U.S. holders of ADA-ES common stock. This discussion is based upon current provisions of the Internal Revenue Code of 1986, as amended (the "Code"), current and proposed Treasury regulations and judicial and administrative decisions and rulings as of the date of this proxy statement/prospectus, all of which are subject to change (possibly with retroactive effect) and all of which are subject to differing interpretation. This discussion does not address all aspects of U.S. federal income taxation that may be relevant to you in light of your particular circumstances or to persons subject to special treatment under U.S. federal income tax laws. In particular, this discussion deals only with shareholders that hold ADA-ES common stock as capital assets within the meaning of the Code. In addition, this discussion does not address the tax treatment of special classes of shareholders, such as banks, insurance companies, tax-exempt organizations, financial institutions, broker-dealers, persons holding ADA-ES stock as part of a hedge, straddle or other risk reduction, constructive sale or conversion transaction, U.S. expatriates, persons subject to the alternative minimum tax and persons who acquired ADA-ES stock in compensatory transactions. If you are not a U.S. holder (as defined below), this discussion does not apply to you.

As used in this summary, a "U.S. holder" is:

- an individual U.S. citizen or resident alien;
- a corporation, partnership or other entity created or organized under U.S. law (federal or state);

- an estate whose worldwide income is subject to U.S. federal income tax; or
- a trust if a court within the United States of America is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or certain trusts formed prior to August 20, 1996, if such trust has a valid election in effect to be treated as a domestic trust for U.S. federal income tax purposes.

If a partnership (including, for this purpose, any entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of ADA-ES common stock, the U.S. federal income tax consequences to a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. A holder of ADA-ES common stock that is a partnership, and the partners in such partnership, should consult their own tax advisors regarding the U.S. federal income tax consequences of the reorganization.

ALL HOLDERS ARE URGED TO CONSULT WITH THEIR OWN TAX ADVISORS REGARDING THE TAX CONSEQUENCES OF THE REORGANIZATION TO THEIR PARTICULAR SITUATION, INCLUDING THE EFFECTS OF U.S. FEDERAL, STATE AND LOCAL, FOREIGN AND OTHER TAX LAWS.

ADA-ES and ADES have received a legal opinion from Sparkman + Foote LLP, dated March 25, 2013, that the merger will constitute an exchange of ADA-ES common stock for ADES common stock governed by Section 351 of the Code, as well as a reorganization within the meaning of Section 368(a) of the Code, and, therefore, no gain or loss will be recognized by the shareholders of ADA-ES upon the receipt of ADES common stock pursuant to the merger. The opinions of counsel are based on then-existing law and based in part upon representations, made as of March 25, 2013, by ADES, ADA-ES and MergerCo, which counsel will assume to be true, correct and complete. If the representations are inaccurate, the opinions of counsel could be adversely affected. Neither ADES nor ADA-ES has requested nor will request a private letter ruling from the Internal Revenue Service as to the tax consequences of the reorganization transactions. The opinions of counsel are not binding upon the Internal Revenue Service or any other taxing authority. It is the opinion of Sparkman + Foote, LLC that the material U.S. federal income tax consequences of the transactions will be as follows:

- No gain or loss will be recognized by ADES or ADA-ES as a result of the merger;
- No gain or loss will be recognized by you upon your receipt of ADES common stock solely in exchange for your ADA-ES common stock;
- The aggregate tax basis of the shares of ADES common stock that you receive in exchange for your ADA-ES common stock in the merger will be the same as the aggregate tax basis of your ADA-ES common stock exchanged; and
- The holding period for shares of ADES common stock that you receive in the merger will include the holding period of your ADA-ES common stock exchanged.

The foregoing discussion is not intended to be a complete analysis or description of all potential U.S. federal income tax consequences or any other consequences of the reorganization. In addition, the discussion does not address tax consequences, which may vary with, or are contingent on, your individual circumstances. Moreover, the discussion does not address state, local, foreign or non-income tax consequences or tax return reporting requirements. Accordingly, you are strongly urged to consult with your own tax advisor to determine the particular U.S. federal, state, local or foreign income or other tax consequences to you of the reorganization.

Anticipated Accounting Treatment

For accounting purposes, our reorganization into a holding company structure will be treated as a merger of entities under common control. The accounting treatment for such events is similar to the former "pooling of interests method." Accordingly, the financial position and results of operations of ADA-ES will be included in the consolidated financial statements of ADES on the same basis as currently presented.

Authorized Capital Stock

ADA-ES's amended and restated articles of incorporation currently authorizes the issuance of 50,000,000 shares of common stock, no par value and 50,000,000 shares of preferred stock, no par value. ADES's Certificate of Incorporation, which would govern the rights of our stockholders after the reorganization, to be filed prior to the effective date of the reorganization, will authorize the issuance of 100,000,000 shares of common stock, par value $0.001 and 50,000,000 shares of preferred stock, par value $0.001. Additional authorized shares of common stock would enable us to issue common stock to raise capital expeditiously and economically for the Company's ongoing operational needs and could be used for stock splits or distributions, equity incentive plans, acquisitions, strategic alliances or other corporate purposes without the delay and expense involved in obtaining shareholder approval, when the Board of Directors and management believes that such issuance is appropriate. Upon completion of the reorganization, the number of shares of ADES common stock that will be outstanding will be equal to the number of shares of ADA-ES common stock outstanding immediately prior to the reorganization.

The number of shares reserved for issuance under the ADA-ES Plans as of April 10, 2013 is 1,131,881. No other shares are presently reserved for any other purpose.

Listing of ADES Common Stock on the NASDAQ Capital Market; De-listing and De-registration of ADA-ES Common Stock

The completion of the reorganization is conditioned on the approval for listing of the shares of ADES common stock issuable in the reorganization (and any other shares to be reserved for issuance in connection with the reorganization) on the NASDAQ Capital Market. We expect that the ADES common stock will trade under the ticker symbol "ADES." In addition, ADES will become a reporting company under the Exchange Act.

Following the reorganization, ADA-ES's common stock will no longer be quoted on the NASDAQ Capital Market and will no longer be registered under the Exchange Act. In addition, ADA-ES will cease to be a reporting company under the Exchange Act.

Board of Directors and Executive Officers of ADES Following the Reorganization

Presently, the ADES board is comprised of Dr. Michael Durham and Mr. Mark McKinnies. We expect that immediately following the reorganization the ADES board will be comprised of the directors of ADA-ES elected at the 2013 Annual Meeting. Nominees for director are Kim B. Clarke, Michael D. Durham, Alan Bradley Gabbard, Derek C. Johnson, W. Phillip Marcum, Mark H. McKinnies, Robert E. Shanklin, Jeffrey C. Smith and Richard J. Swanson.

ADES expects that its executive officers following the reorganization will be the following executive officers of ADA-ES immediately prior to the reorganization: President and Chief Executive Officer, Senior Vice President, Chief Financial Officer and Secretary, Executive Vice President, Chief Operating Officer, Chief Technology Officer, Vice President and General Counsel and Vice President of Investor Relations. We believe that this simplified top-level management structure will best serve the holding company and allow for continued growth. Management and business operations of the operating company will remain substantially the same.

For information concerning persons expected to become directors of ADES, see "Proposal Two—Election of Directors" below.

Independent Registered Public Accounting Firm of ADES

The approval by the holders of ADA-ES common stock of the Reorganization Agreement will also constitute ratification of KPMG LLP as described under the caption "Proposal Three—Ratification of the Engagement of the Independent Registered Public Accounting Firm" as the Independent Registered Public Accounting Firm of ADES for the fiscal year ending December 31, 2013.

Issuances of ADES Common Stock under the ADA-ES Plans

The approval by the holders of ADA-ES common stock of the Reorganization Agreement will also constitute approval of the assumption by ADES of the ADA-ES Plans and, where appropriate, the future issuance of shares of ADES common stock in lieu of shares of ADA-ES common stock under the ADA-ES Plans, each as amended in connection with the reorganization without further shareholder action.

ADES Certificate of Incorporation

The approval by the holders of ADA-ES common stock of the Reorganization Agreement will also constitute approval of the terms of the Certificate of Incorporation in the form attached to this proxy statement/prospectus as Annex II.

Restrictions on the Sale of ADES Shares

The shares of ADES common stock to be issued in the reorganization will be registered under the Securities Act of 1933, as amended (the "Securities Act"). These shares will be freely transferable under the Securities Act, subject to existing restrictions on certain affiliates of ADA-ES who will also be affiliates of ADES and subject to any restrictions on shares of restricted stock that have not vested.

Description of ADES Capital Stock

ADES is incorporated in the State of Delaware. The rights of stockholders of ADES will generally be governed by Delaware law and ADES's Certificate of Incorporation and bylaws. The following is a summary of the material provisions of ADES's Certificate of Incorporation and bylaws. This summary is not complete and is qualified by reference to the full texts of ADES's Second Amended and Restated Certificate of Incorporation and bylaws, which are attached as Annexes II and III, respectively, to this proxy statement/prospectus.

General

Upon the completion of the reorganization, the authorized capital of ADES will be 150,000,000 shares, consisting of 100,000,000 shares of common stock, par value $0.001 per share, and 50,000,000 shares of preferred stock, par value $0.001 per share. All of the shares issued and outstanding upon completion of the reorganization will be fully paid and nonassessable.

Upon completion of the reorganization, the number of shares of ADES common stock that will be outstanding will be equal to the number of shares of ADA-ES common stock outstanding immediately prior to the reorganization (other than shares held in treasury, which will be cancelled).

Common Stock

Dividends and Distributions. Subject to preferences applicable to any shares of ADES preferred stock issued in the future, the holders of outstanding shares of ADES common stock will be entitled to receive dividends and other distributions out of assets legally available at times and in amounts as the board of directors of ADES may determine from time to time. All shares of ADES common stock are entitled to participate ratably with respect to dividends or other distributions.

Liquidation Rights. If ADES is liquidated, dissolved or wound up, voluntarily or involuntarily, holders of ADES common stock are entitled to share ratably in all assets of ADES available for distribution to the ADES stockholders after the payment in full of any preferential amounts to which holders of any ADES preferred stock issued in the future may be entitled.

Voting Rights. Holders of ADES common stock are entitled to one vote per share on all matters to be voted upon by stockholders. There are no cumulative voting rights. Stockholders may vote by proxy.

Other. There are no preemption, redemption, sinking fund or conversion rights applicable to the ADES common stock.

Preferred Stock

The board of directors of ADES may, without further stockholder approval, issue up to 50,000,000 shares of preferred stock in one or more series and fix the number of shares constituting the designation, voting powers (if any), preferences and other rights, as well as the qualifications, limitations and restrictions, of the series. The powers, preferences and rights, and the qualifications, limitations or restrictions, if any, of each series of preferred stock may be different from those of any and all other series. The issuance of ADES preferred stock may have the effect of delaying, deferring or preventing a change of control of ADES without further action by the stockholders, may discourage bids for ADES common stock at a premium over the market price of ADES common stock and may adversely affect the market price of, and the voting and other rights of the holders of, ADES common stock.

Delaware Anti-Takeover Law and Certain Charter Provisions

ADES has opted out of provisions of Section 203 of the Delaware General Corporation Law ("DGCL"), which statute prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date the stockholder became an interested stockholder unless certain criteria are met. Instead, the Certificate of Incorporation includes what is known as a "fair price" provision. The fair price provision is designed to prevent a purchaser from utilizing two-tier pricing and similar tactics in an attempted takeover. This provision requires the affirmative vote of holders of at least a majority of the outstanding shares of voting stock not owned directly or indirectly by any interested stockholder or any affiliate of an interested stockholder to approve any business combination with any related or interested person. If such business combination has been approved by a majority of continuing directors at a meeting at which a continuing director quorum is present or such business combination involves ADES and a subsidiary in which a related person has no direct or indirect interest, subject to certain additional limitations, however, such heightened standard for shareholder approval will not apply and the business combination would require only such affirmative vote as may be required by law or otherwise.

ADES's Certificate of Incorporation provisions provides the board of directors the authority to issue up to 50,000,000 shares of undesignated preferred stock and to determine the rights, preferences and privileges of these shares, without stockholder approval. In addition, the bylaws provide that only the board of directors and the holders of shares entitled to cast not less than 20% of the votes at a special meeting can call a special meeting, which is a higher percentage than the 10% percent level required under the CBCA and ADA-ES's bylaws. The bylaws also provide that all stockholder actions must be effected at a duly called meeting of stockholders or upon the unanimous written consent of all stockholders.

In addition, ADES's bylaws require that for a stockholder to nominate a director or bring other business before an annual meeting of stockholders, they must satisfy certain advance notice and disclosure requirements. The stockholder must disclose, among other items, certain information related to the business to be proposed at the meeting, its beneficial ownership in ADES and whether it is acting in concert with other stockholders or interested parties. Advance notice of any such business must be delivered to or mailed and received at the principal executive offices of the ADES not less than one hundred twenty (120) calendar days in advance of the date specified in the Corporation's proxy statement released to stockholders in connection with the previous year's annual meeting of stockholders; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date contemplated at the time of the previous year's proxy statement, notice by the stockholder to be timely must be so received not later than the close of business on the later of one hundred twenty (120) calendar days in advance of such annual meeting or ten (10) calendar days following the date on which of public disclosure of such meeting. ADES's bylaws also specify requirements as to the form and content of a stockholder's notice. These advance notice provisions may delay a person from bringing matters before a stockholders meeting. The

provisions provide enough time for us to begin litigation or take other steps to respond to these matters, or to prevent them from being acted upon, if we find it desirable to do so.

Such provisions described above may have the effect of delaying or preventing a change in control.

Limitation of Director Liability and Indemnification

ADES's Certificate of Incorporation provides, to the fullest extent permitted by Delaware law, that directors will not be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director. Delaware law currently provides that this waiver may not apply to liability:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under Section 174 of the DGCL (governing distributions to stockholders); or
- for any transaction from which the director derived any improper personal benefit.

If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, however, then the liability of our directors will be eliminated or limited to the fullest extent permitted by the DGCL, as so amended. The Certificate of Incorporation of ADES further provide that we will indemnify each of our directors and officers to the fullest extent permitted by Delaware law and may indemnify other persons as authorized by the DGCL. These provisions do not eliminate any monetary liability of directors under the federal securities laws.

Transfer Agent

We expect that the transfer agent for ADES common stock will be Computershare Investor Services, 350 Indiana Street, Suite 750, Golden, Colorado 80401.

The NASDAQ Capital Market Listing

We expect that ADES common stock will be listed on the NASDAQ Capital Market under the trading symbol "ADES."

Description of ADA-ES, Inc. Capital Stock

ADA-ES, Inc. is incorporated in the State of Colorado. The rights of shareholders of ADA-ES are generally governed by Colorado law and ADA-ES's amended and restated articles of incorporation and second amended and restated bylaws. The following is a summary of the material provisions of ADA-ES's amended and restated articles of incorporation and second amended and restated bylaws. This summary is not complete and is qualified by reference to the full texts of ADA-ES's amended and restated articles of incorporation and second amended and restated bylaws. A copy of ADA-ES's amended and restated articles of incorporation is attached as Exhibit 3.1 to the Form 10-QSB filed with the SEC on November 10, 2005. A copy of ADA-ES's second amended and restated bylaws is attached as Exhibit 3.2 to the Company's Form 10-Q filed with the SEC on November 12, 2010.

General

ADA-ES is authorized to issue 50,000,000 shares of common stock, no par value per share, and 50,000,000 shares of preferred stock, no par value per share. As of the Record Date, ADA-ES had 10,062,242 shares outstanding shares of common stock outstanding held of record by approximately 1,300 record holders and approximately 3,700 beneficial shareholders. The outstanding shares of ADA-ES's stock are fully paid and nonassessable.

Common Stock

Dividends and Distributions. Subject to preferences applicable to any shares of outstanding ADA-ES preferred stock, the holders of outstanding shares of ADA-ES common stock are entitled to receive dividends and other distributions out of assets legally available at times and in amounts as the Board of ADA-ES may determine from time to time. All shares of ADA-ES common stock are entitled to participate ratably with respect to dividends or other distributions.

Liquidation Rights. If ADA-ES is liquidated, dissolved or wound up, voluntarily or involuntarily, holders of ADA-ES common stock are entitled to share ratably in all net assets of ADA-ES available for distribution to the ADA-ES shareholders after the payment in full of any preferential amounts to which holders of any ADA-ES preferred stock may be entitled.

Voting Rights. Holders of ADA-ES common stock are entitled to one vote per share on all matters to be voted upon by shareholders. There are no cumulative voting rights. Shareholders may vote by proxy.

Other. There are no preemption, redemption, sinking fund or conversion rights applicable to the ADA-ES common stock.

Preferred Stock

The Board has the authority to issue 50,000,000 shares of ADA-ES preferred stock in one or more series and to fix the voting powers, designations, preferences and participating, optional, relative or other special rights, and qualifications, limitations or restrictions of the ADA-ES preferred stock, without any further vote or action by ADA-ES's shareholders. No shares of preferred stock are issued or outstanding. The issuance of ADA-ES preferred stock may have the effect of delaying, deferring or preventing a change of control of ADA-ES without further action by the shareholders, may discourage bids for the ADA-ES common stock at a premium over the market price of the ADA-ES common stock and may adversely affect the market price of, and the voting and other rights of the holders of, ADA-ES common stock.

Anti-Takeover Provisions Contained in ADA-ES's Articles of Incorporation and Bylaws

Certain provisions of ADA-ES's amended restated articles of incorporation and second amended and restated bylaws make it less likely that ADA-ES's management would be changed or someone would acquire voting control of the Company without the Board's consent. These provisions may delay, deter or prevent tender offers or takeover attempts that ADA-ES shareholders may believe are in their best interests, including tender offers or attempts that might allow shareholders to receive premiums over the market price of their common stock. These provisions include:

- the authority of the Board to issue up to 50,000,000 shares of undesignated preferred stock and to determine the rights, preferences and privileges of these shares, without approval; and
- all shareholder actions must be effected at a duly called meeting of shareholders or by unanimous written consent.

Such provisions may have the effect of delaying or preventing a change in control.

Indemnification of Directors and Officers

ADA-ES's amended and restated articles of incorporation and second amended and restated bylaws provide that ADA-ES shall indemnify its directors and officers, to the fullest extent permitted by law, for any liability or expense including any obligation with respect to an employee benefit plan and any matters covered by the CBCA, except liability that as to which the CBCA prohibits expressly the elimination or limitation of liability.

Transfer Agent

The transfer agent for ADA-ES common stock is Computershare Investor Services, 350 Indiana Street, Suite 800, Golden, Colorado 80401.

The NASDAQ Capital Market Listing

ADA-ES common stock is listed on the NASDAQ Capital Market under the trading symbol "ADES."

Comparative Rights of Holders of ADES Capital Stock and ADA-ES Capital Stock

At the effective time of the merger, ADA-ES common stock will be converted on a one-for-one basis into ADES common stock. As a result, ADES's Certificate of Incorporation and bylaws and the applicable provisions of the DGCL will govern the rights of the former holders of ADA-ES common stock who receive shares of ADES common stock pursuant to the merger. The rights of ADA-ES shareholders are currently governed by the CBCA and common law, ADA-ES's amended and restated articles of incorporation (the "articles") and ADA-ES's second amended and restated bylaws (the "bylaws"). The rights of ADES stockholders after the completion of the reorganization will be governed by the DGCL and common law, ADES's Certificate of Incorporation (the "certificate") and ADES's bylaws (the "bylaws"). The following summary compares the material rights that ADA-ES shareholders currently have and the rights that they will have as stockholders of ADES following the reorganization. This summary is qualified in its entirety by reference to the full text of the articles, certificate, and bylaws. For detailed descriptions of the capital stock of ADA-ES and ADES, see "Description of ADA-ES Capital Stock" and "Description of ADES Capital Stock" in this proxy statement/prospectus.

COLORADO (ADA-ES)	DELAWARE (ADES)
Authorized Shares	
The authorized capital stock of ADA-ES consists of 50,000,000 shares of common stock, no par value, and 50,000,000 shares of preferred stock, no par value. No shares of preferred stock have been issued.	Upon completion of the reorganization, the authorized capital stock of ADES will consist of 100,000,000 shares of common stock, par value per share of $0.001 and 50,000,000 preferred stock, par value per share of $0.001. One share of common stock is currently outstanding and held by ADA-ES. No shares of preferred stock have been issued.
Voting Requirements	
Holders of common stock are entitled to one vote per share and vote together as a single class on all matters to be voted upon by shareholders.	Same: Holders of common stock will be entitled to one vote per share and will vote together as a single class on all matters to be voted upon by stockholders.
Under the CBCA, shareholders have the right to cumulate their votes in the election of directors under specified procedures unless the articles of incorporation or bylaws of specified categories of corporations provide otherwise. The right of shareholders to cumulate votes has been eliminated in ADA-ES's articles.	Same: Under the DGCL, stockholders do not have the right to cumulate their votes in the election of directors unless such right is granted in the certificate of incorporation. ADES's certificate does not provide for cumulative voting.

Voting Required For Election of Directors

The CBCA provides that the vote of a plurality of the shares entitled to vote for directors is required in order to elect a director.

Same: ADES's bylaws provide that a vote of a plurality of the votes cast at a meeting of the stockholders by the holders of stock entitled to vote in the election will be required to elect a director.

Classified Board of Directors

ADA-ES's articles do not provide for a classified board of directors. Accordingly, under the CBCA, all of ADA-ES's directors are elected annually.

Same: ADES's certificate does not provide for a classified board of directors. Accordingly, under the DGCL all directors of ADES will be elected annually.

Number of Directors

Under the CBCA, the number of directors must be specified in a corporation's bylaws. ADA-ES's bylaws provide that the board of directors is to be set by the board within a range of between 1 and 15 members. The CBCA, unlike the DGCL, provides that shareholders may amend a corporation's bylaws without the approval of the board of directors. Accordingly, under the CBCA, shareholders of ADA-ES have the ability to determine the size of the Board of Directors.

The DGCL permits a corporation's certificate of incorporation to specify the number of directors if it is not specified in the bylaws. The number of directors is specified in ADES's bylaws and states that the board of directors of ADES is to be set by the board within a range of 1 and 15 members.

Blank Check Preferred Stock

ADA-ES's articles provide for up to 50,000,000 shares of blank check preferred stock.

ADES's certificate provides for up to 50,000,000 shares of blank check preferred stock.

Action By Shareholders Without a Meeting

The CBCA requires unanimous written consent for any shareholder action taken without a meeting, unless a provision is contained in a corporation's articles of incorporation that allows holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted to take such action by consent. ADA-ES's articles do not contain such a provision.

Same effect: ADES's certificate and bylaws provide that stockholders may take any action permitted at an annual or special meeting of stockholders by unanimous written consent.

Removal of Directors

Consistent with the CBCA, ADA-ES's bylaws provide that its shareholders may remove directors of the company with or without cause.

Same: Consistent with the DGCL, ADES's bylaws provide that its stockholders may remove directors of the company with or without cause.

Vacancies on the Board of Directors

Under the CBCA, because ADA-ES's articles do not provide otherwise, any vacancies on the board of directors may be filled either by the remaining directors or the shareholders.

Under the DGCL and ADES's certificate, vacancies on the board of directors of ADES will be filled by the remaining directors.

Committees of the Board of Directors

ADA-ES's bylaws provide that the board may designate from among its members, an executive and one or more other committees. With the exception of certain actions set forth in the CBCA, which generally prohibit committees from approving significant transactions or taking significant actions, the committees may exercise the authority granted to them by the board.

ADES's bylaws provide that the board may designate one or more committees, each of which shall consist of one or more members of the board. With the exception of certain actions set forth in the DGCL, which generally prohibit committees from amending the certificate, approving a significant merger or acquisition or declaring dividends, the committees may exercise all of the authority of the board to the extent provided in a resolution of the board.

Shareholders Power to Call Special Meetings

In accordance with the CBCA, a special meeting of shareholders may be called by (i) the board of directors or the person authorized by the bylaws to call such a meeting (in the case of ADA-ES, the President or any member of the board of directors), or (ii) at the request of holders of not less than 10% of the outstanding shares of ADA-ES.

Under the DGCL, special stockholder meetings may be called by (i) the board of directors, or (ii) stockholders to the extent authorized by the company's certificate of incorporation or bylaws. ADES's bylaws provide that a special meeting of shareholders may be called at the request of holders of not less than 20% of the outstanding shares of ADES.

Notice of Shareholder Meetings

Consistent with the CBCA, ADA-ES's bylaws require that (i) if the authorized shares of ADA-ES are to be increased, at least 30 days' notice shall be given to the shareholders of record and (ii) if a shareholder meeting is adjourned for more than 120 days (in which case a new record date is to be fixed by the board of directors of ADA-ES), notice shall be given to record holders as of the new record date. In all other cases, shareholders must be given at least 10 days' notice, but not more than 60 days' notice, of shareholder meetings.

ADES's bylaws provide for the same notice requirements as ADA-ES's bylaws (i.e. between no less than 10 but not more than 60 days written notice), except that (i) the set notice period for an increase in the authorized shares was eliminated because the DGCL does not require a set notice period and (ii) the 120-day notice in the case of adjournments was changed to a 30-day notice to be consistent with the DGCL.

Notice of Shareholder Nominations for Directors and Business to be Brought Before Meetings

ADA-ES's bylaws provide that a shareholder may propose business to be brought before an annual meeting of shareholders only if such proposal is (i) properly made in accordance with Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (ii) included in the notice of meeting given by or at the direction of the board of directors or (iii) otherwise permitted by Colorado law. In addition, if a special meeting is properly called by shareholders, the Board shall determine the time and place of such special meeting, which shall be held ninety (90) days from the last date of proper demand for such, unless another earlier date is established by the Board.

ADES's bylaws provide that no business may be brought before any meeting of stockholders, including the nomination or election of persons to the board of directors, by a stockholder unless the stockholder satisfies certain advance notice and disclosure requirements. The stockholder must disclose, among other items, certain information related to the business to be proposed at the meeting, its beneficial ownership in ADES and whether it is acting in concert with other stockholders or interested parties. Advance notice of any such business must be delivered to or mailed and received at the principal executive offices of ADES not less than one hundred twenty (120) calendar days in advance of the date specified in the Corporation's proxy statement released to stockholders in connection with the previous year's annual meeting of stockholders; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date contemplated at the time of the previous year's proxy statement, notice by the stockholder to be timely must be so received not later than the close of business on the later of one hundred twenty (120) calendar days in advance of such annual meeting or ten (10) calendar days following the date of public disclosure of such meeting. Notice of a special meeting called by stockholders must comply with similar information disclosure requirements as stated above. In addition, if a special meeting is properly called by stockholders, the board of directors shall determine the time and place of such special meeting, which shall be held not less than thirty-five (35) nor more than one hundred twenty (120) days after the date of the receipt of the request.

Indemnification/Limitation of Liability

ADA-ES's articles and bylaws provide that ADA-ES shall indemnify its directors and officers, to the fullest extent permitted by law, for any liability or expense including any obligation to with respect to an employee benefit plan and any matters covered by the CBCA, except liability that as to which the CBCA prohibits expressly the elimination or limitation of liability. In addition, as required by the CBCA, the Company is required to give shareholders, with or before the notice for the next shareholders' meeting, a notice of all indemnification of, or advancement of expenses to, directors of the ADA-ES in connection with a proceeding by or in the right of the corporation.

ADES's certificate provides that, to the fullest extent permitted by the DGCL, directors of ADES shall not be held personally liable to ADES or its stockholders for monetary damages for breach of any fiduciary duty as a director. In addition, ADES's certificate and bylaws provide that ADES shall indemnify, to the fullest extent permitted by the laws of Delaware, any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person is or was a director or officer of ADES or serves or served at any other enterprise as a director or officer at the request of ADES.

Record Date

Consistent with the CBCA, ADA-ES's bylaws provide that with respect to all actions requiring the fixing of a record date, the record date is not to be more than seventy (70) days (nor fewer than ten (10) days in the event of a meeting) before a meeting or action requiring a determination of shareholders.

Consistent with the DGCL, ADES's bylaws provide that the record date is not to be more than sixty (60) days (nor fewer than ten (10) days in the event of a meeting) before a meeting or action requiring determination of stockholders.

Amending the Charter

The CBCA provides that amendments to a corporation's articles of incorporation (other than certain ministerial amendments that may be made by the board of directors, without shareholder action) may be proposed by the board of directors or by the holders of shares representing at least 10% of all of the votes entitled to be cast on the amendment. The board must recommend the amendment to the shareholders, unless the amendment is being proposed by the shareholders, or unless the board determines that because of a conflict of interest or other special circumstances it should make no recommendation and communicates the basis for its determination to the shareholders.

In accordance with the DGCL, amendments to ADES's certificate generally require that the Board adopt a resolution setting forth the amendment, declaring its advisability and submitting it to a vote of the stockholders (i.e., stockholders are not entitled to enact an amendment to ADES's certificate without any Board action).

Corporate Records (Form of Records)

Under the CBCA, ADA-ES is required to keep as permanent records minutes of all meetings of the shareholders and the Board of ADA-ES, a record of all actions taken by the shareholders or the Board of ADA-ES without a meeting, a record of all actions taken by a committee of the Board of ADA-ES, and a record of all waivers of notices of meetings of shareholders and of the Board of the or any committee of the Board. In addition, the CBCA requires ADA-ES to keep specific records at its principal office, including the articles, bylaws, the minutes of all shareholders' meetings, and records of all action taken by shareholders without a meeting, for the past three years, all written communications within the past three years to shareholders as a group or to holders of any class or series of shares as a group, a list of the names and business addresses of current directors and officers, a copy of ADA-ES's most recent Colorado annual corporate report, and all financial statements prepared for periods ending during the last three years that a shareholder has a right to request under the CBCA.

Pursuant to the DGCL, any records maintained by ADES in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on, or by means of, or be in the form of, any information storage device or method, provided that the records so kept can be converted into clearly legible paper form within a reasonable time.

Examination of Books and Records

Pursuant to the CBCA, any record or beneficial shareholder of ADA-ES may, upon 5 days' written demand, inspect certain records, including the articles of incorporation, bylaws, minutes of shareholder meetings or records of all actions taken by consent without a meeting, communications with shareholders during the previous three years, the list of names and business addresses of current directors and officers, the most recent Colorado corporate annual report, and all financial statements prepared during the last three years as that a shareholder has a right to request under the CBCA. In addition, upon 5 days' written demand, any shareholder may inspect the list of shareholders and certain other corporate records, including (a) excerpts of minutes of any meetings of the Board, a board committee or shareholders of ADA-ES, (b) excerpts of actions taken by the Board, a Board committee or shareholders by consent without a meeting, (c) waivers of notices of any meetings of the Board, a Board committee or shareholders, and (d) accounting records of the corporation, if the shareholder either (i) has been a shareholder for at least 3 months or (ii) is a shareholder of at least 5% of all outstanding shares of any class of shares when the demand is made, provided that the demand is made in

Pursuant to the DGCL, the inspection rights of the stockholders of ADES are the same as under Colorado law, except: (i) there is no requirement that a stockholder has been a stockholder for at least 3 months or is a stockholder of at least 5% of all outstanding shares of any class of shares when the demand is made, and (ii) if ADES refuses to permit inspection or does not reply to an inspection demand within 5 business days after the demand has been made, the stockholder may apply to the Delaware Court of Chancery for an order to compel such inspection.

good faith and for a “proper purpose” (as defined), the shareholder describes with reasonable particularity the purpose and the records the shareholder desires to inspect, and the records are directly connected with the described purpose.

Business Combination Statute/Fair Price Provisions

The CBCA does not contain any “business combination provisions” which would serve to prevent or delay combinations with “interested shareholders.”

ADA-ES’s articles do not contain any “fair price” provisions.

Section 203 of the DGCL provides for a three-year moratorium on certain business combination transactions with “interested stockholders” (generally, persons who beneficially own 15% or more of the corporation’s outstanding voting stock). ADES’s certificate includes “fair price” provisions that will be in lieu of Section 203. Accordingly, ADES has opted out of Section 203 of the DGCL in its certificate.

ADES’s certificate contains a fair price provision. The fair price provision is designed to prevent a purchaser from utilizing two-tier pricing and similar tactics in an attempted takeover. This provision requires the affirmative vote of holders of at least a majority of the outstanding shares of voting stock not owned directly or indirectly by any interested stockholder or any affiliate of an interested stockholder to approve any business combination with any related or interested person. If such business combination has been approved by a majority of continuing directors at a meeting at which a continuing director quorum is present or such business combination involves ADES and a subsidiary in which a related person has no direct or indirect interest, subject to certain additional limitations, however, such heightened standard of shareholder approval will not apply and the business combination would require only such affirmative vote as may be required by law or otherwise.

Dissenters’ and Appraisal Rights

Pursuant to the CBCA, with certain exceptions that apply to corporations listed on a national securities exchange or the NASDAQ stock market, or that are held by more than 2,000 shareholders of record (including for such purpose both “record” and “beneficial” holders of shares), as is the case for ADA-ES, shareholders are entitled to exercise dissenters’ rights in the event of certain mergers, share exchanges, sales, leases, exchanges or other dispositions of all or substantially all of the property of the corporation and conversions. Shareholders also may dissent in the case of a reverse stock split that

Under the DGCL, appraisal rights are available only in connection with statutory mergers or consolidations. Even in those cases, unless the certificate of incorporation provides otherwise (and ADES’s certificate does not so provide), the DGCL does not provide appraisal rights for any class or series of stock (i) listed on a national securities exchange or (ii) held of record by more than 2,000 stockholders, except that appraisal rights are available for stockholders who, by the terms of the agreement of merger or consolidation, are required to accept anything other than: (i) shares of the corporation surviving or resulting from the merger

reduces the number of shares owned to a fraction of a share or to scrip if such scrip is to be acquired for cash or voided. Dissenters' rights in Colorado are available to both record holders and beneficial holders, however such rights are not available in connection with the reincorporation proposal.

or consolidation; (ii) shares of any other corporation which at the effective time of the merger or consolidation are either listed on a national securities exchange or held of record by more than 2,000 stockholders; (iii) cash in lieu of fractional shares; or (iv) any combination of the foregoing shares and cash in lieu of fractional shares.

Derivative Actions

Pursuant to the CBCA, if following final judgment, a court finds that an action by a shareholder by or in the right of the corporation (i.e., a "derivative action") was brought without reasonable cause, the court shall require the plaintiff to pay the defendants' reasonable expenses attributable to the defense of such action, exclusive of attorney's fees. In addition, ADA-ES may, at any time before final judgment, require the plaintiff to give security for the costs and reasonable expenses which may be incurred by ADA-ES or other parties named as defendants in the defense of such action, but not including attorney's fees, if the shareholder instituting the action holds less than 5% of the outstanding shares of any class of ADA-ES, unless the shares so held have a market value in excess of $25,000. If the court then finds that the action was instituted without reasonable cause, the corporation shall have recourse to such security in the amount determined by the court upon termination of the action.

The DGCL's requirements for bringing derivative actions are substantially similar to those contained in the CBCA, except that the DGCL does not impose (i) the reasonable cause requirement or (ii) the security requirement imposed by CBCA.

Franchise Tax

There is no franchise tax in Colorado. There is a nominal annual fee assessed to maintain the good standing of a corporation in the State of Colorado.

The DGCL requires corporations to pay franchise tax annually. The amount of such franchise tax will be significantly more than the nominal annual fee ADA-ES is paying in Colorado.

Board Recommendation

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE PROPOSAL TO APPROVE THE REORGANIZATION PROPOSAL AND TO APPROVE THE REORGANIZATION AGREEMENT.

PROPOSAL THREE
RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Relationship with Independent Registered Public Accounting Firm

EKS&H, LLLP ("EKS&H") served as the Company's independent registered public accounting firm for fiscal years 2011 and 2012 and has performed procedures related to the financial statements. There have been no disagreements on matters of accounting principles or practices, financial statement disclosures or audit scope or procedures between the Company and EKS&H, during the most recent fiscal year or any subsequent interim period. Effective as of March 19, 2013, the Company's Audit Committee approved the dismissal of EKS&H as the Company's independent registered public accountant, effective as of the date of EKSH's completion of the audit services for the fiscal year ended December 31, 2012 and the filing of the Company's Annual Report on Securities and Exchange Commission Form 10-K on March 18, 2013.

Effective as of March 19, 2013, the Audit Committee approved the appointment of KPMG LLP as the Company's independent registered public accounting firm to perform independent audit services beginning with the fiscal year ending December 31, 2013. The appointment follows a competitive process to select the Company's new auditors. Shareholder ratification of the Audit Committee's selection of KPMG LLP as our independent registered public accounting firm as requested in Proposal 3 is not required by our bylaws or otherwise. The Board is submitting this proposal to the shareholders for ratification as a matter of good corporate practice. If the shareholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain this firm. We anticipate that a representative of KPMG LLP will be available to respond to shareholder questions and will have the opportunity to make a statement at that time if the representative desires to do so.

Audit Fees

	EKS&H	
	2012	2011
Audit Fees (1)	$ 324,184	$ 169,219
Audit Related Fees (2)	$ 14,000	$ 13,000
Tax Fees (3)	$ 150	$ 1,950

(1) Includes annual and quarterly review services related to our Form 8-K, 10-Q, 10-K filings, Section 404 internal control audit service and review services related to the filings of Registration Statements on Form S-3, S-4 and Form S-8.
(2) Includes consultation services related to a Department of Energy audit for governmental projects.
(3) Includes services related to a sales and use tax audit for the years 2005 through 2009 from the state of Colorado.

Audit Committee Approval of Services

The Audit Committee pre-approves all audit or non-audit services performed by our independent accountant in accordance with Audit Committee policy and applicable law. The Audit Committee generally provides pre-approval of audit services and services associated with SEC registration statements, other SEC filings and responses to SEC comment letters (Audit Fees) and services related to internal control reviews, internal control

reporting requirements and consultations with our management as to accounting or disclosure treatment of transactions or events and the impact of rules, standards or interpretations by the SEC and other regulatory or standard-setting bodies (Audit-Related Fees) for each 12-month period within a range of approved fees. To avoid certain potential conflicts of interest, the law prohibits us from obtaining certain non-audit services from our independent accountant. The Audit Committee has delegated authority to approve permissible services to its Chairman. The Chairman reports such pre-approvals to the full Audit Committee at its next scheduled meeting. The Audit Committee Chairman pre-approved 100% of the services provided by the independent accountants in 2012. None of the services of the independent accountants in 2012 were of the type specified in Rule 2-01(c)(7)(i)(C) of SEC Regulation S-X.

Board Recommendation

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE AUDIT COMMITTEE'S SELECTION OF KPMG LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2013.

EXECUTIVE OFFICERS

Information concerning our executive officers who are not director nominees is provided below. See "Election of Directors" above for information regarding Dr. Durham and Mr. McKinnies.

Name	Age	Positions and Offices
Christine B. Amrhein	51	Vice President and General Counsel
C. Jean Bustard	55	Chief Operating Officer
Jonathan R. Lagarenne	53	Executive Vice President
Cameron E. Martin	55	Vice President Emissions Control Systems
Graham O. Mattison	41	Vice President of Investor Relations
Richard L. Miller	59	Vice President Business Development
Richard J. Schlager	61	Vice President of Administration
Sharon M. Sjostrom	46	Chief Technology Officer

Each of the officers named above serves at the pleasure of the Board.

Ms. Amrhein became Vice President and Corporate Counsel of the Company in July 2011 and was promoted to General Counsel in June 2012. Prior to her appointment, Ms. Amrhein served as Vice President – Associate General Counsel of The TriZetto Group, Inc. from 2008 through 2011. From 2003 through 2008, Ms. Amrhein was Senior Counsel of First Data Corporation. From 1989 through 2003, Mr. Amrhein had various legal and business roles with The Timken Company. Ms. Amrhein currently serves as the Co-Chair of the Transactions Practice Committee of the Colorado Chapter of the Association of Corporate Counsel. Ms. Amrhein holds a B.A. degree from Allegheny College, an M.A. degree from the University of Exeter and a J.D. degree from the University of Pittsburgh School of Law. Ms. Amrhein also completed the Executive Program at the University of Virginia Darden School of Business.

Ms. Bustard was appointed Chief Operating Officer of the Company in June 2004. She was appointed Manger of Clean Coal Solutions, LLC, our consolidated subsidiary, in January 2012. Ms. Bustard served as Interim President of ADA-CS from October 2008 through September 2010 and served as a member of its Board of Managers from October 2008 through November 2011. Prior to her appointment as COO, she served as Executive Vice President of ADA Environmental Solutions, LLC, our wholly owned subsidiary, beginning with its formation in 1996. Ms. Bustard was employed by ADA Technologies from 1988 through 1996. Ms. Bustard holds a B.S. in Physics Education from Indiana University, an M.A. in Physics from Indiana State University and an Executive M.B.A. from the University of Colorado.

Mr. Lagarenne has served as our Executive Vice President since May 2012. Prior to ADA-ES, he was a partner at Fox Rothschild LLP from 2005 to 2012. Mr. Lagarenne was in private practice as an attorney at the Law Office of Jonathan Lagarenne from 2004 to 2005. He served on the Board of Directors of Turbosonic Technologies from 2002 to 2005. Mr. Lagarenne served as the Chief Executive Officer of Hamon Corporation from 2000 through 2003 and as the Chief Operating Officer from 1998 to 2000. From 1994 to 1998, he served as Vice President and General Counsel of Research-Cottrell, Inc., serving as Associate Counsel prior to that. From 1990 to 1998, Mr. Lagarenne served in multiple regional counsel positions for Air & Water Technology Corporation. Mr. Lagarenne holds a B.S. degree in chemical engineering, with honors, from the University of Virginia and a J.D. degree from Rutgers School of Law.

Mr. Mattison has served as our Vice President of Investor Relations since December 2012. Prior to joining ADA-ES, Inc., he served as an Equity Research Analyst covering alternative energy and industrials for Lazard Capital Markets from 2007 through 2012, including coverage of ADA-ES. From 2004 to 2007, Mr. Mattison served as an Equity Research Associate covering alternative energy, energy infrastructure and oilfield services for First Albany Capital. Previously he served as an associate at MMC Energy, LLC, and co-founded and served as the Chief Operating Officer and Chief Financial Officer of 1RoofRealty.com. He began his career as a financial analyst at Daiwa Securities and Churchill-Pryce Capital in their Bangkok, Thailand offices. He holds a B.A. degree from Hobart College and an M.B.A. degree with a specialization in global finance, with honors, from Thunderbird, The Garvin School of International Management.

Mr. Martin was appointed Vice President Emissions Control Systems of the Company in December 2007. Prior to that appointment he served the Company as a Director of Mercury Control since 2003, Director of Engineering since 1997 and Project Manager in 1996. Mr. Martin has a B.S. in Environmental Science from West Virginia University.

Mr. Miller has served as our Vice President Business Development since January 2011. Prior to that appointment he served as Vice President Business Development of Utility Systems from November 2005 to December 2010. He was previously employed by Hamon Research-Cottrell (HRC), a major provider of air pollution control technology solutions for utilities, refineries and other industries serving the North American market, from 1990 to November 2005, most recently as Vice President of Sales with primary responsibility in Particulate and Mercury Control Technologies. Prior to 1989, Mr. Miller was employed by Buell/General Electric Environmental Services, Inc. (now a part of Marsulex, Inc.), in various technical and sales positions with direct responsibility for all fabric filter technologies. Mr. Miller currently serves as Co-Chair of ICAC's Mercury Control division and has previously served as Chairman of ICAC's Fabric Filter Division. Mr. Miller has an A.A.S. in Marine Science Technology from Southern Maine University, a B.S. Degree in Management from Lebanon Valley College and an Executive M.B.A. from Colorado Technical University.

Mr. Schlager was appointed as our Vice President of Administration in December 2012. Prior to that appointment, he served as Vice President of the Technology Services Division since August 2010, Vice President of Administration of the Company from August 2007 to August 2010, served as the Vice President, Contract Research and Development from 2000 to 2007 and was employed by ADA Technologies from 1989 until that time. Mr. Schlager holds a B.S. in Chemistry and an M.S. in Metallurgical Engineering from the Colorado School of Mines.

Ms. Sjostrom has served as our Chief Technology Officer since January 2011 and served as Vice President of Technology from January 2007 to December 2010. Previously she served the Company as Director, Technology Development since 2003 when we acquired her company EMC Engineering, LLC, an engineering services company, where she served as President since 2002. From 1998 until September 2002, Ms. Sjostrom served as Director of Emissions Control for Apogee Scientific, LLC, a provider of advanced engineering and environmental technologies. Ms. Sjostrom has a B.S. in Mechanical Engineering from Colorado State University, an M.S. in Mechanical Engineering from the California Institute of Technology and an Executive M.B.A. from the University of Denver.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL SHAREHOLDERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

The following table provides information with respect to the beneficial ownership of the Company's common stock by (1) each of our shareholders whom we believe are beneficial owners of more than 5% of our outstanding common stock, (2) each of our directors and named executive officers and (3) all of our directors and executive officers as a group. We base the share amounts shown on each person's beneficial ownership as of April 10, 2013 (including options exercisable within 60 days thereof), unless we indicate some other basis for the share amounts. Percentage ownership is calculated based on 10,216,305 shares outstanding as of April 10, 2013, including securities deemed outstanding pursuant to Rule 13d-3(d)(1) under the Exchange Act. Except as noted below, each of the individuals named below has sole voting and investment power for the respective shares.

Name and Address	Amount and Nature of Beneficial Ownership	Percent of Class
Christine Amrhein (Vice President and General Counsel) (a)	18,114(1)	*
C. Jean Bustard (Chief Operating Officer) (a)	97,075(2)	1.0%
Robert N. Caruso (Director) (a)	28,028(3)	*
Kim B. Clarke (Director) (a)	-0-	*
Michael D. Durham (Director, President and CEO) (a)	293,830(4)	2.9%
A. Bradley Gabbard (Director) (a)	2,146	*
Derek Johnson (Director) (a)	10,877	*
Ronald B. Johnson (a)	29,686(5)	*
Jonathan R. Lagarenne (Executive VP) (a)	2,250	*
W. Phillip Marcum (Director) (a)	42,323(6)	*
Cameron E. Martin (VP Emissions Control Systems) (a)	19,184(7)	*
Graham O. Mattison (VP Investor Relations) (a)	1,560	*
Mark H. McKinnies (Director, Secretary, Senior VP and CFO) (a)	120,895(8)	1.2%
Richard Miller (VP Business Development for Utility Systems) (a)	33,950(9)	*
Richard J. Schlager (VP Administration) (a)	60,078(10)	*
Robert E. Shanklin (Director) (b)	-0-(11)	*
Sharon M. Sjostrom (Chief Technology Officer) (a)	16,614(12)	*
Jeffrey C. Smith (Director) (a)	43, 144	*
Richard Swanson (Director) (a)	16,664	*
BlackRock, Inc. (c)	1,042,606(13)	10.2%
Wellington Management Company, LLP (d)	1,284,037(14)	12.6%
Directors and Officers as a Group (19 individuals)	**836,418(15)**	**8.2%**

* Less than 1%.
(a) 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, CO
(b) 1 CityPlace Dr., St. Louis, MO
(c) 40 East 52nd Street, New York, NY
(d) 280 Congress Street, Boston, MA

Notes:

(1) Included in the amount shown are 1,186 shares of restricted stock held by Ms. Amrhein which have not vested and are subject to certain repurchase rights, 403 shares held in Ms. Amrhein's 401(k) Plan account and 15,045 shares held indirectly by Ms. Amrhein (by spouse). Included in the 15,045 shares held by

spouse are 449 shares of restricted stock which have not yet vested and are subject to certain repurchase rights and 4,505 shares held in Mr. Amrhein's 401(k) Plan (as defined below) account.

(2) Included in the amount shown are 24,543 shares to which Ms. Bustard has the right to acquire beneficial ownership through stock options, 12,000 shares of restricted stock which have not yet vested and are subject to certain repurchase rights and 18,369 shares held in Ms. Bustard's 401(k) Plan account.

(3) Included in the amount shown are 10,979 shares held by B/3 Management Resources, LLC, which is controlled by Mr. Caruso as a Managing Director.

(4) Included in the amount shown are 55,984 shares held in Dr. Durham's 401(k) Plan account, 15,000 shares of restricted stock which have not yet vested and are subject to certain repurchase rights, and 49,010 shares to which Dr. Durham has the right to acquire beneficial ownership through stock options.

(5) Included in the amount shown are 7,777 shares held by the Johnson Family Trust and 21,909 shares held by Twin-Kem International, Inc., which is controlled by Mr. Johnson as the President and Owner.

(6) Included in the amount shown are 5,000 shares to which Mr. Marcum has the right to acquire beneficial ownership through stock options.

(7) Included in the amount shown are 394 shares of restricted stock which have not vested and are subject to certain repurchase rights and 8,618 shares held in Mr. Martin's 401(k) Plan account.

(8) Included in the amount shown are 35,411 shares held in Mr. McKinnies' 401(k) Plan account, 500 shares held as trustee for the MJ Kraft Trust, 12,000 shares of restricted stock which have not vested and are subject to certain repurchase rights and 34,210 shares to which Mr. McKinnies has the right to acquire beneficial ownership through stock options.

(9) Included in the amount shown are 13,000 shares to which Mr. Miller has the right to acquire beneficial ownership through stock options, 1,500 shares of restricted stock which have not vested and are subject to certain repurchase rights and 5,450 shares held in Mr. Miller's 401(k) Plan account.

(10) Included in the amount shown are 28,300 shares to which Mr. Schlager has the right to acquire beneficial ownership through stock options and 19,380 shares held in Mr. Schlager's 401(k) Plan account.

(11) Does not include 296,277 shares held by Arch Coal, Inc. Mr. Shanklin is Vice President of Coal Technology at Arch Coal and disclaims beneficial ownership of such shares.

(12) Included in the amount shown are 7,832 shares held in Ms. Sjostrom's 401(k) Plan account.

(13) As of December 31, 2012, per Schedule 13G filed with the SEC on January 11, 2013, which reported as follows: BlackRock, Inc. owned and had sole voting and dispositive power of 1,042,606 shares.

(14) As of December 31, 2012, per Schedule 13G/A filed with the SEC on February 14, 2013, which reported as follows: Wellington Management, LLC owned 1,284,837 shares and had voting power of 803,800 shares and dispositive power of 1,284,837 shares.

(15) The amount shown includes options to purchase 154,063 shares of our common stock held by individuals in the group.

EXECUTIVE COMPENSATION

Our philosophy for executive compensation is set forth in a document entitled "Amended and Restated ADA-ES Executive Compensation Plan" (the "EC Plan") which was adopted by the Compensation Committee of the Board on February 22, 2012. The ADA-ES compensation philosophy is designed to support achievement of our Company strategies and goals, thereby creating long-term value for our shareholders and customers and ensuring our ability to recruit and retain highly qualified executive employees. The EC Plan:

- Employs a process that fully complies with all legal, regulatory and disclosure requirements.
- Supports our Company's vision, mission, strategy, and values in the long-term best interests of our shareholders.
- Requires Board approval of the philosophy underlying executive compensation and periodic reports on the program's adherence to these guidelines.

- Vests in the Compensation Committee responsibility for oversight, implementation and administration of executive compensation and benefits, including the establishment of appropriate measures of materiality which determine those matters that are subject to committee review and approval.
- Ensures that members of the Compensation Committee, together with their legal counsel and consultants, are independent and do not have a conflict of interest relative to the executive or compensation being reviewed or any related products/services being utilized or considered.
- Attracts and retains the best executive talent and a highly qualified diverse workforce within a non-discriminatory, merit-based compensation program.
- Utilizes external compensation data to benchmark comparable positions in similar industries and companies within our geographical region as one key factor in establishing the competitiveness of our executive salaries, incentives and benefits.
- Provides internal equity and fairness by considering differences among executive-level job qualification/skill requirements, responsibility/accountability, value creation and performance.
- Gives flexibility to the Compensation Committee to make compensation decisions adaptable to changing business conditions and within budgetary guidelines.
- Encourages competency-building by linking career development, performance management and compensation rewards.
- Achieves a performance-driven leadership culture that generates growth, profitability and long-term shareholder value.
- Provides clear prioritization, focus and measurement on strategic and operational goals with a meaningful link to rewards.
- Recognizes and rewards individual and executive-group leadership, innovation, achievement, contribution and excellence.
- Encourages recruitment, retention, and motivation of outstanding executives so that the organization can achieve its mission and objectives.
- Includes periodic adjustments to pay ranges based upon changes in the marketplace.

The EC Plan applies to the Executive Team, which includes the President/Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer, Chief Technology Officer and all Vice Presidents of the Company. Executives become eligible to participate in this plan after completing 12 months of continuous service with ADA-ES. Participation may be modified based on the Board's approval.

The Compensation Committee establishes the base salary for all executive officers and establishes annual performance incentive metrics. The CEO makes recommendations as to base salary and incentive compensation of all other executive officers to the Compensation Committee.

Base Salaries

Base salary is defined as ongoing, cash compensation paid bi-weekly based on such factors as job responsibilities, external competitiveness, and the individual's experience and performance. Pay ranges have been set based on the local market for similar positions, with consideration given to regional and national rates of pay for employees serving similar functions in comparable companies. Base salary is typically increased annually based on cost of labor/living increases. In determining appropriate merit increases, the Compensation Committee has considered the actual market change for various job families in addition to published local CPI-U data. The market change is determined by tracking the year-over-year change in the median rate for a given

position or job family using regional salary surveys. ADA-ES attempts to ensure middle market pay for solid performers and consider higher levels of pay for outstanding performers. ADA-ES does not intend to be a market leader in base compensation. A decision to materially increase or decrease compensation would be based on the aforementioned factors. Mountain States Employers Council, a regional compensation consultant, was engaged by the Compensation Committee and assisted with the design and application of the EC Plan and has advised on the appropriateness of incentive levels for executive positions.

The Compensation Committee engaged Mountain States Employers Council, a regional compensation consultant ("MSEC"), to assist with the initial design and application of the EC Plan and reviewed data provided by MSEC in determining the appropriateness of base pay and incentive compensation for executive positions in 2010 through 2012. MSEC did not provide any other services to the Company.

On July 27, 2010, the Compensation Committee approved an increase in Dr. Durham's base salary to $405,000, in Mr. McKinnies' base salary to $300,000, in Ms. Bustard's base salary to $255,000, in Ms. Sjostrom's base salary to $175,000 and increases in the salaries of the Company's other executive officers, all to be effective as of July 1, 2010. In determining the base pay increases in 2010, the Compensation Committee considered data from MSEC that showed higher salary levels for public company executives. Data considered by the Compensation Committee prior to July 2010 was primarily for private companies. The pay increase for Mr. McKinnies also reflected the desire of the Compensation Committee to distinguish his compensation from that of Ms. Bustard.

On January 25, 2011, the Board appointed Ms. Sjostrom as Chief Technology Officer and, based on data from MSEC, approved an increase in her base salary to $200,000, to be effective as of January 1, 2011. On June 7, 2011, the Board appointed Ms. Amrhein as Corporate Counsel and Vice President to commence July 18, 2013 (she was later appointed as Vice President and General Counsel on June 6, 2012) and approved a base salary of $175,000 based on data from MSEC.

On January 16, 2012, the Compensation Committee approved an increase in Dr. Durham's base salary to $485,000, in Mr. McKinnies' base salary to $325,000, in Ms. Bustard's base salary to $275,000, in Ms. Sjostrom's base salary to $220,000, in Ms. Amrhein's base salary to $200,000 and increases in the salaries of the Company's other executive officers, all to be effective as of January 1, 2012 based on data from MSEC and performance of the Company's executive officers.

Incentive Compensation

Annual performance incentives are designed to motivate the management team to achieve critical short-term goals, typically one to two years, which are expected to contribute to the long-term health and value of the Company. Incentives may be paid in cash or equity as determined by the Board. We generally grant restricted stock awards to new executives at the Board meeting following the commencement of employment.

Incentive amounts are set based on job position and market practices. The performance metrics under the EC Plan focus on specific business objectives set during the first half of each year. Objectives are those metrics which management and the Board determine are most important to the short and long term health and value of the organization. The objectives for 2012 were based on revenues, gross margins, ratio of contracts awarded for certain products, share price performance, general and administrative expense rate, commercial advancement of certain products, CO2 Capture projects, new product development and exploration of new business opportunities. Potential incentive amounts for 2012 performance were established at 50% and 40% of base salary for the CEO and other members of the executive team, respectively.

Annual incentive awards under the EC Plan for the CEO and the other executive officers as a group are made by the Compensation Committee in January or February of each year with respect to the previous year's performance. The CEO has the discretion to allocate the incentive pool set by the Committee to the other

executive officers, subject to final approval by the Committee Chairman over such allocations. Annual incentives, if any, are generally planned for payment by February 28th of the calendar year following the incentive period. Incentives paid in cash are subject to payroll taxes and other customary withholdings. These incentives can be deferred and paid to a designated beneficiary, although that has not been the case with any incentives awarded thus far. In early 2011, 2012 and 2013 the Compensation Committee approved incentive awards earned by the executive officers based on 2010, 2011 and 2012 performance, respectively, under the EC Plan with a value of $626,952 and $742,810 and $569,487, respectively, in the aggregate for the CEO and the other executive officers as a group. The Compensation Committee allocated 21%, 28% and 27% of the 2010, 2011 and 2012 incentive awards to the CEO and gave the CEO discretion to allocate the remaining amounts to the other executive officers.

From time to time the Board may recognize exemplary performance of any executive with a cash or stock award. Exemplary performance is performance that the Board determines to have required significant effort and commitment and is determined to have had a significant positive impact on the current or future performance of the organization. No such payments were made in 2010, 2011 and 2012 other than the RC Bonus described below.

The use of equity payments to make incentive payments and the award of stock-based incentives for achieving specific project milestones, is intended to link short-term success to long-term performance and decision making, and to align management and shareholder interests. Payments may be made in shares or options, as determined by the Board, considering accounting and regulatory restrictions, and the financial condition of the Company. The stock portions of the 2012, 2011 and 2010 incentive awards are shown below in the Summary Compensation table under the “Stock Awards” column. The cash portions of the 2012, 2011 and 2010 incentive awards are shown below in the Summary Compensation table under the “Non-Equity Incentive Plan Compensation” column.

Crowfoot Incentive Program for Certain Executive Management

In March 2008, the Compensation Committee and the Board approved an incentive program (the “Crowfoot Incentive Program”) pursuant to the 2007 Equity Incentive Plan (the “2007 Plan”) under which 172,500 shares of ADA-ES common stock were awarded (but not vested) to four of our executive officers and an independent consultant as an incentive for the executives and the consultant to work diligently to attain certain milestones related to progress on the development, construction and operation of an activated carbon production facility (the “Crowfoot Project”). The facility was developed by Red River Environmental Products, LLC, a wholly owned subsidiary of ADA-CS.

The eligible recipients of awards under the Crowfoot Incentive Program, and the number of shares awarded to each, were as follows: Michael Durham – 57,500 shares, Mark McKinnies – 46,000 shares, C. Jean Bustard – 46,000 shares, Richard Miller – 11,500 shares and a financial consultant to the Company – 11,500 shares. A portion of the shares awarded to each of the recipients “vests” upon attainment of each defined milestones. Unvested shares are subject to repurchase rights of the Company. Based on the satisfaction of milestones and

waivers of certain conditions in 2010, the following table identifies the number of shares that are vested, forfeited and unvested for each recipient:

Name of Individual and Principal Position	Total Shares Awarded (#)	Total Shares Vested (#)	Total Shares Forfeited (#)	Total Shares Unvested (#)
Michael D. Durham . . . . PEO	57,500	41,625	875	15,000
Mark H. McKinnies . . . . PFO	46,000	33,300	700	12,000
C. Jean Bustard . . . . COO	46,000	33,300	700	12,000
Richard Miller . . . . Vice President of Business Development	11,500	10,000	—	1,500
Financial Consultant	11,500	9,833	167	1,500
Totals	**172,500**	**128,058**	**2,442**	**42,000**

Effective as of November 28, 2011, the Compensation Committee terminated the Crowfoot Incentive Program due to the relinquishment of the Company's interest in ADA-CS. The Committee determined not to repurchase the unvested shares at such time and may reallocate such shares to future incentive programs.

Refined Coal Activities Supplemental Compensation Plan

On April 20, 2010, the Compensation Committee of our Board adopted the Refined Coal Activities Supplemental Compensation Plan, which was amended and restated on November 9, 2011 (the "RC Plan"). The RC Plan provides for the allocation of annual incentive awards in an amount equal to seven percent of the "Net Contribution Margin" (as defined in the RC Plan) resulting from our "Refined Coal Activities" (as defined in the RC Plan). Refined Coal Activities currently include the activities of CCS and may include such other activities that the Compensation Committee designates. The amount of each incentive award is calculated and paid annually following the close of each fiscal year and allocated as follows: three percent of Net Contribution Margin, or 42.85% of the amount of the award, is allocated to our Chief Executive Officer, Dr. Michael Durham, and four percent of Net Contribution Margin, or 57.15% of the amount of the award, is allocated to those eligible RC Plan participants selected by Dr. Durham based on their contributions to our Refined Coal Activities during the prior fiscal year. The RC Plan was amended in November 2011 to clarify the "Revenue" and "Expense" components that are used to calculate the Net Contribution Margin and to include "Claw-Back Rights" pursuant to which we would be entitled to a return of amounts paid out under the RC Plan if we are required to refund any of the Revenue upon which an award was made. In February 2012, the Compensation Committee limited the "Claw-Back Rights" to apply only to our executive officers, set a minimum threshold for their application and provided that any claw-back would be an offset against any future incentive compensation. These changes were made based on concerns as to the possible negative impact any exercise of such rights may have on employee morale, the costs and difficulty of administering any claw-back and the unlikelihood that any such claw-back right may arise.

In early 2011, the Compensation Committee approved the calculation of an award amount of approximately $430,000 under the RC Plan based on Refined Coal Activities in 2010. In February 2012, the Compensation Committee approved the calculation of an award amount of approximately $283,000 under the RC Plan based on Refined Coal Activities in 2011. In March 2013, the Compensation Committee approved the calculation of an award amount of approximately $223,000 under the RC Plan based on Refined Coal Activities in 2011 due to cash distributions from Clean Coal in 2013; this award was earned in 2013 and is not included in the Summary Compensation Table below.

During 2012, the Compensation Committee discussed various changes to the RC Plan based on input from senior management and in March 2013 terminated the RC Plan in favor of a replacement long-term incentive plan being developed. In lieu of an award under the RC Plan with respect to Refined Coal Activities in 2012, on March 20, 2013, the Compensation Committee approved a discretionary bonus in the amount of approximately $723,000 based on the calculations that would have been made pursuant to certain of the changes discussed during 2012, including inclusion of an award based on tax credits earned by Clean Coal during 2012 due to Refined Coal Activities. This discretionary bonus was earned in 2013 and is not included in the Summary Compensation Table below.

Clean Coal Activities Supplemental Bonus

On November 9, 2011, the Compensation Committee approved a $1 million discretionary bonus (outside of the RC Plan) (the "2011 RC Bonus") to reward the management team and employees for their work that resulted in the $60 million investment by GSFS Investments I Corp., an affiliate of the Goldman Sachs Group, Inc. to Clean Coal. The discretionary bonus included a cash portion and up to $300,000 to be paid in shares of common stock reserved under the 2007 Equity Incentive Plan. The shares were issued to the Company's 401(k) Plan for eligible recipients (including all executive officers) and issued directly to recipients not eligible to participate in the Company's 401(k) Plan. Dr. Durham received $300,000 ($10,045 in common stock and the remainder in cash), and he allocated the remaining amount to the other executive officers, a contractor and employees.

2013 Executive Compensation and Compensation Adviser

Our Compensation Committee determined it was in the best interest of the Company to engage a compensation adviser to assist with the design and implementation of compensation arrangements starting in 2013. In November 2012, our Compensation Committee completed a competitive bidding process and selected Longnecker & Associates ("Longnecker"). Longnecker has advised the Company on:

- selection of a peer group for purposes of analyzing and comparing executive compensation data,
- executive officer base salaries for 2013,
- development of short-term incentive metrics for 2013 under our EC Plan,
- termination of the RC Plan and
- replacement of the RC Plan with a long term incentive plan for our executive officers and a profit sharing incentive plan for our employees, both of which are still in the process of being developed.

Based on disclosures made by Longnecker, the Compensation Committee determined that Longnecker meets the independence criteria of Rule 10C-1 of the Securities and Exchange Act of 1934, as amended. Longnecker does not provide any other services to the Company.

Other Aspects of Executive Employment

There is no severance pay policy or other benefits payable after termination for any executive except for Mr. Lagarenne. See "Employment Contracts and Termination of Employment and Change-in-Control Arrangements" below regarding executives' obligations after termination.

In the event of a restatement of income, any overpayments of incentive pay made to executives based on such restatement of income may be reclaimed at the discretion of the Board of Directors. The Company restated its financial statements for the fiscal years ended December 31, 2010 and 2011 in October of 2012. The Compensation Committee determined there was no overpayment of incentive pay as a result of such restatements.

We have key person term insurance for our CEO in the amount of $5 million and for our CFO, COO and CTO in the amount of $2 million for each individual. The policies may be assigned to the individuals upon termination of employment other than for cause whereupon the executive would be responsible for any premium payments.

Executives are encouraged to own a number of shares of stock equal to a value of at least one (1) times the annual base salary as a condition of continued employment with ADA-ES. Executives have five (5) years from the date of their hire/promotion to accomplish this level of ownership. Ownership is calculated considering holdings of restricted stock, whether or not the restrictions have expired, private holdings, and shares held in retirement accounts. Holding of options also will be considered in the ownership calculation by adding the value of the spread of in-the-money options to the total value of other holdings. The Compensation Committee reviewed executive equity ownership against the ownership goals for our executives in August 2012 and confirmed all executives met the ownership guidelines at that time.

After the stock ownership guidelines have been met, executives may sell unrestricted stock they have owned for a period greater than 12 months, and may exercise vested stock options and sell shares to pay for the exercise price and withholding tax, except as otherwise provided for in the underlying stock option agreement. The Company must be advised of any sale of stock options or shares of stock at least 30 days in advance or the executive must be engaged in a pre-announced program sale in compliance with federal securities laws, and such sales must be made in compliance with our insider trading policy.

Executives leaving the Company may be required to hold their stock in the Company for at least 6 months after leaving the Company.

The ADA-ES, Inc. Profit Sharing Retirement Plan, which is a plan qualified under Section 401(k) of the Internal Revenue Code (the "401(k) Plan") covers all eligible employees. Pursuant to that plan, we make matching contributions to each eligible employee's account up to 7% of the employee's eligible compensation, and may make, at the discretion of the Board, contributions based on the profitability of the Company to those accounts. Beginning in June 2009, we have made our matching contributions in shares of the Company's common stock. No discretionary contributions were made to the 401(k) Plan in 2010, 2011 and 2012 other than as discussed above. Investments in an employee's account may be made in stocks, bonds, mutual funds and other investments permitted by the Plan's administrator.

Employee contributions to the 401(k) Plan are 100% vested. Company contributions become 100% vested if an employee's employment ends after the date such employee attains normal retirement age (age 65), dies or becomes disabled. If an employee's employment is terminated prior to the date the employee attains normal retirement age (65) or dies or becomes disabled, the employee will become vested in the Company's matching contributions and any discretionary contributions according to the schedule below:

Years of Vesting Service	Vested Percentage
Less than 2	0%
2	20%
3	40%
4	60%
5	80%
6 or more	100%

The following table shows compensation of those persons who were our principal executive officer ("PEO"), principal financial officer ("PFO"), and the three other most highly compensated executive officers other than the PEO and PFO (collectively, the "NEOs") for each of the years they were so designated. The structure of pay for each NEO is the same, although as noted above the potential incentive amounts under the EC Plan for 2010, 2011 and 2012 performance were established at 50% of base salary for the PEO and 40% of base salary for other NEOs.

Summary Compensation Table for Years Ended December 31, 2010, 2011 and 2012

Name of Individual and Principal Position	Year	Salary ($)(1)	Stock Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)(3)	All Other Compensation ($)(4)	Total ($)
Michael D. Durham	2012	481,923	—	218,537	22,527	722,987
President, CEO and	2011	395,520	10,045	545,835	17,156	968,556
Director (PEO)	2010	332,027	—	319,180	17,504	668,711
Mark H. McKinnies	2012	324,038	—	120,401	22,080	466,519
Senior VP, CFO and	2011	295,983	10,045	118,892	17,161	442,081
Director (PFO)	2010	266,903	29,860	105,237	15,056	417,056
C. Jean Bustard	2012	274,231	—	102,030	18,477	394,738
COO	2011	252,949	10,045	107,078	9,247	379,319
	2010	253,199	29,860	94,408	13,082	390,549
Sharon M. Sjostrom	2012	219,231	—	81,095	15,454	315,780
CTO	2011	199,037	8,200	52,594	14,730	274,561
	2010	154,956	22,096	50,906	11,742	239,700
Christine Amrhein	2012	199,038	—	57,405	7,562	264,005
Vice President and	2011	74,038	44,887	15,340	—	134,265
General Counsel (5)						

(1) The 2010 amounts include deferred wages from 2009 that were earned and paid in shares of common stock in 2010 under the 2007 Plan and were valued at the fair value of the awards determined in accordance with FASB Accounting Standards Codification ("ASC") Topic 718 as discussed in (2) below.

(2) Amounts for 2010 represent portions of the 2010 EC Plan award executives elected to receive in stock. Amounts for 2011 include the stock portion of the 2011 RC Bonus and for Ms. Amrhein, restricted stock issued upon commencement of her employment. Ms. Amrhein's restricted stock consists of a $25,000 starting bonus, which stock vested upon completion of one year of service, and the standard award to all new employees equal to 10% of her base salary, which vests pursuant to a five year vesting schedule with 10% vesting on the second anniversary, 20% on the third anniversary, 30% on the fourth anniversary and 40% on the fifth anniversary of her start date. These awards were valued at the grant date fair value determined in accordance with FASB ASC Topic 718, which is based on the closing sales price of the common stock on the grant date. The Company recognizes stock-based compensation expense for restricted stock awards over the vesting period.

(3) Amounts shown for 2012 represent the 2012 EC Plan award and amounts earned for the 2011 EC Plan award in 2012. Amounts shown for 2011 represent the amounts earned for the 2011 EC Plan award, under the RC Plan for Refined Coal Activities in 2011 and for the 2011 RC Bonus. The 2010 amounts represent the amounts earned for the 2010 EC Plan award and under the RC Plan for Refined Coal Activities in 2010.

(4) Amounts represent matching contributions in stock made by the Company under our 401(k) Plan for the benefit of the named individual.

(5) The 2011 amounts for Ms. Amrhein are for the period from July 2011, when she commenced employment, through December 2011.

Grants of Plan-Based Awards

Name of Individual and Principal Position	Estimated Future Payments Under Non-EquityIncentive Plan Awards (1)		
	Threshold ($)	Target ($)	Maximum ($)
Michael D. Durham PEO	97,000	242,500	363,750
Mark H. McKinnies PFO	52,000	130,000	195,000
C. Jean Bustard COO	44,000	110,000	165,000
Sharon M. Sjostrom CTO	35,200	88,000	176,000
Christine Amrhein Vice President and General Counsel	32,000	80,000	160,000

(1) The target non-equity incentive award under the EC Plan for 2012 was 50% of base salary for the PEO and 40% of base salary for all other executive officers. The threshold non-equity incentive award was 40% of the target and the maximum non-equity incentive award was 150% of the target. The metrics used to determine the non-equity incentive awards for our executives under the EC Plan are discussed above. Actual non-equity incentive awards earned for 2012 are included in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table.

Outstanding Equity Awards at December 31, 2012

Name	Option Awards					Stock Awards	
	Number of Securities Underlying Unexercised Options (#) Exercisable (1)	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price per Share	Option Expiration Date	Equity Incentive Plan Award: Number of Unearned Shares That Have Not Vested (2)	Equity Incentive Plan Award: Market Value of Unearned Shares That Have Not Vested (2)
Michael D. Durham	49,010	—	—	$ 8.60	12/31/15	15,000	$ 253,200
Mark H. McKinnies	34,210	—	—	$ 8.60	12/31/15	12,000	$ 202,560
C. Jean Bustard	24,543	—	—	$ 8.60	12/31/15	12,000	$ 202,560
Sharon M. Sjostrom	2,363	—	—	$ 13.80	11/4/14	—	$ —
Christine B. Amrhein	—	—	—	$ —	—	1,186	$ 17,488

(1) Represents options granted on August 23, 2004 pursuant to our 2004 ESO Plan for Mr. Durham, Mr. McKinnies and Ms. Bustard and options granted on November 4, 2004 pursuant to the 2002 ADA-ES, Inc. Stock Option Plan for Ms. Sjostrom.

(2) The shares for all executives except Ms. Amrhein consist of Crowfoot Incentive Program awards granted on March 17, 2008. Effective November 28, 2011, the Program was terminated. The Compensation Committee determined not to repurchase the unvested shares at such time and may reallocate such shares to future incentive programs. The shares for Ms. Amrhein consist of restricted stock issued upon commencement of service with the Company in July 2011 and pursuant to the 2011 RC Bonus that have not yet vested. The market value of such shares was determined based on a share price of $16.88 at December 31, 2012.

Option Exercises and Stock Vested

Name of Individual and Principal Position	Stock Awards	
	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
Michael D. Durham (PEO)	—	—
Mark H. McKinnies (PFO)	—	—
C. Jean Bustard COO	—	—
Sharon M. Sjostrom CTO	—	—
Christine Amrhein Vice President and General Counsel (1)	1,480	35,698

(1) Amounts shown represent restricted stock awarded to Ms. Amrhein upon commencement of employment and that vested in July 2012.

Pension Benefits

No retirement payments or benefits were paid to any NEO of the Company in the fiscal year ended December 31, 2012 except those matching contributions paid under the Company's Profit Sharing Retirement Plan, which is a tax-qualified defined contribution plan.

Nonqualified Deferred Compensation

Although our EC Plan allows for deferrals of payment, the Company does not currently have any nonqualified deferred compensation plans that apply to the NEOs.

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

We have executed employment agreements with every full-time employee, including our executive officers. The agreements with all of our executive officers contain the following provisions:

1. Description of position, duties, authority, compensation, benefits and obligation of the employee to devote full time to the fulfillment of his/her obligations under the agreement.
2. Obligations to disclose and Company ownership of inventions and confidential subject matter, which obligations survive for two years after termination of employment.
3. Assignment of inventions, obligations regarding inventions and confirmation of no Company obligation to commercialize inventions, all of which survive after termination of employment.
4. Acknowledgement that copyright works are "works for hire" and obligation of employee to maintain written records of all inventions and confidential subject matter.
5. Restrictive obligations relating to confidential subject matter, which survive after termination of employment.
6. Acknowledgement and agreement regarding no conflicting obligations and obligations upon termination of employment.

The agreements with our Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Chief Technology Officer and Vice President and General Counsel also contain the following provisions:

1. Automatic extensions for one-year periods unless previously terminated with appropriate advance notice.
2. Three months' prior written notice of intent to terminate by either the Company other than for cause, death or permanent disability or the employee.

The compensation amounts included in the employment agreements are subject to annual adjustment and the compensation levels for the named executive officers are shown in the tables above. None of our employment contracts or other agreements contain any provisions for the payment of any amounts that result from or will result from the resignation, retirement or any other termination of any executive officer's employment with us or from a change-in-control of the Company or a change in the named executive officer's responsibilities following a change-in-control except as described below.

Under our stock incentive plans, unless otherwise provided in a stock option agreement, options held by a director, executive or employee become exercisable after such person's death or permanent disability without regard to any vesting requirements of such options.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our officers and directors and persons who beneficially own more than ten percent of a registered class of our equity securities to file reports of ownership with the SEC. Officers, directors and greater than ten percent shareholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Based solely on our review of the copies of such forms filed or received by us, or written representations from the reporting persons, two executive officers filed two late reports and four executive officers filed one late report, each of which contained one transaction not reported on a timely basis. One director filed one late report that contained five transactions not reported on a timely basis.

Risks Arising from Compensation Policies and Practices

We believe that our compensation policies and practices do not motivate excessive or imprudent risk-taking. We note the following key aspects of our compensation policies and practices in making this determination:

- The Company's EC Plan is based on balanced performance metrics that promote disciplined progress towards long-term Company goals in addition to the short-term health of the organization;
- We do not offer significant short-term incentives that might drive high-risk investments at the expense of long-term Company value;
- Our RC Plan was based on a portion of the net profit, on a cash received basis, resulting from our "Refined Coal Activities," which took into account both revenues and costs associated with that business; and
- When considering the Company's executive share ownership and holding objectives, the Company's compensation programs are weighted towards offering long-term incentives.

Because of these factors, we believe that our compensation policies and practices, both for our employees generally and for our executive officers, do not create risks that are reasonably likely to have a material adverse effect on the Company.

Golden Parachute Compensation

There are no agreements or understandings between the Company and its NEOs concerning any type of compensation that is based on or otherwise relates to the reorganization proposal.

DIRECTOR COMPENSATION

Our Nominating and Governance Committee has responsibility for reviewing the compensation plan for our non-management directors annually and making recommendations to the entire Board for approval. The Committee has not delegated authority to any other person to determine director compensation. Our two executive officers who serve on the Board have provided their views as to the appropriate amount and form of director compensation, and Mr. McKinnies, our Chief Financial Officer, has made recommendations to the Committee regarding the form of compensation (i.e. cash or stock) and tax and accounting ramifications of awards. In addition, the two executive officers who serve on our Board vote on the recommendations for director compensation made by the Committee to the Board.

In October 2011 the Committee reviewed industry data from the National Association of Corporate Directors Director Compensation Report and Survey Data. In February 2012, Committee authorized the increases to director compensation described below after evaluating industry averages, personal liability risks and other factors.

- Annual Retainer. As of February 2012, each non-management director is entitled to receive a $95,000 annual retainer, at least $47,500 of which was payable in stock (not to exceed any limits in the 2007 Plan) and the remainder of which is payable in cash. Prior to February 2012, that annual retainer was $80,000.
- Initial Appointment or Election. Directors receive a one-time award of options to acquire 5,000 shares of our common stock upon initial appointment or election to the Board.
- Chairman Retainers. As of February 2012, the Chairman of the Board and Chairman of the Audit Committee each receive an annual retainer of $12,500, and the Chairman of the Compensation Committee and the Chairman of the Nominating and Governance Committee each receive an annual retainer of $7,500 for their services in such positions. These amounts are all paid in cash. Prior to February 2012, the Chairman of the Board and Chairman of the Audit Committee each received an annual retainer of $10,000, and the Chairman of the Compensation Committee and the Chairman of the Nominating and Governance Committee each received an annual retainer of $5,000 for their services in such positions.
- Committee Service Retainers. As of February 2012, directors receive an annual retainer of $5,000, payable in cash, for each standing committee on which such director serves (unless such director is receiving compensation for acting as Chairman of such Committee, in which case no additional sum is paid). Prior to February 2012, directors received an annual retainer of $2,500 for each standing committee on which such director served. From time to time, the Board of Directors may also establish special committees. In 2011 and 2012, Messrs. Caruso, Derek Johnson, Marcum and Swanson each served on a special committee established by the Board. The members of the special committee were compensated in 2011 in cash for their service on the special committee from the inception of the special committee through March 31, 2012 as follows: Mr. Caruso—$70,000, Messrs. Derek Johnson and Swanson—$40,000, and Mr. Marcum—$30,000. These amounts are not included in the 2012 Director Compensation table below because these amounts were paid in 2011. The special committee completed its obligations as delegated by the Board on June 5, 2012.

We have maintained directors and officers insurance coverage for our directors and executive officers since May 2006. The annual cost of such coverage is approximately $82,000.

Director Compensation During the Year Ended December 31, 2012

The following table pertains to our non-management directors who served during 2012. Dr. Durham and Mr. McKinnies do not receive any additional compensation for their service on the Board or any special committees.

Name	Fees Earned or Paid in Cash ($)(6)	Stock Awards ($)(7)	Option Awards ($)(8)	Total ($)
Robert N. Caruso (1)	49,583	3,583		53,166
Alan Bradley Gabbard	9,583	—	54,658	64,241
Robert E. Shanklin (2)	51,667	2,650		54,317
Derek Johnson (3)	56,458	2,550		59,008
Ronald B. Johnson (4)	56,458	2,650		59,108
W. Phillip Marcum	68,750	2,550		71,300
Jeffrey C. Smith	58,958	2,550		61,508
Richard Swanson (5)	63,958	2,550		66,508
Totals	**415,415**	**19,082**	**54,658**	**489,155**

(1) Cash fees and shares issued for services from Mr. Caruso are paid to a limited liability company owned by such individual.
(2) Cash fees and shares issued for services from Mr. Shanklin are paid or issued to Arch Coal, Inc.
(3) Cash fees for services from Mr. Derek Johnson are paid to a limited liability company owned by such individual.
(4) Cash fees and shares issued for services from Mr. Ronald Johnson are paid or issued to Twin-Kem International, Inc.
(5) Cash fees and shares issued for services from Mr. Swanson are paid or issued to R&K Corporation.
(6) Amounts represent retainers for services on the Board and on the Audit, Nominating and Governance, Compensation and Special committees. The amounts in the table include fees earned in December 2012 that were paid in January 2013.
(7) Amounts shown are the fair value of stock awards granted in 2012, determined in accordance with FASB ASC Topic 718, as a portion of the compensation for each non-management director's services performed in 2012. The Company issues shares based on the stock price as of July 1 of each year after election of the directors at the annual meeting for services to be provided from June 1 to May 31 of the following year. Shares for the period of June 1, 2012 through May 31, 2013 were issued in January 2013 and are not included in this table.
(8) The aggregate number of fully vested outstanding stock options for each non-management director, in the order listed in the table, as of December 31, 2012 was -0-, -0-, -0-, -0-, -0-, 5,000, -0-, and -0-, respectively. Upon commencement of service on October 29, 2012, Mr. Gabbard was awarded an option to purchase 5,000 shares of common stock, which was unvested and outstanding as of December 31, 2012. The fair value of the option was estimated on the date of grant using a Black-Scholes valuation model. The shares subject to the option vest over a three-year period, the option expires five years from the grant date. The Company recognizes expense from the grant of options on a straight-line basis over the vesting period.

STOCK INCENTIVE PLANS

2002 ADA-ES, Inc. Stock Option Plan

During 2003, the Company adopted the 2002 ADA-ES, Inc. Stock Option Plan, which was originally referred to as the 2002 Stock Option Plan (the "2003 Plan"), and reserved 400,000 shares of common stock for issuance under the plan. In general, all options granted under the 2003 Plan expire ten years from the date of grant unless otherwise specified by the Company's Board. The exercise price of options was determined by the Compensation Committee of the Board at the time the option was granted of not less than 100% of the fair market value of a share of our common stock on the date the option is granted. During the first quarter of 2006, 19,900 options were granted under this plan. This plan was replaced by the 2007 Equity Incentive Plan described below, and as a result, 148,506 shares of common stock that were originally reserved for issuance upon exercise of options grantable under the 2003 Plan were removed from the 2003 Plan. As of December 31, 2012, 39,913 options remained outstanding and exercisable.

2004 ESO Plan

During 2004, we adopted the 2004 ESO Plan, which did not require shareholder approval. The 2004 ESO Plan authorized the grant of up to 200,000 options to purchase shares of our common stock to our executive officers. The 2004 ESO Plan is intended to promote our growth and profitability by awarding options to purchase our common stock in exchange for services performed and to be performed in the future. Options granted under the 2004 ESO Plan are generally intended to be non-qualified stock options ("NQSO") for federal income tax purposes. The 2004 ESO Plan is administered by our Compensation Committee. In general, the exercise price of an option will be determined by the Compensation Committee at the time the option is granted and will not be less than 100% of the fair market value of a share of our common stock on the date the option is granted. Under the 2004 ESO Plan, the grant of options is limited to 60,000 per individual. The options are exercisable over a 10-year period based on a vesting schedule, typically between 5% and 20% per year, which may be accelerated based on performance of the individual recipients as determined by our Compensation Committee. During 2004, all 200,000 options were granted under the 2004 ESO Plan to five executive officers, each of whom is a full-time employee. In 2009, all options were fully vested. As of December 31, 2012, 136,063 options remain outstanding and exercisable under this plan.

2005 Directors' Compensation Plan

During 2005 we adopted the 2005 Directors' Compensation Plan (the "2005 Plan"), which authorized the issuance of shares of common stock and the grant of options to purchase shares of our common stock to non-management directors. The 2005 Plan was approved by our shareholders at the 2005 Annual Meeting. The 2005 Plan is intended to advance our interests by providing eligible non-management directors an opportunity to acquire or increase an equity interest in the Company, create an increased incentive to expend maximum effort for our growth and success and encourage such eligible individuals to continue to service the Company. The 2005 Plan provides a portion of the annual compensation to our non-management directors in the form of awards of shares of common stock and vesting of options to purchase common stock for services performed for the Company. Under the 2005 Plan, the award of stock is limited to 1,000 shares per individual per year, and the grant of options is limited to 5,000 per individual in total. The aggregate number of shares of common stock reserved for issuance under the 2005 Plan totals 90,000 shares (50,000 in the form of stock awards and 40,000 in the form of options). The exercise price is the market price on the date of grant, the shares of common stock underlying the option will vest at a rate of no more than 1,667 shares per annual period per individual, and any unvested shares of Stock that are outstanding at the date the individual is no longer a director are forfeited. Shares may be issued and options may be granted under the 2005 Plan only to non-management directors of the Company or its subsidiaries.

The 2005 Plan will terminate ten years after the date of its adoption, if not earlier terminated by the Board. It may be amended, modified or terminated at any time if and when it is advisable in the absolute discretion of the

Board, although certain amendments are subject to approval of regulatory bodies and our shareholders. No such amendment may adversely affect any options previously granted under the Plan without the consent of the recipient(s). The 2005 Plan is currently administered by the Compensation Committee of the Board. During 2012, an option to purchase 5,000 shares was awarded and as of December 31, 2012, two 5,000 five year options remain outstanding and exercisable. 35,065 shares of common stock, 30,000 of which are designated to underlie options to purchase shares, remain available for issuance under the 2005 Plan.

2007 Plan

During 2007, the Company adopted the 2007 Equity Incentive Plan (the "2007 Plan"), which replaced the 2003 Plan. The 2007 Plan was amended and restated as of August 31, 2010 to make non-material changes to assure Internal Revenue Code Section 409A compliance and to increase the non-management director annual grant limit to 15,000 shares of common stock from 10,000 shares. The 2007 Plan was amended pursuant to Amendment No. 1 to the plan, approved by the Board on January 25, 2011, re-approved by the Board on February 24, 2012 and approved by the Company's shareholders on July 19, 2012, to increase the amount of authorized and issuable shares as well as the limits of shares that may be granted to individuals and directors. The 2007 Plan authorizes the issuance to employees, directors and consultants of up to 1,300,000 shares of common stock, subject to automatic increases pursuant to the 2007 Plan's evergreen provision, either as restricted stock, grants to underlie options to purchase shares of our common stock or other benefits under the plan (with a maximum number of shares of 1,800,000 authorized). Under the 2007 Plan, the award of stock is limited to not more than 50,000 shares per individual per year with a maximum of 30,000 shares grantable in any year to non-management Directors. In general, all options granted under the 2007 Plan will expire ten years from the date of grant unless otherwise specified by the Board. The exercise price for options granted under the 2007 Plan will be the market price on the date of grant and the shares of common stock underlying the option will vest on the passage of specified times following the date of grant, the occurrence of one of more events, the satisfaction of performance criteria or other conditions specified by the Board. As of December 31, 2012, no options have been granted and 531,764 shares have been reserved but not yet issued under the 2007 Plan.

In March 2008, in connection with the Crowfoot Incentive Program, 172,500 of restricted stock were awarded to four of our executive officers and an independent consultant for that Program. The shares awarded pursuant to the Crowfoot Incentive Program only vest upon attainment of certain milestones, as described above under "Executive Compensation." As of December 31, 2012, 42,000 shares remain to be vested. Such shares have not been repurchased by the Company but may be reallocated to other incentive programs under the 2007 Plan. This program was terminated effective November 28, 2011.

2009 Profit Sharing Retirement Plan

In June 2009, the Company revised its ADA-ES, Inc. Profit Sharing Retirement Plan, which is a plan qualified under Section 401(k) of the Internal Revenue Code (the "401(k) Plan"). The revision allows the Company to issue shares of common stock to employees to satisfy its obligation to match employee contributions under the terms of the 401(k) Plan in lieu of matching contributions in cash. The Company reserved 300,000 shares of its common stock for this purpose. The value of common stock issued as matching contributions under the 401(k) Plan is determined based on the per share market value of our common stock on the date of issuance. As of December 31, 2012, 136,582 shares of common stock are available for issuance under the 401(k) Plan.

2010 Non-Management Compensation and Incentive Plan

During 2010 the Board adopted the 2010 Non-Management Compensation and Incentive Plan (the "2010 Plan"), which authorized the issuance of shares of common stock, restricted stock or other rights or benefits under the plan to non-management employees and consultants. Our Board re-adopted the Plan in February 2012, and our shareholders approved the plan at the 2012 Annual Meeting. The purposes of the 2010 Plan are to attract and retain the best available personnel, to provide additional incentives to non-management employees and consultants and to promote the success of the Company's business. The number of shares authorized for issuance under the 2010 Plan is limited to 300,000.

The 2010 Plan will terminate ten years after the date of its adoption, if not earlier terminated by the Board. It may be amended, modified or terminated at any time if and when it is advisable in the absolute discretion of the Board, although certain amendments are subject to approval of regulatory bodies and our shareholders. The 2010 Plan is administered by the Board or a committee designated by the Board. As of December 31, 2012, 298,102 shares of common stock are available for issuance under the 2010 Plan.

EQUITY COMPENSATION PLAN INFORMATION
AS OF DECEMBER 31, 2012

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	*(b)*	*(c)*
Equity compensation plans approved by security holders (1)	10,000	$ 14.56	834,931
Equity compensation plans not approved by security holders (2)	175,976	$ 9.18	136,582
Total	185,976	$ 10.20	971,513

(1) Amounts shown represent two 5,000 5-year option awards to two directors at exercise prices of $10.20 and $19.54, respectively, covered under our 2005 Plan and 5,065 shares covered under our 2005 Plan, 531,764 shares covered under our 2007 Plan and 298,102 shares covered under our 2010 Plan.

(2) Amounts shown in column (a) and column (b) represent 10-year options to purchase a total of 35,288 shares granted to employees at exercise prices ranging from $8.60 to $15.18 under our 2003 Plan, 10-year options to purchase a total of 4,625 shares granted to two consultants at an exercise price of $13.80 under our 2003 Plan, and 10-year options to purchase a total of 136,063 shares granted to executive officers at an exercise price of $8.60 under our 2004 ESO Plan. Amounts shown in column (c) represent shares available for issuance under our 401(k) Plan described above.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Review and Approval of Related Party Transactions

Our Board recognizes that related party transactions present a heightened risk of conflicts of interest and/or improper valuation (or the perception thereof) and therefore has adopted a written policy with respect to all related party transactions involving the Company. Under this policy, any related party transaction, as defined (which excludes transactions available to all employees generally and transactions involving less than $5,000), may be consummated or may continue only if:

1. the Audit Committee has approved or ratified such transaction in accordance with the guidelines set forth in the policy and if the transaction is on terms comparable to those that could be obtained in arm’s length dealings with an unrelated third party;
2. the transaction has been approved by the disinterested members of the Board; and
3. the compensation with respect to such transaction has been approved by our Compensation Committee.

Management must recommend any related party transactions it proposes that the Company enter into to the Audit Committee at its first regularly scheduled meeting each year. After review, the Audit Committee will approve or disapprove such transactions and at each subsequently scheduled meeting, management must update the Audit Committee as to any material change to those proposed transactions. If management recommends any additional related party transactions subsequent to such meeting, such transactions may be presented to the Audit Committee for approval or preliminarily entered into by management subject to ratification by such Committee. If the Audit Committee does not ratify the transaction, however, management must make all reasonable efforts to cancel or annul such transaction.

Any material related party transaction must be disclosed to our full Board of Directors, and management must assure that all related party transactions are approved in accordance with any requirements of our financing or other agreements.

2012 Related Party Transactions

We had one related party transaction during the 2012 fiscal year. To assist with Mr. Lagarenne's relocation to Colorado, we purchased a $285,000 interest in Mr. Lagarenne's real estate owned in New Jersey, consisting of a single family residence and an adjacent vacant lot. The Company has a right to the net proceeds of the sale of the property and is obligated to reimburse Mr. Lagarenne for the monthly carrying costs for the property until the property is sold. This transaction was ratified by our Audit Committee and the Board.

PROPOSAL FOUR

ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION

As required by Section 14A of the Exchange Act, we are conducting a non-binding advisory vote on the frequency upon which the Company will conduct an advisory vote to approve the compensation of named executive officers as disclosed in the Company's proxy statements under the section "Executive Compensation." Under this proposal, shareholders may vote, on an advisory basis, to have the say-on-pay vote every year, every other year or every three years or may abstain. On January 25, 2011, the Company's Board of Directors found it to be in the best interests of the Company and its shareholders to annually submit to the shareholders an advisory vote to approve the Company's compensation paid to named executive officers beginning in the year required by applicable law.

Board Recommendation

OUR BOARD OF DIRECTORS RECOMMENDS THAT AN ADVISORY VOTE ON EXECUTIVE COMPENSATION BE HELD EVERY YEAR.

PROPOSAL FIVE
APPROVAL, ON AN ADVISORY BASIS, OF THE COMPANY'S COMPENSATION PAID TO NAMED EXECUTIVE OFFICERS

As required by Section 14A of the Exchange Act, we are seeking a non-binding advisory vote on the compensation of named executive officers as disclosed in the section of this proxy statement titled "Executive Compensation." The Company's Board of Directors proposes the following resolution for approval by the shareholders:

> **RESOLVED**, that the shareholders approve the compensation of the Company's named executive officers as disclosed in this proxy statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which includes the Compensation Discussion and Analysis, the compensation tables and related narrative discussion).

Board Recommendation

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE PROPOSAL TO APPROVE, ON AN ADVISORY BASIS, THE COMPANY'S COMPENSATION PAID TO NAMED EXECUTIVE OFFICERS.

PROPOSALS OF SHAREHOLDERS FOR PRESENTATION AT THE NEXT ANNUAL MEETING OF SHAREHOLDERS

We anticipate that the next Annual Meeting of Shareholders for ADA-ES, or ADES if the reorganization is complete, will be held in June 2014.

Any shareholder of record who desires to submit a proper proposal for inclusion in the proxy material related to the next Annual Meeting of Shareholders must do so in writing and it must be received at our principal executive offices on or before December 30, 2013. If a shareholder intends to submit a proposal at the meeting that is not included in our proxy statement/prospectus, and the shareholder fails to notify us prior to March 15, 2014 of such proposal, then to the extent permitted by law, the proxies appointed by our management would be allowed to use their discretionary voting authority when the proposal is raised at the annual meeting, without any discussion of the matter in the proxy statement/prospectus. The proponent must own 1% or more of the outstanding shares or

$2,000 in market value of our common stock and must have continuously owned such shares for one year and intend to continue to hold such shares through the date of the Annual Meeting in order to present a shareholder proposal to us. If the reorganization occurs, under the ADES Bylaws, the stockholder must disclose, among other items, certain information related to the business to be proposed at the meeting, its beneficial ownership in ADES and whether it is acting in concert with other stockholders or interested parties. See Section 2.03 of the ADES Bylaws.

ANNUAL REPORT ON FORM 10-K

We will provide our Annual Report on Form 10-K concerning our operations during the fiscal year ended December 31, 2012, including certified consolidated financial statements and any financial statement schedules for the year then ended, to our shareholders without charge upon request to Graham O. Mattison, Vice President of Investor Relations, ADA-ES, Inc., 9135 South Ridgeline Boulevard, Suite 200, Highlands Ranch, Colorado 80129. Exhibits listed in the Form 10-K are available upon request to shareholders at a nominal charge for printing and mailing.

OTHER MATTERS

The Board knows of no other business to be presented at the Annual Meeting of Shareholders. If other matters properly come before the Annual Meeting, to the extent permitted by law, the persons named in the accompanying form of proxy intend to vote on such other matters in accordance with their best judgment.

VALIDITY OF SHARES

Schuchat, Herzog & Brenman, LLC, Denver, Colorado has passed upon the validity of the shares of ADES common stock offered by this proxy statement/prospectus.

EXPERTS

EKS&H, LLLP has audited ADA-ES's consolidated financial statements included in ADA-ES's Annual Report on Form 10-K for the year ended December 31, 2012, as set forth in their report dated March 18, 2013, which is incorporated by reference in this prospectus and elsewhere in the registration statement. ADA-ES's financial statements are incorporated by reference in reliance on such firm's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

Registration Statement

ADES filed a registration statement on Form S-4, as amended ("registration statement") to register with the SEC the shares of ADES common stock offered by this proxy statement/prospectus. This proxy statement/prospectus is a part of that registration statement and constitutes a prospectus of ADES in addition to being a proxy statement of ADA-ES for the Annual Meeting. As permitted by SEC rules, this proxy statement/prospectus does not contain all the information you can find in the registration statement or in exhibits to the registration statement.

Other SEC Filings

ADA-ES files annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any of the information on file with the SEC at the SEC's public reference room, located

at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800- SEC-0330 for further information on the public reference room. ADA-ES's SEC filings are also available on the SEC's web site located at http://www.sec.gov, and certain filings are available on ADA-ES's web site at www.adaes.com.

Documents Incorporated by Reference

The SEC allows us to "incorporate by reference" information into this proxy statement/prospectus, which means that we can disclose important information to you by referring you to another document filed separately by ADA-ES with the SEC. The information incorporated by reference is deemed to be part of this proxy statement/prospectus except for any information superseded by information in this proxy statement/prospectus or in any of our filings pursuant to the Exchange Act filed with the SEC (i) after the date of the initial registration statement and prior to effectiveness of the registration statement and (ii) after the date of this proxy statement/prospectus and before the date the offering is terminated, which is also incorporated by reference. This proxy statement/prospectus incorporates by reference the documents set forth below, including the exhibits that these documents specifically incorporate by reference, that ADA-ES, Inc. has previously filed with the SEC. These documents contain important information about ADA-ES, Inc. and its financial performance.

- ADA-ES, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 filed with the SEC on March 18, 2013 (File No. 000-50216);
- ADA-ES, Inc.'s Current Reports on Form 8-K filed with the SEC on February 11, 2013, March 13, 2013, March 22, 2013 and March 25, 2013 (excluding information furnished under Items 2.02, 7.01, and 9.01) (File No. 000-50216);
- Advanced Emissions Solutions, Inc.'s Current Report on Form 8-K filed with the SEC on March 25, 2013 (excluding information furnished under Item 9.01) (File No. 333-172809);
- Exhibit 3.1 to ADA-ES, Inc.'s Form 10-QSB filed with the SEC for the period ended September 30, 2005 filed on November 10, 2005 (File No. 000-50216);
- Exhibit 3.2 to ADA-ES, Inc.'s Form 10-Q filed with the SEC for the period ended September 30, 2010 filed on November 12, 2010 (File No. 000-50216); and
- All reports and definitive proxy or information statements filed by ADA-ES or ADES pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (i) after the date of the initial registration statement and prior to effectiveness of the registration statement and (ii) after the date of this proxy statement/prospectus and before the date the offering is terminated (other than Current Reports that are "furnished" under Items 2.02, 7.01 or 9.01 of Form 8-K).

Following the reorganization described in this proxy statement/prospectus, ADES will become subject to the same informational requirements as ADA-ES was prior to the reorganization, and will file annual, quarterly and special reports, proxy statements and other information with the SEC in accordance with the Exchange Act and the NASDAQ Capital Market pursuant to the Exchange Act and NASDAQ Listing Rules. ADA-ES does not expect to be subject to such requirements following the reorganization.

Documents Available Without Charge from Us

You can obtain any document incorporated by reference, excluding all exhibits that have not been specifically incorporated by reference, from us or the SEC. Documents incorporated by reference are available from us without charge.

Shareholders may obtain documents incorporated by reference in this document by requesting them in writing or by telephone at the following address:

ADA-ES, Inc.
9135 South Ridgeline Boulevard, Suite 200
Highlands Ranch, Colorado 80129
Telephone: 888-822-8617
Attn: Vice President of Investor Relations

If you would like to request documents from us, please do so by June 6, 2013 to receive them before the Annual Meeting. We will send requested documents by first-class mail within one business day after receiving the request.

You should rely only on the information contained or incorporated by reference in this proxy statement/ prospectus and the registration statement of which this proxy statement/prospectus is a part to vote on the Annual Meeting proposals. No one has been authorized to provide you with information that is different from what is contained in this proxy statement/prospectus or in the incorporated documents.

This proxy statement/prospectus is dated April 25, 2013. You should not assume the information contained in this proxy statement/prospectus is accurate as of any date other than this date, and neither the mailing of this proxy statement/prospectus to shareholders nor the issuance of the ADES common stock in the reorganization shall imply information is accurate as of any other date.

BY ORDER OF THE BOARD OF DIRECTORS

By: /s/ Mark H. McKinnies
Mark H. McKinnies
Secretary

Dated: April 25, 2013

Annex I
Reorganization Agreement

AGREEMENT AND PLAN OF MERGER

This AGREEMENT AND PLAN OF MERGER (this "Agreement"), dated as of March 25, 2013, is among ADA-ES, Inc., a Colorado corporation (the "Company"), Advanced Emissions Solutions, Inc., a Delaware corporation and a direct, wholly owned subsidiary of the Company ("HoldingCo"), and ADA Merger Corp., a Colorado corporation and a direct, wholly owned subsidiary of HoldingCo ("MergerCo").

RECITALS

WHEREAS, as of the date hereof, the authorized capital stock of the Company consists of (i) 50,000,000 shares of common stock, no par value per share ("Company Common Stock"), of which approximately 10,063,135 shares are issued and outstanding, approximately 1,122,623 shares are reserved for issuance under the Company's Plans (as defined below) and upon exercise of outstanding Company Awards (as hereinafter defined) and 122 shares are held in treasury, and (ii) 50,000,000 shares of preferred stock, no par value per share ("Company Preferred Stock"), of which none are outstanding;

WHEREAS, before the closing date of the transaction contemplated herein, the authorized capital stock of HoldingCo will consist of (i) 100,000,000 shares of common stock, par value $0.001 per share ("HoldingCo Common Stock"), of which one share is issued and outstanding and no shares are held in treasury, and (ii) 50,000,000 shares of preferred stock, par value $0.001 per share ("HoldingCo Preferred Stock"), of which none are outstanding;

WHEREAS, as of the date hereof, all of the issued and outstanding common stock of MergerCo ("MergerCo Common Stock") is held by HoldingCo;

WHEREAS, HoldingCo and MergerCo were organized for the purpose of participating in the transactions herein contemplated;

WHEREAS, the Board of Directors of each of the Company, HoldingCo and MergerCo have unanimously determined that it is advisable and in the best interests of their respective security holders to reorganize to create a new holding company structure by merging the Company with MergerCo with the Company being the surviving entity (sometimes hereinafter referred to as the "Surviving Company"), and converting each outstanding share of Company Common Stock into one share of HoldingCo Common Stock, all in accordance with the terms of this Agreement;

WHEREAS, the Board of Directors of the Company has unanimously determined that it is advisable and in the best interests of its shareholders to reorganize the Company's operations, such that the public company owned by its shareholders is incorporated in the State of Delaware and, accordingly, HoldingCo has been incorporated in the State of Delaware;

WHEREAS, the Boards of Directors of each of HoldingCo, the Company and MergerCo and the sole shareholder of MergerCo have adopted or approved this Agreement and the merger of the Company with MergerCo upon the terms and subject to the conditions set forth in this Agreement (the "Merger");

WHEREAS, the Boards of Directors of each of the Company and MergerCo have declared advisable this Agreement and the Merger upon the terms and subject to the conditions set forth in this Agreement, and the Boards of Directors of each of the Company and MergerCo have unanimously determined to recommend to their respective shareholders the approval of this Agreement and the Merger, subject to the terms and conditions hereof and in accordance with the provisions of the Colorado Business Corporation Act (the "CBCA"); and

WHEREAS, the parties intend, by executing this Agreement, to adopt a plan of reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended (the "Code"), and to cause the Merger to qualify as a reorganization under the provisions of Section 368(a)(1)(A) and (a)(2)(E) of the Code, as well as a transaction to which Section 351(a) of the Code applies.

NOW, THEREFORE, in consideration of the premises and the covenants and agreements contained in this Agreement, and intending to be legally bound hereby, the Company, HoldingCo and MergerCo hereby agree as follows:

ARTICLE 1
THE MERGER

1.1 The Merger. In accordance with Section 7-111-101 of the CBCA, and subject to and upon the terms and conditions of this Agreement, the Company shall, at the Effective Time (as defined below), be merged with MergerCo, the separate corporate existence of MergerCo shall cease and the Company shall continue as the Surviving Company. At the Effective Time, the effect of the Merger shall be as provided in Sections 7-90-204 and 7-111-106(1) of the CBCA.

1.2 Effective Time. The Merger shall become effective upon the filing of a Certificate of Merger with the Secretary of the State of the State of Colorado or a later date specified therein (the "Effective Time"). It is currently anticipated by the parties that the Effective Time will be on or about July 1, 2013.

1.3 Organizational Documents of the Surviving Company.

1.3.1 From and after the Effective Time, the amended and restated articles of incorporation of the Company, as in effect immediately prior to the Effective Time, shall continue in full force and effect as the articles of incorporation of the Surviving Company until thereafter amended as provided therein or by applicable law.

1.3.2 From and after the Effective Time, the second amended and restated bylaws of the Company, as in effect immediately prior to the Effective Time, shall continue in full force and effect as the bylaws of the Surviving Company (the "Surviving Company Bylaws") until thereafter amended as provided therein or by applicable law.

1.4 Directors. The directors of the MergerCo immediately prior to the Effective Time shall be the initial directors of the Surviving Company and will hold office from the Effective Time until their successors are duly elected or appointed and qualified in the manner provided in the Surviving Company Bylaws or as otherwise provided by law.

1.5 Officers. The officers of the Company immediately prior to the Effective Time shall be the initial officers of the Surviving Company and will hold office from the Effective Time until their successors are duly elected or appointed and qualified in the manner provided in the Surviving Company Bylaws or as otherwise provided by law.

1.6 Directors and Officers of HoldingCo. Prior to the Effective Time, the Company in its capacity as the sole stockholder of HoldingCo, agrees to take or cause to be taken all such actions as are necessary to cause those persons serving as (i) the directors of the Company immediately prior to the Effective Time to be elected or appointed as the directors of HoldingCo and (ii) the (a) President and Chief Executive Officer, (b) Senior Vice President, Chief Financial Officer and Secretary, (c) Executive Vice President, (d) Chief Operating Officer, (e) Chief Technology Officer, (f) Vice President and General Counsel and (g) Vice President of Investor Relations of the Company immediately prior to the Effective Time to be elected or appointed as the executive officers of HoldingCo, each such person to have the same office(s) with HoldingCo (and the same committee

memberships in the case of directors) as he or she held with the Company, with the directors serving until the earlier of the next meeting of the HoldingCo stockholders at which an election of directors of such class is held and until their successors are elected or appointed (or their earlier death, disability or retirement).

1.7 Additional Actions. Subject to the terms of this Agreement, the parties hereto shall take all such reasonable and lawful action as may be necessary or appropriate in order to effectuate the Merger and to comply with the requirements of the CBCA. If, at any time after the Effective Time, the Surviving Company shall consider or be advised that any deeds, bills of sale, assignments, assurances or any other actions or things are necessary or desirable to vest, perfect or confirm, of record or otherwise, in the Surviving Company its right, title or interest in, to or under any of the rights, properties or assets of either of MergerCo or the Company acquired or to be acquired by the Surviving Company as a result of, or in connection with, the Merger or otherwise to carry out this Agreement, the officers of the Surviving Company shall be authorized to execute and deliver, in the name and on behalf of each of MergerCo and the Company, all such deeds, bills of sale, assignments and assurances and to take and do, in the name and on behalf of each of MergerCo and the Company or otherwise, all such other actions and things as may be necessary or desirable to vest, perfect or confirm any and all right, title and interest in, to and under such rights, properties or assets in the Surviving Company or otherwise to carry out this Agreement.

1.8 Conversion of Securities. At the Effective Time, by virtue of the Merger and without any action on the part of HoldingCo, MergerCo, the Company or the holder of any of the following securities:

1.8.1 Each share of Company Common Stock issued and outstanding immediately prior to the Effective Time (other than any shares held in treasury, which shall be automatically cancelled and retired without the payment of any consideration therefor) shall be converted into one duly issued, fully paid and nonassessable share of HoldingCo Common Stock (the "Merger Consideration").

1.8.2 The MergerCo common stock held by HoldingCo will automatically be converted into, and thereafter represent, 100% of the common stock of the Surviving Company.

1.8.3 Each share of HoldingCo Common Stock owned by the Company immediately prior to the Merger shall automatically be cancelled and retired and shall cease to exist.

1.8.4 From and after the Effective Time, holders of certificates formerly evidencing Company Common Stock shall cease to have any rights as shareholders of the Company, except as provided by law; provided, however, that such holders shall have the rights set forth in Section 1.9 herein.

1.8.5 In accordance with Section 7-113-102 of the CBCA, no appraisal rights shall be available to holders of Company Common Stock in connection with the Merger.

1.9 No Surrender of Certificates; Direct Registration of HoldingCo Common Stock. At the Effective Time, each outstanding share of Company Common Stock (other than any shares of Company Common Stock to be cancelled in accordance with Section 1.8) shall automatically represent the same number of shares of HoldingCo Common Stock without any further act or deed by the shareholders of the Company and record of such ownership shall be kept in uncertificated, book entry form by HoldingCo's transfer agent. Until thereafter surrendered for transfer or exchange in the ordinary course, each outstanding certificate that, immediately prior to the Effective Time, evidenced Company Common Stock shall, from and after the Effective Time, be deemed and treated for all corporate purposes to evidence the ownership of the same number of shares of HoldingCo Common Stock.

1.10 Stock Transfer Books. At the Effective Time, the stock transfer books of the Company shall be closed and thereafter shall be no further registration of transfers of shares of Company Common Stock theretofore outstanding on the records of the Company. From and after the Effective Time, the holders of certificates representing shares of Company Common Stock outstanding immediately prior to the Effective Time shall cease to have any rights with respect to such shares of Company Common Stock except as otherwise

provided in this Agreement or by law. On or after the Effective Time, any certificates presented to the exchange agent or HoldingCo for any reason shall solely represent the right to receive the Merger Consideration issuable in respect of the shares of Company Common Stock formerly represented by such certificates without any interest thereon.

1.11 Plan of Reorganization. This Agreement is intended to constitute a "plan of reorganization" within the meaning of Treasury Regulations Section 1.368-2(g). Each party hereto shall use its commercially reasonable efforts to cause the Merger to qualify, and will not knowingly take any actions or cause any actions to be taken which could reasonably be expected to prevent the Merger from qualifying, as a reorganization within the meaning of Section 368(a)(1)(A) and (a)(2)(E) of the Code, as well as a transaction to which Section 351(a) of the Code applies.

1.12 Successor Issuer. It is the intent of the parties hereto that HoldingCo be deemed a "successor issuer" of the Company in accordance with Rule 12g-3 under the Securities Exchange Act of 1934, as amended, and Rule 414 under the Securities Act of 1933, as amended. At or after the Effective Time, HoldingCo shall file (i) an appropriate report on Form 8-K describing the Merger and (ii) appropriate pre-effective and/or post-effective amendments, as applicable, to any Registration Statements of the Company on Forms S-3 and S-8.

ARTICLE 2
ACTIONS TO BE TAKEN IN CONNECTION WITH THE MERGER

2.1 Assumption of Company Awards. At the Effective Time, all unexercised and unexpired options to purchase Company Common Stock ("Company Options") or shares of restricted stock (collectively with Company Options, "Company Awards") then outstanding under any of the Company's 2003 Stock Option Plan, 2003 Stock Compensation Plan #1, 2003 Stock Compensation Plan #2, 2004 Executive Stock Option Plan, 2004 Stock Compensation Plan #2, 2004 Directors Stock Compensation Plan #1, 2005 Directors' Compensation Plan, Amended and Restated 2007 Equity Incentive Plan, as amended, Amended and Restated 2010 Non-Management Compensation and Incentive Plan or the other rights to acquire Company Common Stock under the ADA-ES, Inc. Profit Sharing Retirement Plan (collectively, the "Company Plans"), whether or not then exercisable, will be assumed by HoldingCo. Each Company Award so assumed by HoldingCo under this Agreement will continue to have, and be subject to, the same terms and conditions as set forth in the applicable Company Plan and any agreements thereunder immediately prior to the Effective Time (including, without limitation, the vesting schedule (without acceleration thereof by virtue of the Merger and the transactions contemplated hereby) and per share exercise price), except that each Company Award will be exercisable (or will become exercisable in accordance with its terms) for, or shall be denominated with reference to, that number of shares of HoldingCo Common Stock equal to the number of shares of Company Common Stock that were subject to such Company Award immediately prior to the Effective Time. The conversion of any Company Options that are "incentive stock options" within the meaning of Section 422 of the Code, into options to purchase HoldingCo Common Stock shall be made in a manner consistent with Section 424(a) of the Code so as not to constitute a "modification" of such Company Options within the meaning of Section 424 of the Code.

2.2 Assignment and Assumption of Agreements. Effective as of the Effective Time, the Company hereby assigns to HoldingCo, and HoldingCo hereby assumes and agrees to perform, all obligations of the Company pursuant to the Company Plans, each stock option agreement and restricted stock agreement entered into pursuant to the Company Plans, and each outstanding Company Award granted thereunder.

2.3 Reservation of Shares. On or prior to the Effective Time, HoldingCo will reserve sufficient shares of HoldingCo Common Stock to provide for the issuance of HoldingCo Common Stock upon exercise of the Company Awards outstanding under the Company Plans.

2.4 Registration Statement; Proxy/Prospectus.

2.4.1 As promptly as practicable after the execution of this Agreement, the Company shall prepare and file with the Securities and Exchange Commission (the "SEC") a proxy statement in preliminary form relating to the Shareholders' Meeting (as hereinafter defined) (together with any amendments thereof or supplements thereto, the "Proxy Statement") and HoldingCo shall prepare and file with the SEC a registration statement on Form S-4 (together with all amendments thereto, the "Registration Statement" and the prospectus contained in the Registration Statement together with the Proxy Statement, the "Proxy/Prospectus"), in which the Proxy Statement shall be included, in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act") of the shares of HoldingCo Common Stock to be issued to the shareholders of the Company as the Merger Consideration. Each of HoldingCo and the Company shall use its reasonable best efforts to cause the Registration Statement to become effective and the Proxy Statement to be cleared by the SEC as promptly as practicable, and, prior to the effective date of Registration Statement, HoldingCo shall take all actions reasonably required under any applicable federal securities laws or state blue sky laws in connection with the issuance of shares of HoldingCo Common Stock pursuant to the Merger. As promptly as reasonably practicable after the Registration Statement shall have become effective and the Proxy Statement shall have been cleared by the SEC, the Company shall mail or cause to be mailed or otherwise make available in accordance with the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Proxy/Prospectus to its shareholders; provided, however, that the parties shall consult and cooperate with each other in determining the appropriate time for mailing or otherwise making available to the Company's shareholders the Proxy/Prospectus in light of the date set for the Shareholders' Meeting.

2.5 Meeting of Company Shareholders; Board Recommendation.

2.5.1 Meeting of Company Shareholders. The Company shall take all action necessary in accordance with the CBCA and its amended and restated articles of incorporation and second amended and restated bylaws to call, hold and convene a meeting of its shareholders to consider the adoption of this Agreement (the "Shareholders' Meeting") to be held no less than 10 nor more than 60 days following the distribution of the definitive Proxy/Prospectus to its shareholders. The Company will use its reasonable best efforts to solicit from its shareholders proxies in favor of the approval of this Agreement and the Merger. The Company may adjourn or postpone the Shareholders' Meeting to the extent necessary to ensure that any necessary supplement or amendment to the Proxy/Prospectus is provided to its shareholders in advance of any vote on this Agreement and the Merger or, if as of the time for which the Shareholders' Meeting is originally scheduled (as set forth in the Proxy/Prospectus) there are insufficient shares of Company Common Stock voting in favor of the approval of this Agreement and the Merger or represented (either in person or by proxy) to constitute a quorum necessary to conduct the business of such Shareholders' Meeting.

2.6 Section 16 Matters. Prior to the Effective Time, the Board of Directors of the Company or an appropriate committee of non-employee directors thereof (as such term is defined for purposes of Rule 16b-3 promulgated under the Exchange Act) shall adopt a resolution consistent with the interpretive guidance of the SEC so that the receipt by any officer or director of the Company who is a covered person for purposes of Section 16(a) of the Exchange Act of shares of HoldingCo Common Stock in exchange for shares of Company Common Stock or Company Options pursuant to this Agreement and the Merger is intended to be an exempt transaction pursuant to Section 16b-3 of the Exchange Act. Prior to the Effective Time, the Board of Directors of HoldingCo or an appropriate committee of non-employee directors (as such term is defined for purposes of Rule 16b-3 promulgated under the Exchange Act) shall adopt a resolution consistent with the interpretive guidance of the SEC so that the receipt by any officer or director of the Company or HoldingCo who is a covered person for purposes of Section 16(a) of the Exchange Act of shares of HoldingCo Common Stock or options in exchange for shares of Company Common Stock or Company Options pursuant to this Agreement and the Merger is intended to be an exempt transaction for purposes of Section 16b-3 of the Exchange Act.

ARTICLE 3
CONDITIONS OF MERGER

3.1 Conditions Precedent. The obligations of the parties to this Agreement to consummate the Merger and the transactions contemplated by this Agreement shall be subject to fulfillment by the parties hereto at or prior to the Effective Time of each of the following conditions:

3.1.1 The Registration Statement shall have been declared effective by the SEC under the Securities Act and no stop order suspending the effectiveness of the Registration Statement shall have been issued by the SEC and no proceeding for that purpose shall have been initiated or, to the knowledge of HoldingCo or the Company, threatened by the SEC and not concluded or withdrawn. No similar proceeding with respect to the Proxy Statement shall have been initiated or, to the knowledge of HoldingCo or the Company, threatened by the SEC and not concluded or withdrawn.

3.1.2 This Agreement and the Merger shall have been approved by the requisite vote of the shareholders of the Company in accordance with the CBCA.

3.1.3 The HoldingCo Common Stock to be issued pursuant to the Merger shall have been approved for listing by The NASDAQ Capital Market ("NASDAQ").

3.1.4 No order, statute, rule, regulation, executive order, injunction, stay, decree, judgment or restraining order that is in effect shall have been enacted, entered, promulgated or enforced by any court or governmental or regulatory authority or instrumentality that prohibits or makes illegal the consummation of the Merger or the transactions contemplated hereby.

3.1.5 The Boards of Directors of the Company and HoldingCo shall have received a legal opinion of Sparkman + Foote LLP in form and substance reasonably satisfactory to them indicating that holders of Company Common Stock will not recognize gain or loss for United States federal income tax purposes as a result of the transactions contemplated by this Agreement.

ARTICLE 4
COVENANTS

4.1 Listing of HoldingCo Common Stock. HoldingCo will use its reasonable best efforts to obtain, at or before the Effective Time, confirmation of listing on the NASDAQ of the HoldingCo Common Stock issuable pursuant to the Merger.

4.2 The Plans. The Company and HoldingCo will take or cause to be taken all actions necessary or desirable in order to implement the assumption by HoldingCo pursuant to Section 2.2 of the Company Plans, each stock option agreement or restricted stock agreement entered into pursuant thereto, and each Company Award granted thereunder, all to the extent deemed appropriate by the Company and HoldingCo and permitted under applicable law.

4.3 Insurance. HoldingCo shall procure insurance or cause the execution, amendment or endorsement of the insurance policies of the Company such that, upon consummation of the Merger, HoldingCo shall have insurance coverage that is substantially identical to the insurance coverage held by the Company immediately prior to the Merger.

ARTICLE 5
TERMINATION AND AMENDMENT

5.1 Termination. This Agreement may be terminated and the Merger contemplated hereby may be abandoned at any time prior to the Effective Time by action of the Board of Directors of the Company if such

Board of Directors should determine that for any reason the completion of the transactions provided for herein would be inadvisable or not in the best interest of the Company or its shareholders. In the event of such termination and abandonment, this Agreement shall become void and none of the Company, HoldingCo or MergerCo or their respective security holders, directors or officers shall have any liability with respect to such termination and abandonment.

5.2 Amendment. At any time prior to the Effective Time, this Agreement may, to the extent permitted by the CBCA, be supplemented, amended or modified by the mutual consent of the parties to this Agreement.

ARTICLE 6
MISCELLANEOUS PROVISIONS

6.1 Governing Law. This Agreement shall be governed by and construed and enforced under the laws of the State of Colorado.

6.2 Counterparts. This Agreement may be executed in one or more counterparts, each of which when executed shall be deemed to be an original but all of which shall constitute one and the same agreement.

6.3 Entire Agreement. This Agreement constitutes the entire agreement and supersedes all other agreements and undertakings, both written and oral, among the parties, or any of them, with respect to the subject matter hereof.

6.4 Severability. The provisions of this Agreement are severable, and in the event any provision hereof is determined to be invalid or unenforceable, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

6.5 No Third-Party Beneficiaries. Nothing contained in this Agreement is intended by the parties hereto to expand the rights and remedies of any person or entity not party hereto against any party hereto as compared to the rights and remedies which such person or entity would have had against any party hereto had the parties hereto not consummated the transactions contemplated hereby.

6.6 Tax Matters. Each of the Company and HoldingCo will comply with the recordkeeping and information reporting requirements of the Code that are imposed as a result of the transactions contemplated hereby, and will provide information reporting statements to holders of Company Common Stock at the time and in the manner prescribed by the Code and applicable Treasury Regulations.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, the Company, HoldingCo and MergerCo have caused this Agreement to be executed as of the date first written above by their respective officers thereunto duly authorized.

ADA-ES, INC.

By: /s/ Mark H. McKinnies
Mark H. McKinnies
Senior Vice President and Chief Financial Officer

ADVANCED EMISSIONS SOLUTIONS, INC.

By: /s/ Mark H. McKinnies
Mark H. McKinnies
Senior Vice President, Chief Financial Officer,
Secretary and Treasurer

ADA MERGER CORP.

By: /s/ Mark H. McKinnies
Mark H. McKinnies
Senior Vice President and Chief Financial Officer

Annex II

Second Amended and Restated Certificate of Incorporation of Advanced Emissions Solutions, Inc.

SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF

ADVANCED EMISSIONS SOLUTIONS, INC.

ARTICLE I NAME

The name of the corporation is ADVANCED EMISSIONS SOLUTIONS, INC. (the "**Corporation**").

ARTICLE II REGISTERED OFFICES

The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent is The Corporation Trust Company.

ARTICLE III PURPOSE

The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "**DGCL**").

ARTICLE IV AUTHORIZED CAPITAL STOCK

The total number of shares of common stock which the corporation is authorized to issue is 100,000,000 at a par value of $.001 per share (the "**Common Stock**") and the total number of shares of preferred stock which the corporation is authorized to issue is 50,000,000 at a par value of $.001 per share ("**Preferred Stock**").

The board of directors is hereby expressly authorized to provide, out of the unissued shares of Preferred Stock, for one or more series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, the voting powers, if any, of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series. The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding.

Except as otherwise provided by law or by the resolution or resolutions adopted by the board of directors designating the rights, powers and preferences of any series of Preferred Stock, the Common Stock shall have the exclusive right to vote for the election of directors and for all other purposes. Each share of Common Stock shall have one vote on each matter properly submitted to the stockholders of the Corporation for their vote, and the holders of the Common Stock shall vote together as a single class.

ARTICLE V CERTAIN DEFINITIONS

"Affiliate or Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as in effect on March 11, 2011.

"Announcement Date" shall have the meaning set forth in Section 6.02(b)(i).

"Beneficial Owner or beneficially owned" shall have the meaning ascribed to such term in Rule 13d-3 of the General Rules and Regulations of the Securities Exchange Act of 1934, as amended. In addition, a Person shall be the "Beneficial Owner" of any voting stock which such Person or any of its Affiliates or Associates has (a) the right to acquire (whether such right is exercisable immediately or only after the passage of time), pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options or otherwise or (b) the right to vote pursuant to any agreement, arrangement or understanding (but neither such Person nor any such Affiliate or Associate shall be deemed to be the Beneficial Owner of any shares of voting stock solely by reason of a revocable proxy or consent granted for a particular meeting of stockholders, pursuant to a public solicitation of proxies or consents for such meeting, and with respect to which shares neither such Person nor any such Affiliate or Associate is otherwise deemed the Beneficial Owner). Notwithstanding the foregoing, a Person shall not be a "Beneficial Owner" of any voting stock for the purposes of this Article V which such person may have the right to acquire pursuant to the rights agreement from time to time in effect and the rights issued thereunder.

"Business Combination" shall mean any of the transactions described in any one or more of clauses (a) through (f) of Section 6.01.

"Commencement Date" shall have the meaning set forth in Section 6.02(b)(i).

"Continuing Director" means any member of the Board who is unaffiliated with the Interested Stockholder and was a member of the Board before the Interested Stockholder became an Interested Stockholder, and any director who is thereafter chosen to fill any vacancy on the Board or who is elected and who, in either event, is unaffiliated with the Interested Stockholder and in connection with his or her initial assumption of office is recommended for appointment or election by a majority of Continuing Directors then on the Board.

"Determination Date" shall have the meaning set forth in Section 6.02(b)(i).

"**Entity**" means a corporation, partnership, joint venture, limited liability company, trust, unincorporated organization, association or other similar entity.

"Excluded Preferred Stock" means any series of Preferred Stock with respect to which a majority of the Continuing Directors have approved a Preferred Stock Designation creating such series that expressly provides that the provisions of Article VI shall not apply.

"Fair Market Value" shall mean (a) in the case of stock, the highest closing sale price during the 30-day period immediately preceding the date in question of a share of such stock on the Composite Tape for New York Stock Exchange listed stocks, or, if such stock is not quoted on the Composite Tape, on the New York Stock Exchange, or, if such stock is not listed on such exchange, on the principal U.S. securities exchange registered under the Securities Exchange Act of 1934, as amended, on which such stock is listed, or, if such stock is not listed on any such exchange, the highest closing sale price during the 30-day period immediately preceding the date in question of a share of such stock on the National Association of Securities Dealers, Inc. Automated Quotation System, or any system then in use, or if no such quotations are available, the fair market value on the date in question of a share of such stock as determined by the Board in accordance with Section 6.03; and (b) in the case of property other than cash or stock, the fair market value of such property on the date in question as determined by the Board in accordance with Section 6.03.

"Interested Stockholder" shall mean any Person (other than the Corporation or any Subsidiary and other than any profit-sharing, employee stock ownership or other employee benefit plan of the Corporation or any Subsidiary or any trustee or fiduciary with respect to any such plan or holding voting stock for the purpose of funding any such plan or funding other employee benefits for employees of the Corporation or any Subsidiary

when acting in such capacity) who or which: (a) itself, or along with its Affiliates, is the Beneficial Owner, directly or indirectly, of more than 10% of the then outstanding voting stock; or (b) is an Affiliate of the Corporation and at any time within the two-year period immediately prior to the date in question was itself, or along with its Affiliates, the Beneficial Owner, directly or indirectly, of 10% or more of the then outstanding voting stock; or (c) is an assignee of or has otherwise succeeded to any voting stock which was at any time within the two-year period immediately prior to the date in question beneficially owned by an Interested Stockholder, if such assignment or succession shall have occurred in the course of a transaction or series of transactions not involving a public offering within the meaning of the Securities Act of 1933, as amended. For the purpose of determining whether a Person is an Interested Stockholder, the number of shares of voting stock deemed to be outstanding shall include shares deemed beneficially owned by the Interested Stockholder, but shall not include any other shares of voting stock which may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise of conversion rights, warrants or options or otherwise.

"Person" means an individual, governmental or regulatory body or Entity.

"Subsidiary" shall mean any Entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at any time directly or indirectly owned by the Corporation.

ARTICLE VI
HIGHER VOTE REQUIRED FOR CERTAIN BUSINESS COMBINATIONS

Section 6.01 Higher Vote Required for Certain Business Combinations. In addition to any affirmative vote required by applicable law or this Amended and Restated Certificate of Incorporation, and except as otherwise expressly provided in Section 6.02 below:

(a) any merger or consolidation of the Corporation or any Subsidiary with any Interested Stockholder or any other Entity (whether or not an Interested Stockholder) which is, or after such merger or consolidation would be, an Affiliate of an Interested Stockholder;

(b) any sale, lease, exclusive license, exchange, mortgage, pledge, transfer or other disposition (in one transaction or a series of transactions) to or with any Interested Stockholder or any Affiliate of an Interested Stockholder, of any assets of the Corporation or any Subsidiary having an aggregate Fair Market Value of more than the lower of either (i) 10% of the market capitalization of the Corporation's stock, excluding the value of stock held by any Interested Stockholder and any Affiliate of an Interested Stockholder, at any point during any such transaction or series of transactions or (ii) 10% of the value of the Corporation's assets as such value is reported on the most recent balance sheet filed by the Corporation with the Securities and Exchange Commission ("**SEC**") in accordance with generally accepted accounting principles ("**GAAP**");

(c) the issuance or transfer by the Corporation or any Subsidiary (in one transaction or a series of transactions) of any securities of the Corporation or any Subsidiary to any Interested Stockholder or any Affiliate of an Interested Stockholder, in exchange for cash, securities or other property (or a combination thereof) having an aggregate Fair Market Value of more than the lower of either (i) 10% of the market capitalization of the Corporation's stock, excluding the value of stock held by any Interested Stockholder and any Affiliate of an Interested Stockholder, at any point during any such transaction or series of transactions or (ii) 10% of the value of the Corporation's assets as such value is reported on the most recent balance sheet filed by the Corporation with the SEC in accordance with GAAP;

(d) the adoption of any plan or proposal for the liquidation or dissolution of the Corporation proposed by or on behalf of an Interested Stockholder or any Affiliate of an Interested Stockholder;

(e) any reclassification of securities (including any reverse stock split), recapitalization of the Corporation or any merger or consolidation of the Corporation with any of its Subsidiaries or any other transaction (whether or not an Interested Stockholder is a party thereto) which has the effect, directly or indirectly, of increasing the

proportionate share of the outstanding shares of any class of equity or convertible securities of the Corporation or any Subsidiary which are directly or indirectly owned by any Interested Stockholder or any Affiliate of an Interested Stockholder; or

(f) any agreement, contract or other arrangement providing for any one or more of the actions specified in the foregoing (a) to (e).

shall require, except as otherwise prohibited by applicable law, the affirmative vote of the holders of at least a majority of the voting power of the then outstanding voting stock, voting together as a single class, including the affirmative vote of the holders of at least a majority of the voting power of the then outstanding voting stock not owned directly or indirectly by any Interested Stockholder or any Affiliate of an Interested Stockholder. Such affirmative vote shall be required notwithstanding the fact that no vote may be required, or that a lesser percentage may be permitted, by applicable law or in any agreement with any national securities exchange or otherwise.

Section 6.02 When Higher Vote Not Required. The provisions of Section 6.01 shall not be applicable to any particular Business Combination, and such Business Combination shall require only such affirmative vote as is required by applicable law or any other provision of this Amended and Restated Certificate of Incorporation, if the conditions specified in either of the following paragraphs (a) or (b) are met:

(a) The Business Combination has been approved by a majority of the Continuing Directors; or

(b) All of the following conditions have been met:

(i) The aggregate amount, as of the date (the "**Consummation Date**") of the consummation of the Business Combination, of (A) the cash and (B) the Fair Market Value of the consideration other than cash to be received per share by holders of Common Stock in such Business Combination shall be at least equal to the higher of the following (in each case appropriately adjusted in the event of any stock dividend, stock split, combination of shares or similar event): (x) (if applicable) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Stockholder or any of its Affiliates for any shares of Common Stock acquired by them (1) within the two-year period immediately prior to the date of the first public announcement of the proposal of the Business Combination (the "**Announcement Date**"), or (2) in any transaction in which the Interested Stockholder became an Interested Stockholder (the "**Determination Date**"), whichever is higher; (y) the Fair Market Value per share of Common Stock on the Announcement Date or the Determination Date, whichever is higher; and (z) (if applicable) the price per share equal to the Fair Market Value per share of Common Stock, multiplied by the ratio of (1) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Stockholder for any shares of Common Stock acquired by it within the two-year period immediately prior to the Announcement Date to (2) the Fair Market Value per share of Common Stock on the first day in such two-year period upon which the Interested Stockholder acquired any shares of Common Stock;

(ii) The aggregate amount, as of the Consummation Date, of (A) the cash and (B) the Fair Market Value of the consideration other than cash to be received per share by holders of shares of any class or series (other than Common Stock or Excluded Preferred Stock) of outstanding capital stock shall be at least equal to the highest of the following (in each case appropriately adjusted in the event of any stock dividend, stock split, combination of shares or similar event), it being intended that the requirements of this paragraph (b)(ii) shall be required to be met with respect to every such class or series of outstanding capital stock whether or not the Interested Stockholder or any of its Affiliates has previously acquired any shares of a particular class or series of capital stock: (w) (if applicable) the price per share equal to the Fair Market Value per share of such class of capital stock, multiplied by the ratio of (1) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Stockholder for any shares of such class of capital stock acquired by it within the two-year period immediately prior to the Announcement Date to (2) the Fair Market Value per share of such class of capital stock on the first day in such two-year period upon which the

Interested Stockholder acquired any shares of such class of capital stock; (x) (if applicable) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Stockholder or any of its Affiliates for any shares of such class or series of capital stock acquired by them (1) within the two-year period immediately prior to the Announcement Date or (2) in any transactions in which it became an Interested Stockholder, whichever is higher; (y) the Fair Market Value per share of such class or series of capital stock on the Announcement Date or on the Determination Date, whichever is higher; and (z) the highest preferential amount per share, if any, to which the holders of shares of such class or series of capital stock would be entitled in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation;

(iii) The consideration to be received by holders of a particular class of outstanding voting stock (including Common Stock and other than Excluded Preferred Stock) shall be in cash or in the same form as the Interested Stockholder has previously paid for shares of such class of voting stock. If the Interested Stockholder has paid for shares of any class of voting stock with varying forms of consideration, the form of consideration for such class of voting stock shall be either cash or the form used to acquire the largest number of shares of such class of voting stock previously acquired by it;

(iv) After such Interested Stockholder has become an Interested Stockholder and prior to the consummation of such Business Combination: (A) there shall have been no failure to declare and pay at the regular date therefor any full quarterly dividends (whether or not cumulative) on any outstanding Preferred Stock, except as approved by a majority of the Continuing Directors; (B) there shall have been no reduction in the annual rate of dividends paid on the Common Stock (except as necessary to reflect any subdivision of the Common Stock), except as approved by a majority of the Continuing Directors; (C) there shall have been an increase in the annual rate of dividends as necessary fully to reflect any recapitalization (including any reverse stock split) or any similar reorganization which has the effect of reducing the number of outstanding shares of the Common Stock, unless the failure so to increase such annual rate is approved by a majority of the Continuing Directors; and (D) such Interested Stockholder shall not have become the Beneficial Owner of any additional voting stock except as part of the transaction which results in such Interested Stockholder becoming an Interested Stockholder;

(v) After such Interested Stockholder has become an Interested Stockholder, such Interested Stockholder shall not have received the benefit, directly or indirectly (except proportionately as a stockholder), of any loans, advances, guarantees, pledges or other financial assistance or any tax credits or other tax advantages provided by the Corporation, whether in anticipation of, or in connection with, such Business Combination or otherwise; and

(vi) A proxy or information statement describing the proposed Business Combination and complying with the requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (or any subsequent provisions replacing such act, rules or regulations) shall have been mailed to stockholders of the Corporation at least 30 days prior to the consummation of such Business Combination (whether or not such proxy or information statement is required to be mailed pursuant to such act or subsequent provisions).

Section 6.03 Determination by the Continuing Directors. The Continuing Directors of the Corporation shall have the power and duty to determine for the purposes of this Article VI on the basis of information known to them after reasonable inquiry, all facts necessary to determine compliance with this Article VI including, without limitation (a) whether a Person is an Interested Stockholder; (b) the number of shares of capital stock beneficially owned by any Person; (c) whether a Person is an Affiliate or Associate of another; (d) whether the applicable conditions set forth in Section 6.02 have been met with respect to any Business Combination; (e) the Fair Market Value of stock or other property; and (f) whether the assets that are the subject of any Business Combination have, or the consideration to be received for the issuance or transfer of securities by the Corporation or any Subsidiary in any Business Combination has, an aggregate Fair Market Value of more than the lower of

either (i) 10% of the market capitalization of the Corporation's stock, excluding the value of stock held by any Interested Stockholder and any Affiliate of an Interested Stockholder, at any point during any such transaction or series of transactions or (ii) 10% of the value of the Corporation's assets as such value is reported on the most recent balance sheet filed by the Corporation with the SEC in accordance with GAAP. Any such determination made in good faith shall be binding and conclusive on all parties.

Section 6.04 No Effect on Fiduciary Obligations of Interested Stockholders. Nothing contained in this Article VI shall be construed to relieve any Interested Stockholder from any fiduciary obligation imposed by applicable law.

Section 6.05 Amendment or Repeal. Notwithstanding any other provisions of this Amended and Restated Certificate of Incorporation or the Bylaws (and notwithstanding the fact that a lesser percentage may be permitted by applicable law, this Amended and Restated Certificate of Incorporation or the Bylaws), but in addition to any affirmative vote of the holders of any particular class of the voting stock required by applicable law or this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders of at least a majority of the voting power of the shares of the then outstanding voting stock voting together as a single class, including the affirmative vote of the holders of at least a majority of the voting power of the then outstanding voting stock not owned directly or indirectly by any Interested Stockholder or any Affiliate of any Interested Stockholder, shall be required to amend, repeal or adopt any provisions inconsistent with, this Article VI or Article V.

ARTICLE VII
DIRECTOR ELECTION

Unless and except to the extent that the bylaws of the Corporation (the "Bylaws") so require, the election of directors of the Corporation need not be by written ballot.

ARTICLE VIII
DIRECTOR LIABILITY

To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or to its stockholders for monetary damages for any breach of fiduciary duty as a director. No amendment to, modification of or repeal of this Article VIII shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

ARTICLE IX
DIRECTOR INDEMNIFICATION

The Corporation shall indemnify, advance expenses, and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (a "**Covered Person**") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**"), by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Covered Person. Notwithstanding the preceding sentence, except for claims for indemnification (following the final disposition of such Proceeding) or advancement of expenses not paid in full, the Corporation shall be required to indemnify a Covered Person in connection with a

Proceeding (or part thereof) commenced by such Covered Person only if the commencement of such Proceeding (or part thereof) by the Covered Person was authorized in the specific case by the Board of Directors of the Corporation. Any amendment, repeal or modification of this Article IX shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

ARTICLE X
BYLAWS

In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly empowered to adopt, amend or repeal bylaws of the Corporation. Any adoption, amendment or repeal of the bylaws of the Corporation by the board of directors shall require the approval of a majority of the entire board of directors. Except as otherwise required by law or this Amended and Restated Certificate of Incorporation, the stockholders shall also have the power to adopt, amend or repeal any provision of the bylaws of the Corporation with the affirmative vote of the holders of at least a majority of the voting power of all of the then outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class. Notwithstanding anything to the contrary in this Amended and Restated Certificate of Incorporation, in addition to the holders of any class or series of stock of the corporation required by law or by this Amended and Restated Certificate of Incorporation, the affirmative vote of the holders of at least a majority of the voting power of the shares of the then outstanding voting stock voting together as a single class, including the affirmative vote of the holders of at least a majority of the voting power of the then outstanding voting stock not owned directly or indirectly by any Interested Stockholder or any Affiliate of any Interested Stockholder, shall be required to amend, repeal or adopt any provisions inconsistent with, this Article X of this Amended and Restated Certificate of Incorporation.

ARTICLE XI
AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation shall have the right, subject to any express provisions or restrictions contained in the Amended and Restated Certificate of Incorporation of the Corporation or the Bylaws, from time to time, to amend the Amended and Restated Certificate of Incorporation or any provision thereof in any manner now or hereafter provided by law, and all rights and powers of any kind conferred upon a director or stockholder of the Corporation by the Amended and Restated Certificate of Incorporation or any amendment thereof are conferred subject to such right.

ARTICLE XII
OPT-OUT OF RESTRICTIONS ON BUSINESS COMBINATIONS WITH INTERESTED STOCKHOLDERS.

The Corporation shall not be governed by or subject to Section 203 of the DGCL.

ARTICLE XIII
WRITTEN CONSENT

Any action to be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action to be so taken, are signed by all of the holders of outstanding stock entitled to vote with respect to the subject matter thereof and delivered (by hand or by certified or registered mail, return receipt requested) to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the Corporation having custody of the books in which proceedings of meetings of stockholders are recorded.

Annex III
Bylaws of Advanced Emissions Solutions, Inc.

BYLAWS OF
ADVANCED EMISSIONS SOLUTIONS, INC.

ARTICLE I
OFFICES

Section 1.01 Offices. Advanced Emissions Solutions, Inc. (hereinafter called the **"Corporation"**) may have offices at such places, both within and without the State of Delaware, as the board of directors of the Corporation (the **"Board of Directors"**) from time to time shall determine or the business of the Corporation may require.

Section 1.02 Books and Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be maintained on any information storage device or method so long as such records so kept can be converted into clearly legible paper form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to applicable law.

ARTICLE II
MEETINGS OF THE STOCKHOLDERS

Section 2.01 Place of Meetings. All meetings of the stockholders shall be held at such place, if any, either within or without the State of Delaware, as is designated from time to time by resolution of the Board of Directors and stated in the notice of meeting.

Section 2.02 Annual Meeting. The annual meeting of the stockholders for the election of directors and for the transaction of such other business as may properly come before the meeting shall be held at such date, time and place, if any, as are determined by the Board of Directors and stated in the notice of the meeting.

Section 2.03 Advance Notice of Stockholder Nominations and Proposals.

(a) **Definitions.**

"Affiliate or Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as in effect March 11, 2011.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"Public Disclosure" or "**Publicly Disclosed**" means a disclosure made in a press release reported by the Dow Jones News Services, The Associated Press or a comparable national news service or in a document filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(b) **Timely Notice.** At a meeting of the stockholders, only such nominations of persons for the election of directors and such other business shall be conducted as have been properly brought before the meeting. To be properly brought before an annual meeting, nominations or such other business must be:
(i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of

directors or any committee thereof, (ii) otherwise properly brought before the meeting by or at the direction of the board of directors or any committee thereof, or (iii) otherwise properly brought before an annual meeting by a stockholder who is a stockholder of record of the Corporation at the time such notice of meeting is delivered, who is entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 2.03. In addition, any proposal of business (other than the nomination of persons for election to the board of directors, which shall be governed by Section 2.03(c) below) must be a proper matter for stockholder action. For business (including, but not limited to, director nominations) to be properly brought before an annual meeting by a stockholder, the stockholder or stockholders of record intending to propose the business (the "**Proposing Stockholder**") must have given timely notice thereof pursuant to this Section 2.03(b) or Section 2.03(d) below, as applicable, in writing to the secretary of the Corporation even if such matter is already the subject of any notice to the stockholders or Public Disclosure from the board of directors. To be timely, a Proposing Stockholder's notice must be delivered to or mailed and received at the principal executive offices of the Corporation in the case of an annual meeting of the stockholders, not less than one hundred twenty (120) calendar days in advance of the date specified in the Corporation's proxy statement released to stockholders in connection with the previous year's annual meeting of stockholders; provided, however, that if no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date on which the previous year's annual meeting was held, notice by the stockholder to be timely must be so received not later than the close of business on the later of one hundred twenty (120) calendar days in advance of such annual meeting or ten (10) calendar days following the date of Public Disclosure of the date of such meeting. In no event shall the Public Disclosure of an adjournment or postponement of an annual meeting commence a new notice time period (or extend any notice time period).

(c) **Stockholder Nominations.** For the nomination of any person or persons for election to the board of directors, a Proposing Stockholder's notice to the secretary of the Corporation shall set forth (i) the name, age, business address and residence address of each nominee proposed in such notice, (ii) the principal occupation or employment of each such nominee, (iii) the number of shares of capital stock of the Corporation that are owned of record and beneficially by each such nominee (if any), (iv) such other information concerning each such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved) or that is otherwise required to be disclosed, under Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder, (v) the consent of the nominee to being named in the proxy statement as a nominee and to serving as a director if elected, and (vi) as to the Proposing Stockholder: (A) the name and address of the Proposing Stockholder as they appear on the Corporation's books and of the beneficial owner, if any, on whose behalf the nomination is being made, (B) the class and number of shares of the Corporation that are owned by the Proposing Stockholder (beneficially and of record) and owned by the beneficial owner, if any, on whose behalf the nomination is being made, as of the date of the Proposing Stockholder's notice, and a representation that the Proposing Stockholder will notify the Corporation in writing of the class and number of such shares owned of record and beneficially as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first Publicly Disclosed, (C) a description of any agreement, arrangement or understanding with respect to such nomination between or among the Proposing Stockholder and any of its Affiliates or Associates, and any others (including their names) acting in concert with any of the foregoing, and a representation that the Proposing Stockholder will notify the Corporation in writing of any such agreement, arrangement or understanding in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first Publicly Disclosed, (D) a description of any agreement, arrangement or understanding (including any derivative or short positions, profit interests, options, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of the Proposing Stockholder's notice by, or on behalf of, the Proposing Stockholder or any of its Affiliates or Associates, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of the Proposing Stockholder or any of its Affiliates or Associates with respect to shares of stock of the Corporation, and a representation that the Proposing Stockholder will notify the Corporation in writing of any such agreement, arrangement or understanding in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first Publicly

Disclosed, (E) a representation that the Proposing Stockholder is a holder of record of shares of the Corporation entitled to vote at the meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice, and (F) a representation whether the Proposing Stockholder intends to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's outstanding capital stock required to approve the nomination and/or otherwise to solicit proxies from stockholders in support of the nomination. The Corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable stockholder's understanding of the qualifications and independence, or lack thereof, of such nominee.

(d) **Other Stockholder Proposals.** For all business other than director nominations, a Proposing Stockholder's notice to the secretary of the Corporation shall set forth as to each matter the Proposing Stockholder proposes to bring before the annual meeting: (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) any other information relating to such stockholder and beneficial owner, if any, on whose behalf the proposal is being made, required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for the proposal and pursuant to and in accordance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder and (iii) the information required by Section 2.03(c)(vi) above.

(e) **Proxy Rules.** The foregoing notice requirements of Sections 2.03(c) and 2.03(d) shall be deemed satisfied by a stockholder with respect to business or a nomination if the stockholder has notified the Corporation of his, her or its intention to present a proposal or make a nomination at an annual meeting in compliance with the applicable rules and regulations promulgated under Section 14(a) of the Exchange Act and such stockholder's proposal or nomination has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such annual meeting.

(f) **Special Meetings of Stockholders.** Only such business shall be conducted at a special meeting of stockholders as has properly been brought before the meeting pursuant to the Corporation's notice of meeting. Nominations of persons for election to the board of directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of meeting (x) by or at the direction of the board of directors or any committee thereof (or stockholders pursuant to Section 2.04 hereof) or (y) provided that the board of directors (or stockholders pursuant to Section 2.04 hereof have determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 2.03 is delivered to the secretary of the Corporation, who is entitled to vote at the meeting and upon such election and who complies with the notice procedures set forth in this Section 2.03. If the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the board of directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by this Section 2.03 shall be delivered to the secretary at the principal executive offices of the Corporation not less than one hundred twenty (120) days prior to the special meeting at which such business will be considered or the tenth (10th) day following the date of Public Disclosure of the date of the special meeting and of the nominees proposed by the board of directors to be elected at such meeting. The foregoing notice requirements of this paragraph (f) of this Section 2.03 shall be deemed satisfied by a stockholder with respect to a nomination if the stockholder has notified the Corporation of his, her or its intention to present a nomination at such special meeting in compliance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder and such stockholder's nomination has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such special meeting. In no event shall the Public Disclosure of an adjournment or postponement of a special meeting commence a new time period (or extend any notice time period).

(g) **Effect of Noncompliance.** Notwithstanding anything in these Bylaws to the contrary: (i) no nominations shall be made or business shall be conducted at any annual meeting except in accordance with the

procedures set forth in this Section 2.03, and (ii) otherwise required by law, if a Proposing Stockholder intending to propose business or make nominations at an annual meeting pursuant to this Section 2.03 does not provide the information required under this Section 2.03 to the Corporation promptly following the later of the record date or the date notice of the record date is first Publicly Disclosed, or the Proposing Stockholder (or a qualified representative of the Proposing Stockholder) does not appear at the meeting to present the proposed business or nominations, such business or nominations shall not be considered, notwithstanding that proxies in respect of such business or nominations may have been received by the Corporation. The requirements of this Section 2.03 shall apply to any business or nominations to be brought before an annual meeting by a stockholder whether such business or nominations are to be included in the Corporation's proxy statement pursuant to Rule 14a-8 or Rule 14a-11 of the Exchange Act or presented to stockholders by means of an independently financed proxy solicitation. The requirements of the Section 2.03 are included to provide the Corporation notice of a stockholder's intention to bring business or nominations before an annual meeting and shall in no event be construed as imposing upon any stockholder the requirement to seek approval from the Corporation as a condition precedent to bringing any such business or make such nominations before an annual meeting.

Section 2.04 Special Meetings. Special meetings of stockholders for any purpose or purposes may be called pursuant to a resolution approved by the Board of Directors or by the holders of shares entitled to cast not less than twenty percent (20%) of the votes at the meeting, and shall be held at such place, on such date, and at such time as the Board of Directors shall fix. The only business that may be conducted at a special meeting shall be the matter or matters set forth in the notice of such meeting. If a special meeting is properly called by any person or persons other than the Board of Directors, the request shall be in writing, specifying the general nature of the business proposed to be transacted in compliance with the same advance notice requirements of Section 2.03(c) and 2.03(d), and shall be delivered personally or sent by certified or registered mail, return receipt requested, or by telegraphic or other facsimile transmission to the secretary of the Corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors shall determine the time and place of such special meeting, which shall be held not less than thirty-five (35) nor more than one hundred twenty (120) days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the secretary shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 2.07 of these Bylaws. Nothing contained in this Section 2.04 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

Section 2.05 Adjournments. Any meeting of the stockholders, annual or special, may be adjourned from time to time to reconvene at the same or some other place, if any, and notice need not be given of any such adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Corporation may transact any business that may have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date is fixed for stockholders entitled to vote at the adjourned meeting, the Board of Directors shall fix a new record date for notice of the adjourned meeting and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at the meeting as of the record date for notice of such adjourned meeting.

Section 2.06 Notice of Meetings. Notice of the place, if any, date, hour, the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting) and means of remote communication, if any, of every meeting of stockholders shall be given by the Corporation not less than ten days nor more than 60 days before such meeting (unless a different time is specified by law) to every stockholder entitled to vote at the meeting as of the record date for determining the stockholders entitled to notice of the meeting. Notices of special meetings shall also specify the purpose or purposes for which the meeting has been called. Except as otherwise provided herein or permitted by applicable law, notice to stockholders shall be in writing and delivered personally or mailed to the stockholders at their addresses appearing on the books of the Corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, notice of meetings may be given to stockholders by

means of electronic transmission in accordance with applicable law. Notice of any meeting need not be given to any stockholder who, either before or after the meeting, submits a waiver of notice or attends such meeting, except when the stockholder attends for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 2.07 List of Stockholders. The officer of the Corporation who has charge of the stock ledger shall prepare a complete list of the stockholders entitled to vote at any meeting of stockholders (provided, however, if the record date for determining the stockholders entitled to vote is less than ten days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date), arranged in alphabetical order, and showing the address of each stockholder and the number of shares of each class of capital stock of the Corporation registered in the name of each stockholder at least ten days before any meeting of the stockholders. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, at the principal place of business of the Corporation. If the meeting is to be held at a place, the list shall also be produced and kept at the time and place of the meeting the whole time thereof and may be inspected by any stockholder who is present. If the meeting is held solely by means of remote communication, the list shall also be open for inspection by any stockholder during the whole time of the meeting as provided by applicable law. Except as provided by applicable law, the stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger and the list of stockholders or to vote in person or by proxy at any meeting of stockholders.

Section 2.08 Quorum. Unless otherwise required by law, the Certificate of Incorporation of the Corporation (the "**Certificate of Incorporation**") or these bylaws, at each meeting of the stockholders, one-third of the voting power of the outstanding shares of the Corporation entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum. If, however, such quorum is not present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have the power to adjourn the meeting from time to time, in the manner provided in Section 2.05, until a quorum is present or represented. A quorum, once established, shall not be broken by the subsequent withdrawal of enough votes to leave less than a quorum. At any such adjourned meeting at which there is a quorum, any business may be transacted that may have been transacted at the meeting originally called.

Section 2.09 Conduct of Meetings. The Board of Directors of the Corporation may adopt by resolution such rules and regulations for the conduct of the meeting of the stockholders as it deems appropriate. At every meeting of stockholders, the president or in his or her absence or inability to act, the secretary or, in his or her absence or inability to act, the person whom the president appoints, shall act as chairman of, and preside at, the meeting. The secretary or, in his or her absence or inability to act, the person whom the chairman of the meeting appoints secretary of the meeting, shall act as secretary of the meeting and keep the minutes thereof. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the chairman of any meeting of the stockholders has the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (a) the establishment of an agenda or order of business for the meeting; (b) the determination of when the polls open and close for any given matter to be voted on at the meeting; (c) rules and procedures for maintaining order at the meeting and the safety of those present; (d) limitations on attendance at or participation in the meeting to stockholders of record of the Corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting determines; (e) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (f) limitations on the time allotted to questions or comments by participants.

Section 2.10 Voting; Proxies. Unless otherwise required by law or the Certificate of Incorporation, the election of directors and proposals so designated by the directors shall be decided by a

plurality of the votes cast at a meeting of the stockholders by the holders of stock entitled to vote in the election. Unless otherwise required by law, the Certificate of Incorporation or these bylaws, any matter, other than the election of directors and proposals designated by the directors as being subject to a plurality vote, brought before any meeting of stockholders shall be approved if the votes cast favoring the matter exceed the votes cast opposing the matter at a meeting of the stockholders by the holders of stock entitled to vote thereon. Each stockholder entitled to vote at a meeting of stockholders or to express consent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy that is not irrevocable by attending the meeting and voting in person or by delivering to the secretary of the Corporation a revocation of the proxy or a new proxy bearing a later date. Voting at meetings of stockholders need not be by written ballot.

Section 2.11 Inspectors at Meetings of Stockholders. The Board of Directors, in advance of any meeting of stockholders, may, and shall if required by law, appoint one or more inspectors, who may be employees of the Corporation, to act at the meeting or any postponement or adjournment thereof and make a written report thereof. The Board of Directors may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall (a) ascertain the number of shares outstanding and the voting power of each, (b) determine the shares represented at the meeting, the existence of a quorum and the validity of proxies and ballots, (c) count all votes and ballots, (d) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors and (e) certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of their duties. Unless otherwise provided by the Board of Directors, the date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be determined by the person presiding at the meeting and shall be announced at the meeting. No ballot, proxies, votes or any revocation thereof or change thereto, shall be accepted by the inspectors after the closing of the polls unless the Court of Chancery of the State of Delaware upon application by a stockholder determines otherwise. In determining the validity and counting of proxies and ballots cast at any meeting of stockholders, the inspectors may consider such information as is permitted by applicable law. No person who is a candidate for office at an election may serve as an inspector at such election.

Section 2.12 Written Consent of Stockholders Without a Meeting. Any action to be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action to be so taken, are signed by all of the holders of outstanding stock entitled to vote with respect to the subject matter thereof and delivered (by hand or by certified or registered mail, return receipt requested) to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the Corporation having custody of the books in which proceedings of meetings of stockholders are recorded. Every written consent shall bear the date of signature of each stockholder, and no written consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated consent delivered in the manner required by this Section 2.12, written consents signed by all of the holders of outstanding stock entitled to vote with respect to the subject matter thereof are delivered to the Corporation as aforesaid.

Section 2.13 Fixing the Record Date.

(a) In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment or postponement thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 nor less than ten days before

the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment or postponement of the meeting; provided, however, that the Board of Directors may fix a new record date for the determination of stockholders entitled to vote at the adjourned or postponed meeting and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned or postponed meeting the same or an earlier date as that fixed for the determination of stockholders entitled to vote therewith at the adjourned or postponed meeting.

(b) In order that the Corporation may determine the stockholders entitled to express consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting: (i) when no prior action by the Board of Directors is required by law, the record date for such purpose shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded and (ii) if prior action by the Board of Directors is required by law, the record date for such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action. Delivery shall be by hand or by certified or registered mail, return receipt requested.

(c) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

ARTICLE III
BOARD OF DIRECTORS

Section 3.01 General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. The Board of Directors may adopt such rules and procedures, not inconsistent with the Certificate of Incorporation, these bylaws or applicable law, as it may deem proper for the conduct of its meetings and the management of the Corporation.

Section 3.02 Number; Term of Office. The Board of Directors shall consist of no less than one or more than fifteen members. Each director shall hold office until a successor is duly elected and qualified or until the director's earlier death, resignation, disqualification or removal.

Section 3.03 Newly Created Directorships and Vacancies. Any newly created directorships resulting from an increase in the authorized number of directors and any vacancies occurring in the Board of Directors, may be filled by the affirmative votes of a majority of the remaining members of the Board of Directors, although less than a quorum. A director so elected shall hold office until the earlier of the expiration of the term of office of the director whom he or she has replaced, a successor is duly elected and qualified or the earlier of such director's death, resignation or removal.

Section 3.04 Resignation. Any director may resign at any time by notice given in writing or by electronic transmission to the Corporation. Such resignation shall take effect at the date of receipt of such notice by the Corporation or at such later time as is therein specified.

Section 3.05 Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such times and at such places as may be determined from time to time by the Board of Directors or its chairman.

Section 3.06 Special Meetings. Special meetings of the Board of Directors may be held at such times and at such places as may be determined by the chairman or the president on at least 24 hours notice to each director given by one of the means specified in Section 3.09 hereof other than by mail or on at least three days notice if given by mail. Special meetings shall be called by the chairman or the president in like manner and on like notice on the written request of any two or more directors.

Section 3.07 Telephone Meetings. Board of Directors or Board of Directors committee meetings may be held by means of telephone conference or other communications equipment by means of which all persons participating in the meeting can hear each other and be heard. Participation by a director in a meeting pursuant to this Section 3.07 shall constitute presence in person at such meeting.

Section 3.08 Adjourned Meetings. A majority of the directors present at any meeting of the Board of Directors, including an adjourned meeting, whether or not a quorum is present, may adjourn and reconvene such meeting to another time and place. At least 24 hours notice of any adjourned or postponed meeting of the Board of Directors shall be given to each director whether or not present at the time of the adjournment or postponement, if such notice shall be given by one of the means specified in Section 3.09 hereof other than by mail, or at least three days notice if by mail. Any business may be transacted at an adjourned meeting that could have been transacted at the meeting as originally called.

Section 3.09 Notices. Subject to Section 3.06 and Section 3.10 hereof, whenever notice is required to be given to any director by applicable law, the Certificate of Incorporation or these bylaws, such notice shall be deemed given effectively if given in person or by telephone, mail addressed to such director at such director's address as it appears on the records of the Corporation, facsimile, email or by other means of electronic transmission.

Section 3.10 Waiver of Notice. Whenever the giving of any notice to directors is required by applicable law, the Certificate of Incorporation or these bylaws, a waiver thereof, given by the director entitled to the notice, whether before or after such notice is required, shall be deemed equivalent to notice. Attendance by a director at a meeting shall constitute a waiver of notice of such meeting except when the director attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business on the ground that the meeting was not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special Board of Directors or committee meeting need be specified in any waiver of notice.

Section 3.11 Organization. At each meeting of the Board of Directors, the chairman or, in his or her absence, another director selected by the Board of Directors shall preside. The secretary or a person designated by secretary shall act as secretary at each meeting of the Board of Directors. If the secretary is absent from any meeting of the Board of Directors, an assistant secretary shall perform the duties of secretary at such meeting; and in the absence from any such meeting of the secretary and all assistant secretaries, the person presiding at the meeting may appoint any person to act as secretary of the meeting.

Section 3.12 Quorum of Directors. The presence of a majority of the Board of Directors shall be necessary and sufficient to constitute a quorum for the transaction of business at any meeting of the Board of Directors.

Section 3.13 Action by Majority Vote. Except as otherwise expressly required by these bylaws, the Certificate of Incorporation or by applicable law, the vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

Section 3.14 Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting if all directors or members of such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writings or electronic transmissions are filed with the minutes of proceedings of the Board of Directors or committee in accordance with applicable law.

Section 3.15 Committees of the Board of Directors. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of such committee. If a member of a committee is absent from any meeting, or disqualified from voting thereat, the remaining member or members present at the meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may, by a unanimous vote, appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent permitted by applicable law, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers that may require it to the extent so authorized by the Board of Directors. Unless the Board of Directors provides otherwise, at all meetings of such committee, a majority of the then authorized members of the committee shall constitute a quorum for the transaction of business, and the vote of a majority of the members of the committee present at any meeting at which there is a quorum shall be the act of the committee. Each committee shall keep regular minutes of its meetings. Unless the Board of Directors provides otherwise, each committee designated by the Board of Directors may make, alter and repeal rules and procedures for the conduct of its business. In the absence of such rules and procedures each committee shall conduct its business in the same manner as the Board of Directors conducts its business pursuant to this Article III.

ARTICLE IV
OFFICERS

Section 4.01 Positions and Election. The officers of the Corporation shall be elected by the Board of Directors and shall include a president, a treasurer and a secretary. The Board of Directors, in its discretion, may also elect a chairman (who must be a director), one or more vice chairmen (who must be directors) and one or more vice presidents, assistant treasurers, assistant secretaries and other officers. Any individual may be elected to, and may hold, more than one office of the Corporation.

Section 4.02 Term. Each officer of the Corporation shall hold office until such officer’s successor is elected and qualifies or until such officer’s earlier death, resignation or removal. Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors at any time with or without cause by the majority vote of the members of the Board of Directors then in office. The removal of an officer shall be without prejudice to his or her contract rights, if any. The election or appointment of an officer does not of itself create contract rights. Any officer of the Corporation may resign at any time by giving written notice of his or her resignation to the president or the secretary. Any such resignation shall take effect at the time specified therein or, if the time when it becomes effective is not specified therein, immediately upon its receipt. Unless otherwise specified therein, the acceptance of such resignation is not necessary to make it effective. If any vacancy occurs among the officers, the Board of Directors shall, if required by law, or may appoint a person to fill the position for the unexpired portion of the term.

Section 4.03 The President. The president shall have general supervision over the business of the Corporation and other duties incident to the office of president, and any other duties as may be from time to time assigned to the president by the Board of Directors and subject to the control of the Board of Directors in each case.

Section 4.04 Vice Presidents. Each vice president shall have such powers and perform such duties as may be assigned to him or her from time to time by the chairman of the Board of Directors or the president.

Section 4.05 The Secretary. The secretary, or a person appointed by the secretary, president or Board of Directors, shall attend all sessions of the Board of Directors and all meetings of the stockholders and record all votes and the minutes of all proceedings in a book to be kept for that purpose, and shall perform like duties for committees when required. He or she shall give, or cause to be given, notice of all meetings of the stockholders and meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or the president. The secretary shall keep in safe custody the seal of the Corporation and shall see that it is affixed to all documents, the execution of which, on behalf of the Corporation, under its seal, is necessary or proper, and when so affixed may attest the same.

Section 4.06 The Treasurer. The treasurer shall have the custody of the corporate funds and securities, except as otherwise provided by the Board of Directors, and shall cause to be kept full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the president and the directors, at the regular meetings of the Board of Directors, or whenever they may require it, an account of all his or her or her transactions as treasurer and of the financial condition of the Corporation.

Section 4.07 Duties of Officers May be Delegated. In the case of the absence of any officer, or for any other reason that the Board of Directors may deem sufficient, the president or the Board of Directors may delegate for the time being the powers or duties of such officer to any other officer, director or person.

ARTICLE V
Stock Certificates And Their Transfer

Section 5.01 Certificates Representing Shares. The shares of stock of the Corporation shall be represented by certificates unless the Board of Directors provides by resolution or resolutions that some or all of any class or series shall be uncertificated shares that may be evidenced by a book-entry system maintained by the registrar of such stock. If shares are represented by certificates, such certificates shall be in the form approved by the Board of Directors. The certificates representing shares of stock of each class shall be signed by, or in the name of, the Corporation by the chairman, any vice chairman, the president or any vice president, and by the secretary, any assistant secretary, the treasurer or any assistant treasurer. Any or all such signatures may be facsimiles. Although any officer, transfer agent or registrar whose manual or facsimile signature is affixed to such a certificate ceases to be such officer, transfer agent or registrar before such certificate has been issued, it may nevertheless be issued by the Corporation with the same effect as if such officer, transfer agent or registrar were still such at the date of its issue.

Section 5.02 Transfers of Stock. Stock of the Corporation shall be transferable in the manner prescribed by law and in these bylaws. Transfers of stock shall be made on the books of the Corporation only by the person named as the holder thereof on the stock records of the Corporation, by such person’s attorney lawfully constituted in writing, and in the case of shares represented by a certificate upon the surrender of the certificate thereof, which shall be cancelled before a new certificate or uncertificated shares may be issued. No

transfer of stock shall be valid as against the Corporation for any purpose until it has been entered in the stock records of the Corporation by an entry showing from and to whom such stock was transferred. To the extent designated by the president or any vice president or the treasurer of the Corporation, the Corporation may recognize the transfer of fractional uncertificated shares, but shall not otherwise be required to recognize the transfer of fractional shares.

Section 5.03 Transfer Agents and Registrars. The Board of Directors may appoint, or authorize any officer or officers to appoint, one or more transfer agents and one or more registrars.

Section 5.04 Lost, Stolen or Destroyed Certificates. The Board of Directors may direct a new certificate or uncertificated shares to be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or uncertificated shares, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate, or the owner's legal representative to give the Corporation a bond sufficient to indemnify it against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed or the issuance of such new certificate or uncertificated shares.

ARTICLE VI
GENERAL PROVISIONS

Section 6.01 Seal. The seal of the Corporation shall be in such form as is approved by the Board of Directors. The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise, as may be prescribed by law or custom or by the Board of Directors.

Section 6.02 Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

Section 6.03 Checks, Notes, Drafts, Etc. All checks, notes, drafts or other orders for the payment of money of the Corporation shall be signed, endorsed or accepted in the name of the Corporation by such officer, officers, person or persons as from time to time may be designated by the Board of Directors or by an officer or officers authorized by the Board of Directors to make such designation.

Section 6.04 Dividends. Subject to applicable law and the Certificate of Incorporation, dividends upon the shares of capital stock of the Corporation may be declared by the Board of Directors at any regular or special meeting of the Board of Directors. Dividends may be paid in cash, in property or in shares of stock of the Corporation, unless otherwise provided by applicable law or the Certificate of Incorporation.

Section 6.05 Conflict with Applicable Law or Certificate of Incorporation. These bylaws are adopted subject to any applicable law and the Certificate of Incorporation. Whenever these bylaws may conflict with any applicable law or the Certificate of Incorporation, such conflict shall be resolved in favor of such law or the Certificate of Incorporation.

ARTICLE VII
INDEMNIFICATION

Section 7.01 Power to Indemnify in Actions, Suits or Proceedings Other Than Those By or in the Right of the Corporation. Subject to Section 7.03, the Corporation shall indemnify, to the fullest extent permitted by applicable law, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or

investigative (other than an action by or in the right of the Corporation), by reason of the fact that such person is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Section 7.02 Power to Indemnify in Actions, Suit or Proceedings By or in the Right of the Corporation. Subject to Section 7.03, the Corporation shall indemnify, to the fullest extent permitted by applicable law, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 7.03 Authorization of Indemnification. Any indemnification under this Article VII (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the present or former director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 7.01 or Section 7.02, as the case may be. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (iv) by the stockholders. Such determination shall be made, with respect to former directors and officers, by any person or persons having the authority to act on the matter on behalf of the Corporation. To the extent, however, that a present or former director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith, without the necessity of authorization in the specific case.

Section 7.04 Good Faith Defined. For purposes of any determination under Section 7.03, a person shall be deemed to have acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe such person's conduct was unlawful, if such person's action is based on the records or books of account of the Corporation or another enterprise, or on information supplied to such person by the officers of the Corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the Corporation or another enterprise or on information or records given or reports made to the

Corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Corporation or another enterprise. The provisions of this Section 7.04 shall not be deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 7.01 or Section 7.02, as the case may be.

Section 7.05 Indemnification by a Court. Notwithstanding any contrary determination in the specific case under Section 7.03, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery of the State of Delaware or any other court of competent jurisdiction in the State of Delaware for indemnification (following the final disposition of such action, suit or proceeding) to the extent otherwise permissible under Section 7.01 or Section 7.02 or for advancement of expenses to the extent otherwise permissible under Section 7.06. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 7.01 or Section 7.02, as the case may be. Neither a contrary determination in the specific case under Section 7.03 nor the absence of any determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct. Notice of any application for indemnification or advancement of expenses pursuant to this Section 7.05 shall be given to the Corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification or advancement of expenses shall also be entitled to be paid the expense of prosecuting such application to the fullest extent permitted by applicable law.

Section 7.06 Expenses Payable in Advance. Expenses (including attorneys' fees) incurred by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding shall, to the fullest extent not prohibited by applicable law, be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized in this Article VII. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the Corporation deems appropriate.

Section 7.07 Nonexclusivity of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, it being the policy of the Corporation that indemnification of the persons specified in Section 7.01 and Section 7.02 shall be made to the fullest extent permitted by law. The provisions of this Article VII shall not be deemed to preclude the indemnification of any person who is not specified in Section 7.01 or Section 7.02 but whom the Corporation has the power or obligation to indemnify under the provisions of the General Corporation Law of the State of Delaware, or otherwise.

Section 7.08 Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article VII.

Section 7.09 Certain Definitions. For purposes of this Article VII, references to "the Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued,

would have had power and authority to indemnify its directors or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VII with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. The term "another enterprise" as used in this Article VII shall mean any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise of which such person is or was serving at the request of the Corporation as a director, officer, employee or agent. For purposes of this Article VII, references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director or officer of the Corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article VII.

Section 7.10 Survival of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VII shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 7.11 Limitation on Indemnification. Notwithstanding anything contained in this Article VII to the contrary, except for proceedings to enforce rights to indemnification and to advancement of expenses (which shall be governed by Section 7.05), the Corporation shall not be obligated to indemnify any director or officer (or his or her heirs, executors or personal or legal representatives) or advance expenses in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors.

Section 7.12 Indemnification of Employees and Agents. The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article VII to directors and officers of the Corporation.

Section 7.13 Other Sources. The Corporation's obligation, if any, to indemnify or to advance expenses to any director or officer who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise shall be reduced by any amount such director of officer may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust or other enterprise.

Section 7.14 Amendment or Repeal. Any right to indemnification or to advancement of expenses of any director or officer arising hereunder shall not be eliminated or impaired by an amendment to or repeal of these by-laws after the occurrence of the act or omission that is the subject of the action, suit or proceeding for which indemnification or advancement of expenses is sought.

ARTICLE VIII
AMENDMENTS

These bylaws may be amended, altered, changed, adopted and repealed or new bylaws adopted by the Board of Directors. The stockholders may make additional bylaws and may alter and repeal any bylaws whether such bylaws were originally adopted by them or otherwise only to the extent required or permitted by the Corporations' Certificate of Incorporation.