

ADA-ES INC
 Form 424B5
 October 26, 2011
Table of Contents

Filed Pursuant to Rule 424(b)(5)

Registration No. 333-171936

PROSPECTUS SUPPLEMENT

(To Prospectus dated October 12, 2011)

ADA-ES, INC.

2,000,000 Shares of Common Stock

We are offering 2,000,000 shares of our common stock, no par value, in this offering. Our common stock is listed on The NASDAQ Capital Market under the symbol ADES. On October 24, 2011, the last reported sale price of our common stock was \$17.40 per share.

Investing in our common stock involves significant risks. See Risk Factors beginning on page S-7 of this prospectus supplement and page 3 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public Offering Price	\$ 15.25	\$ 30,500,000
Underwriting discounts and commissions	\$.92	\$ 1,830,000
Proceeds to ADA-ES (before expenses)	\$ 14.33	\$ 28,670,000

We estimate the total expenses of this offering, excluding the underwriting discounts and commissions, will be approximately \$250,000. We have granted the underwriters an option for a period of 30 days from the date of this prospectus supplement to purchase up to a total of 300,000 additional shares of our common stock at the public offering price per share, less the underwriting discounts and commissions, to cover any over-allotments. We anticipate that delivery of the shares will be made through the facilities of the Depository Trust Company on or about October 28, 2011, subject to customary closing conditions.

Sole Book-Running Manager

LAZARD CAPITAL MARKETS

Co-Lead Manager

Baird

Co-Manager

JMP Securities

Prospectus supplement dated October 25, 2011.

Table of Contents**TABLE OF CONTENTS**

	Page
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-2
<u>PROSPECTUS SUPPLEMENT SUMMARY</u>	S-4
<u>THE COMPANY</u>	S-4
<u>THE OFFERING</u>	S-6
<u>RISK FACTORS</u>	S-7
<u>FORWARD-LOOKING STATEMENTS</u>	S-8
<u>SELECTED FINANCIAL DATA</u>	S-9
<u>USE OF PROCEEDS</u>	S-9
<u>DESCRIPTION OF CAPITAL STOCK</u>	S-10
<u>DILUTION</u>	S-10
<u>UNDERWRITING</u>	S-11
<u>LEGAL MATTERS</u>	S-14
<u>EXPERTS</u>	S-14
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	S-15
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	S-15
<u>ABOUT THIS PROSPECTUS</u>	2
<u>OVERVIEW</u>	2
<u>RISK FACTORS</u>	3
<u>FORWARD-LOOKING INFORMATION</u>	3
<u>THE SECURITIES WE MAY OFFER</u>	5
<u>USE OF PROCEEDS</u>	6
<u>DESCRIPTION OF CAPITAL STOCK</u>	6
<u>DESCRIPTION OF WARRANTS</u>	7
<u>DESCRIPTION OF UNITS</u>	9
<u>LEGAL OWNERSHIP OF SECURITIES</u>	10
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	15
<u>EXPERTS</u>	15
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	15
<u>INCORPORATION BY REFERENCE</u>	16

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the securities we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein are part of a shelf registration statement that we filed with the Securities and Exchange Commission. Under the shelf registration process, we may offer from time to time shares of our common stock and other equity securities up to an original aggregate amount of \$140,000,000. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein include important information about us, our securities being offered and other information you should know before investing. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we authorized to be delivered to you, as well as the additional information described under Where You Can Find Additional Information on page S-15 of this prospectus supplement and Incorporation of Certain Information by Reference on page S-15 of this prospectus supplement before investing in our securities.

Table of Contents

To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus supplement or the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, any related free writing prospectus that we authorized to be distributed to you and the documents incorporated by reference herein and therein. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we have authorized to be delivered to you is accurate only as of their respective dates, regardless of the time of delivery of such documents or of any sale of securities. Our business, financial condition, results of operations and prospects may have changed since those dates. You should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the United States. Furthermore, you should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

Unless the context requires otherwise, in this prospectus supplement and the accompanying prospectus the terms ADA, the Company, we, us, our and similar names refer to ADA-ES, Inc. and its subsidiaries.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement and in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in shares of our common stock. The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein. Before you decide to invest in shares of our common stock, to fully understand this offering and its consequences to you, you should carefully read the entire prospectus supplement and the accompanying prospectus carefully, including the risk factors beginning on page S-7 of this prospectus supplement and beginning on page 3 of the accompanying prospectus, and the consolidated financial statements and related notes included in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein.

The Company

Incorporated in Colorado in 1997, ADA is a leader in clean coal technology and the associated specialty chemicals, serving the U.S. and Canadian coal-fueled power plant industry. Our proprietary environmental technologies and specialty chemicals enable power plants to enhance existing air pollution control equipment, minimize mercury, CO₂ 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 previous parent company, Earth Sciences, Inc. in September 2003. 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 technologies in the isolation of a laboratory without feedback from users, we work on full-scale mercury control systems that are installed on plants operated by several of the largest power companies in the United States and Canada. We assist electric utility companies to remain competitive while meeting environmental regulations.

Our major activities include:

the development and marketing of our patented refined coal technology, CyClean, for control of NO_x and mercury, which also qualifies for certain tax credits, through our Clean Coal Solutions, LLC (Clean Coal) joint venture with NexGen Refined Coal, LLC, an affiliate of NexGen Resources Corporation (NexGen), and an affiliate of The Goldman Sachs Group, Inc.,

the development and marketing of our new patent-pending M45 technology for the production of refined coal (RC) for use at coal-fired power plants for control of NO_x and mercury, which also qualifies for certain tax credits, and which complements and expands ADA's market for refined coal beyond the CyClean technology, which is limited to cyclone boilers,

the sale of equipment, field testing and services related to emission control including mercury for coal-fired boilers used in electric generation,

under an exclusive development and licensing agreement with Arch Coal, Inc. (Arch Coal), development and commercialization of an enhanced Powder River Basin coal with reduced emissions of mercury and other metals,

the research and development of carbon dioxide (CO₂) capture technology through contracts supported by the Department of Energy (DOE) and industry participants, and

the sale of flue gas conditioning equipment and chemicals, and other chemicals and technologies for coal-fired boilers.

Table of Contents

The address of our principal executive office is 8100 SouthPark Way, Unit B, Littleton, Colorado 80120, and our telephone number is (303) 734-1727. Our website is www.adaes.com. Information contained on our website is not a part of this or any other prospectus supplement or the accompanying prospectus.

Recent Developments

M45 Update: In September, ADA announced that it had successfully demonstrated a new patent-pending technology for producing refined coal for use at coal-fired plants. ADA's new technology, called M45, complements and expands ADA's market for RC beyond its patented and currently operating CyClean technology, which is limited to cyclone boilers. ADA has commenced fabrication of six M45 facilities with the intention of securing locations to demonstrate their operational capability to meet the placed in service requirements to qualify for tax credits of \$6.33 per ton of RC available over the next ten years.

Refined Coal Update: Clean Coal has installed and operated nine RC systems at utility sites. Clean Coal expects to install and operate another eleven systems by year-end, for a total of 20 systems installed and placed in service in 2011. These facilities must be placed in service by year-end to qualify for tax credits of \$6.33 per ton of RC available over the next ten years. In addition, June 2011 marked the first full year of operation of two Clean Coal facilities that produce RC for four boilers at two power plants in the Midwest, generating approximately \$20 million in revenue and about \$9 million in operating income for ADA. Over the next nine years, these facilities are expected to generate between \$15.0 million to \$20.0 million in revenues per year and \$7.0 to \$9.0 million in annual operating income.

Clean Coal Line of Credit: On September 9, 2011, Clean Coal entered into an amendment to its existing credit agreement with Cobiz Bank pursuant to which the maximum amount Clean Coal can borrow was increased from \$10 million to \$15 million. As of September 12, 2011, the outstanding balance on the line of credit was \$9.4 million and the effective interest rate was 5% per annum. Borrowings under the line of credit are subject to certain financial covenants applicable to Clean Coal.

Norit Settlement: On August 29, 2011, ADA entered into a settlement agreement (the ADA Settlement Agreement) with Norit Americas, Inc. and Norit International N.V. (collectively, Norit) and Norit entered into a separate settlement agreement (together, the Settlement Agreements) with Energy Capital Partners, LLC and its affiliated funds (collectively ECP), and ADA Carbon Solutions, LLC (Carbon Solutions) and certain of its subsidiaries (collectively, the AC JV Entities) as to the Norit Litigation and other litigation and claims among Norit, ECP and the AC JV Entities. The primary litigation took place before an arbitration panel, which rendered an interim award in April, 2011. Under terms of the ADA Settlement Agreement, ADA paid Norit's counsel a lump-sum of \$33 million on August 31, 2011 to be held in escrow until the arbitration panel approved the Settlement Agreements. ADA has also agreed to pay Norit the sum of \$7.5 million over the three-year period commencing on August 29, 2012, payable in three installments without interest of \$2.5 million. The arbitration panel confirmed the terms of the Settlement Agreements on October 18, 2011. In addition, as provided in the arbitration panel's preliminary determination, ADA and the AC JV Entities remain jointly and severally liable for royalties to Norit on certain past and future sales of activated carbon (AC) through mid-2018.

Table of Contents

The Offering

Issuer	ADA-ES, Inc.
Common stock offered by us	2,000,000 shares
Over-allotment option	300,000 shares
Common stock to be outstanding immediately after this offering	9,674,547 shares
Use of proceeds	We intend to use the net proceeds from this offering for (i) designing, constructing and placing refined coal facilities into service, (ii) expanding to meet the demands resulting from the expected MACT regulations, (iii) general working capital purposes, including for satisfying indemnity obligations and (iv) general corporate purposes. See Use of Proceeds on page S-9 of this prospectus supplement.
Risk factors	See Risk Factors beginning on page S-7 of this prospectus supplement and on page 3 of the accompanying prospectus for a discussion of factors you should consider carefully when making a decision to invest in our common stock.
NASDAQ Capital Market symbol	ADES
The number of shares of our common stock to be outstanding immediately after this offering as shown above assumes that all of the shares offered hereby are sold and is based on 7,674,547 shares outstanding as of October 24, 2011, and does not include 300,000 shares subject to the underwriters' over-allotment option and also excludes the following:	

186,740 shares of our common stock issuable upon the exercise of options outstanding at October 24, 2011 under our equity plans; and

210,215 shares of our common stock available as of October 24, 2011, for future issuance under our equity plans, including Company matches under our 401(k) plan.

Table of Contents

RISK FACTORS

In addition to other information contained and incorporated by reference in this prospectus supplement and the accompanying prospectus, you should carefully consider the risks described below and incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2010, Part II Item 1A of the Form 10-Q filed for the quarter ended March 31, 2011, Part II Item 1A of the Form 10-Q filed for the quarter ended June 30, 2011 and our current report on Form 8-K dated October 5, 2011, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (Exchange Act) that are incorporated by reference herein in evaluating our company, our properties and our business before making a decision to invest in the common stock. These risks are not the only ones faced by us. Additional risks not presently known to us or that we currently deem immaterial could also materially and adversely affect our financial condition, results of operations, business and prospects. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. This prospectus supplement and the accompanying prospectus, and the documents incorporated herein and therein by reference, also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this prospectus supplement and the accompanying prospectus, and the documents incorporated herein and therein by reference. Please refer to the section entitled Forward-Looking Statements in this prospectus supplement.

Risks Related to this Offering

Management will have broad discretion as to the use of the proceeds of this offering.

We have not designated the amount of net proceeds we will receive from this offering for any particular purpose. Accordingly, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our shareholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds.

Investors in this offering will pay a much higher price than the book value of our common stock.

You will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering because the price per share of our common stock being offered hereby is substantially higher than the book value per share of our common stock. Based on the public offering price of \$15.25 per share in this offering, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$12.25 per share in the net tangible book value of the common stock. See Dilution on page S-10 of this prospectus supplement for a more detailed discussion of the dilution you will incur in this offering.

Future sales of substantial amounts of our common stock could adversely affect the market price of our common stock.

Future sales of substantial amounts of our common stock, or securities convertible or exchangeable into shares of our common stock, into the public market, including shares of our common stock issued upon exercise of options and warrants, or perceptions that those sales could occur, could adversely affect the prevailing market price of our common stock and our ability to raise capital in the future.

Our stock price has historically been volatile.

Stock prices and trading volumes for many clean-tech companies fluctuate widely for a number of reasons, including factors which may be unrelated to their businesses or results of operations such as media coverage, legislative and regulatory measures and the activities of various interest groups or organizations. This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of our common stock and the return on your investment.

Table of Contents

Historically, our stock price has been volatile. For example, in the last twelve months, our stock has traded as high as \$24.92 per share and as low as \$4.54 per share. The significant market price fluctuations of our common stock are due to a variety of factors, including:

the demand in the market for our common stock;

the nature of our products and product candidates;

fluctuations in our operating results;

market conditions relating to the clean-tech and emerging energy industries;

announcements concerning regulatory developments, developments with respect to proprietary rights and our collaborations;

comments by securities analysts;

general market conditions;

political developments in the United States; and

the issuance of common stock to partners, vendors or to investors to raise additional capital.

In addition, the stock market is subject to other factors outside our control that can cause extreme price and volume fluctuations. In the third and fourth quarters of 2008, as well as during 2009 and in 2011, broad distress in the financial markets and the economy have resulted in greatly increased market uncertainty and instability in both U.S. and international capital and credit markets. These conditions, combined with volatile oil prices, declining business and consumer confidence and increased unemployment have recently contributed to substantial market volatility, and if such market conditions persist, the price of our common stock may fluctuate or decline. Securities class action litigation has often been brought against companies that experience volatility in the market price of their securities. Litigation brought against us could result in substantial costs and a diversion of management's attention and resources, which could adversely affect our business.

FORWARD-LOOKING STATEMENTS

Some of the statements contained in this prospectus supplement or incorporated by reference into this prospectus supplement are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are subject to the safe harbor created by the Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our expectations and projections about future events and financial trends affecting the financial condition and/or operating results of our business. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, the negative expressions of these words, or similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted under the heading Risk Factors below, in the filings incorporated herein by reference and in the accompanying prospectus. There are important factors that could cause actual results to be substantially different from the results expressed or implied by these forward-looking statements including, among other things:

Edgar Filing: ADA-ES INC - Form 424B5

when final Maximum Achievable Control Technology (MACT)- based mercury and other regulations or pollution control requirements become effective and the impact of such regulations;

expected growth and anticipated opportunities in our target markets;

expected supply and demand for our products and services;

continued funding by Congress of our DOE CO2 projects, including industry cost share of such projects;

the effectiveness of our technologies;

expected timing of conducting additional demonstrations of our technology and completing a supply agreement with Arch Coal and the amount of benefit per ton of coal our technology could provide;

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

S-8

Table of Contents

timing of construction, installation, meeting placed in service deadlines and commencement of full-time operations and expected production levels at the RC facilities of Clean Coal;

Clean Coal's expected use of its line of credit;

our ability to develop, place into service, generate tax credits under Section 45 of the Internal Revenue Code and profitably sell, lease and/or operate additional RC facilities;

possible changes in the level of our ownership of Carbon Solutions, our joint venture with ECP;

the expected costs, capacity of, timing of full operational capacity and anticipated sales levels at the AC facility (AC Facility) built by ADA Carbon Solutions (Red River), LLC, a wholly-owned subsidiary of Carbon Solutions and the need for additional AC production lines;

the willingness and ability of ECP to continue to fund operations of the AC Facility through contributions and loans to Carbon Solutions and its subsidiaries;

whether the guaranties and commitments the Company has made will be called upon;

timing and amounts of or changes in future revenues, funding for our business and projects, margins, expenses, earnings, dividends, tax rate, cash flow, working capital, liquidity, the value of recorded intangibles and other financial and accounting measures;

the amount of estimated royalties due to Norit;

the materiality of any future adjustments to previously recorded revenue as a result of DOE audits;

who are potential competitors are and who they will be in the future, expected levels of competition in our target markets and whether we have direct competition for our technology;

expected growth in the power industry's interest in and funding for CO2 capture projects;

availability of lease space in the states we do business; and

other factors set forth above under Risk Factors and in the accompanying prospectus, as well as in all filings incorporated by reference into this prospectus supplement.

We do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends.

SELECTED FINANCIAL DATA

Financial data from our filings with the SEC has been incorporated by reference.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of 2,000,000 shares of our common stock in this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$28.4 million (or approximately \$32.7 million if the underwriters' over-allotment option is exercised in full), based upon public offering price of \$15.25 per share in this offering.

We currently intend to use the net proceeds of this offering for (i) designing, constructing and placing refined coal facilities into service, (ii) expanding to meet the demands resulting from the expected and MACT regulations, (iii) general working capital purposes, including for satisfying indemnity obligations and (iv) general corporate purposes. General corporate purposes may include capital expenditures, payment of dividends and any other purposes. While we have estimated the particular uses for the net proceeds of this offering, we have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering for any purpose, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. See **Risk Factors** **Risks Related to this Offering** Management will have broad discretion as to the use of the proceeds of this offering.

Table of Contents

Pending use of the net proceeds as described above, we intend to invest the net proceeds in money-market funds or U.S. treasuries until we use them for their stated purpose.

DESCRIPTION OF CAPITAL STOCK

In this offering, we are offering 2,000,000 shares of our common stock, no par value. We have granted the underwriters an option to purchase up to 300,000 additional shares of our common stock solely to cover over-allotments, if any. This option is exercisable, in whole or in part, for a period of 30 days from the date of this prospectus supplement. The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption "Description of Our Capital Stock" starting on page 6 of the accompanying prospectus.

DILUTION

If you purchase any of the shares of common stock offered by this prospectus supplement, you will experience dilution to the extent of the difference between the offering price per share of common stock you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our unaudited net tangible book value as of June 30, 2011 was approximately \$.6 million, or \$.08 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding.

After giving effect to the sale of 2,000,000 shares of common stock in this offering at a public offering price of \$15.25 per share, and after deducting the underwriting commissions and our estimated offering expenses, our as adjusted net tangible book value as of June 30, 2011, would have been approximately \$29 million, or approximately \$3.00 per share of common stock. This represents an immediate increase in net tangible book value of approximately \$2.92 per share to existing shareholders and an immediate dilution of approximately \$12.25 per share to new investors. The following table illustrates this calculation on a per share basis:

Public Offering price per share	\$ 15.25
Net tangible book value per share as of June 30, 2011	\$.08
Increase per share attributable to this offering	\$ 2.92
As adjusted net tangible book value per share after this offering	3.00
Dilution per share to new investors participating in this offering	\$ 12.25

The number of shares of common stock outstanding used for existing shareholders in both the table and calculations above is based on 7,668,235 shares outstanding as of September 30, 2011. This number of shares does not include 300,000 shares of common stock subject to the underwriters' over-allotment option and also excludes:

186,740 shares of our common stock issuable upon the exercise of options outstanding at September 30, 2011 under our equity plans; and

216,155 shares of our common stock available as of September 30, 2011, for future issuance under our equity plans, including Company matches under our 401(k) plan.

Table of Contents

To the extent that outstanding options are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus supplement, the underwriters named below have agreed to purchase, and we have agreed to sell to them, the number of shares of our common stock at the public offering price, less the underwriting discounts and commissions, as set forth on the cover page of this prospectus supplement as indicated below:

Underwriter	Number of Shares
Lazard Capital Markets LLC	1,100,000
Robert W. Baird & Co. Incorporated	700,000
JMP Securities LLC	200,000
Total:	2,000,000

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken.

The underwriters have an option to buy up to 300,000 additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters may exercise this option at any time and from time to time during the 30-day period from the date of this prospectus supplement. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriters initially propose to offer the shares of common stock directly to the public at the public offering price listed on the cover page of this prospectus supplement. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the underwriters.

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of customary legal opinions, letters and certificates.

Table of Contents**Commissions and Discounts**

The following table summarizes the public offering price, underwriting discounts and commissions and proceeds before expenses to us assuming both no exercise and full exercise of the underwriters' option to purchase additional shares:

	Per Share	Without Over-Allotment	Total With Over-Allotment
Public offering price	\$ 15.25	\$ 30,500,000	\$ 35,075,000
Underwriting discounts and commissions	.92	1,830,000	2,104,500
Proceeds, before expenses, to us	14.33	28,670,000	32,970,500

The expenses of the offering, not including the underwriting discounts and commissions, payable by us are estimated to be \$250,000, which includes approximately \$125,000 that we have agreed to reimburse the underwriters for legal fees incurred in connection with this offering.

The relationship between Lazard Frères & Co. LLC and Lazard Capital Markets LLC is governed by a business alliance agreement between their respective parent companies. Pursuant to such agreement, Lazard Frères & Co. LLC referred this offering to Lazard Capital Markets LLC and will receive a referral fee from Lazard Capital Markets LLC in connection therewith; however, such referral fee is not in addition to the fee paid by us to Lazard Capital Markets LLC described above.

Listing on The Nasdaq Capital Market

Our shares of common stock included in the units are listed on The Nasdaq Capital Market under the symbol ADES.

Indemnification

We and the underwriters have agreed to indemnify each other, and we have also agreed to indemnify Lazard Frères & Co. LLC, against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and liabilities arising from breaches of representations and warranties contained in the underwriting agreement. We have also agreed to contribute to payments the underwriters and Lazard Frères & Co. LLC may be required to make in respect of such liabilities.

No Sales of Similar Securities

We and each of our executive officers and directors, subject to certain customary exceptions, including, but not limited to the sale of shares of common stock under 10b5-1 plans, have agreed with the underwriters not to dispose of or hedge any of our shares of common stock or securities convertible into or exercisable or exchangeable for common stock for 90 days after the date of this prospectus supplement without first obtaining the written consent of Lazard Capital Markets LLC. The 90-day lock-up period during which we and our executive officers and directors are restricted from engaging in transactions in our common stock or securities convertible into or exercisable or exchangeable for common stock is subject to extension such that, in the event that either (i) during the last 17 days of the lock-up period, we issue an earnings or financial results release or material news or a material event relating to us occurs, or (ii) prior to the expiration of the lock-up period, we announce that we will release earnings or financial results during the 16-day period beginning on the last day of the lock-up period, then in either case the expiration of the lock-up period will be extended until the expiration of the 18-day period beginning on the issuance of the earnings or financial results release or the occurrence of the material news or material event, as applicable, unless Lazard Capital Markets LLC waives, in writing, such an extension.

Table of Contents

Price Stabilization, Short Positions

In order to facilitate the offering of our common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. The underwriters must close out any short position by purchasing shares in the open market. A short position may be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchased in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of our common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of our common stock above independent market levels or prevent or slow a decline in the market price of our common stock. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

A prospectus in electronic format may be made available on websites maintained by the underwriters. The underwriters may agree to allocate a number of shares of common stock to other underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters on the same basis as other allocations.

United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (e) of the Order (all such persons together being referred to as relevant persons). The shares of common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such common stock will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 or FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to us, and

(b) it has complied with, and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

European Economic Area

To the extent that the offer of the common stock is made in any Member State of the European Economic Area that has implemented the Prospectus Directive before the date of publication of a prospectus in relation to the common stock which has been approved by the competent authority in the Member State in accordance with the Prospectus Directive (or, where appropriate, published in accordance with the Prospectus Directive and notified to the competent authority in the Member State in accordance with the Prospectus Directive), the offer (including any offer pursuant to this document) is only addressed to qualified investors in that Member State within the meaning of the Prospectus Directive or has been or will be made otherwise in circumstances that do not require us to publish a prospectus pursuant to the Prospectus Directive.

Table of Contents

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities,

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000 and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts, or

(c) in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive. For the purposes of this provision, the expression an offer of shares to the public in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

The EEA selling restriction is in addition to any other selling restrictions set out below. In relation to each Relevant Member State, each purchaser of shares of common stock (other than the underwriters) will be deemed to have represented, acknowledged and agreed that it will not make an offer of shares of common stock to the public in any Relevant Member State, except that it may, with effect from and including the date on which the Prospectus Directive is implemented in the Relevant Member State, make an offer of shares of common stock to the public in that Relevant Member State at any time in any circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive, provided that such purchaser agrees that it has not and will not make an offer of any shares of common stock in reliance or purported reliance on Article 3(2)(b) of the Prospectus Directive. For the purposes of this provision, the expression an offer of shares to the public in relation to any shares of common stock in any Relevant Member State has the same meaning as in the preceding paragraph.

Transfer Agent and Registrar

Computershare Investor Services has been appointed as the transfer agent and registrar for our common stock. It is located at 350 Indiana Street, Suite 800, Golden, Colorado 80401, telephone (303) 262-0600. Our common shares are traded on The NASDAQ Capital Market under the symbol ADES.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Schuchat Herzog & Brenman, LLC, Denver, Colorado. Certain matters will be passed upon for the underwriters by Proskauer Rose LLP, New York, New York.

EXPERTS

The consolidated financial statements of ADA-ES, Inc. as of and for the years ended December 31, 2010 and December 31, 2009 appearing in our Annual Reports on Form 10-K for such years have been audited by Ehrhardt Keefe Steiner & Hottman PC, an independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firms as experts in accounting and auditing.

Table of Contents

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file reports, proxy statements and other documents with the SEC. You may read and copy any document we file at the SEC's public reference room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at www.sec.gov.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

Our Common Stock is currently traded in the over-the-counter market and is quoted on the NASDAQ Capital Market. Reports, proxy statements and other information filed by the Company therewith can be inspected at the Financial Industry Regulatory Authority, Inc., 1735 K Street NW, Washington, D.C. 20006. Information about us, including our SEC filings, is also available at our Internet site at <http://www.adaes.com>. However, the information on our Internet site is not a part of this prospectus supplement. You should rely only on the information provided in, and incorporated by reference in, this prospectus supplement and the prospectus and the registration statement. We have not authorized anyone else to provide you with different information. Our securities are not being offered in any state where the offer is not permitted. You should assume that the information in this prospectus supplement is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference into this registration statement and prospectus the documents listed below, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed with the SEC on March 28, 2011 and Amendment No. 1 to our Annual Report on Form 10-K/A for the fiscal year ended December 31, 2010, filed with the SEC on July 1, 2011;

The information specifically incorporated by reference into the Annual Report from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 9, 2011;

Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2011 and June 30, 2011, filed with the SEC on May 13, 2011 and August 12, 2011, respectively;

Amendment No. 1 to our Quarterly Report on Form 10-Q/A for the fiscal quarter ended June 30, 2011, filed with the SEC on October 7, 2011;

Amendment No. 2 to our Quarterly Report on Form 10-Q/A for the fiscal quarter ended September 30, 2008, filed with the SEC on April 1, 2011;

Our Current Reports on Form 8-K dated (i) January 5, 2011 (filed with the SEC on January 5, 2011), (ii) February 15, 2011 (filed with the SEC on February 15, 2011), (iii) March 14, 2011 (filed with the SEC on March 14, 2011), (iv) March 16, 2011 (filed with the SEC on March 16,

Table of Contents

2011), (v) March 29, 2011 (filed with the SEC on March 29, 2011), (vi) April 11, 2011 (filed with the SEC on April 11, 2011), (vii) April 19, 2011 (filed with the SEC on April 19, 2011), (viii) May 9, 2011 (filed with the SEC on May 9, 2011), (ix) May 24, 2011 (filed with the SEC on May, 24, 2011), (x) May 27, 2011 (filed with the SEC on June 3, 2011), (xi) June, 7, 2011 (filed with the SEC on June 7, 2011), (xii) June 8, 2011 (filed with the SEC on June 8, 2011), (xiii) August 29, 2011 (filed with the SEC on August 30, 2011), (xiv) September 9, 2011 (filed with the SEC on September 14, 2011); (xv) September 12, 2011 (filed with the SEC on September 12, 2011); and (xvi) October 5, 2011 (filed with the SEC on October 24, 2011); and (xvii) October 24, 2011 (filed with the SEC on October 25, 2011).

The description of our common stock contained in our Registration Statement on Form 10-SB filed with the SEC on March 24, 2003, as amended and declared effective by the SEC.

Notwithstanding the foregoing, unless specifically stated otherwise, none of the information that we disclose under Items 2.02 and 7.01 of any Current Report on Form 8-K that may be listed above or that we furnish from time to time to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Mark McKinnies

Secretary of ADA-ES

8100 SouthPark Way, Unit B,

Littleton, Colorado 80120

(303) 734-1727

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to our securities offered hereby. This prospectus supplement, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. We have omitted certain parts of the registration statement as permitted by the rules and regulations of the SEC. For further information about us and our securities offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus supplement regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

Table of Contents

PROSPECTUS

ADA-ES, INC.

\$140,000,000

COMMON STOCK

PREFERRED STOCK

WARRANTS

UNITS

We may offer and sell the securities listed above from time to time in one or more offerings. We will provide specific terms of any offering in supplements to this prospectus. The preferred stock, warrants and units may be convertible into or exercisable or exchangeable for our common stock or our preferred stock. The securities may be offered separately or together in any combination and as separate series. You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in any of our securities.

We will specify in any accompanying prospectus supplement the terms of any offering. The prospectus supplement may also update or change the information set forth in this prospectus. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on the NASDAQ Capital Market or any securities exchange of the securities covered by the prospectus supplement.

Our common stock is traded on the NASDAQ Capital Market under the trading symbol ADES. On October 5, 2011, the last reported sales price for our common stock was \$15.18 per share. As of October 5, 2011, the aggregate market value of our outstanding common stock held by non-affiliates, or our public float, was approximately \$101,420,388, which was calculated based on 6,681,185 shares of outstanding common stock held by non-affiliates and a last sale closing price per share of \$15.18 on that date.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE THE SECTION ENTITLED RISK FACTORS BEGINNING ON PAGE 3 OF THIS PROSPECTUS. THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

We may sell the securities directly to investors, through agents designated from time to time or to or through underwriters or dealers or through a combination of these methods. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution. If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable commissions or discounts will be set forth in a prospectus supplement. The net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is October 12, 2011

Table of Contents**TABLE OF CONTENTS**

<u>ABOUT THIS PROSPECTUS</u>	2
<u>OVERVIEW</u>	2
<u>RISK FACTORS</u>	3
<u>FORWARD-LOOKING INFORMATION</u>	3
<u>THE SECURITIES WE MAY OFFER</u>	5
<u>USE OF PROCEEDS</u>	6
<u>DESCRIPTION OF CAPITAL STOCK</u>	6
<u>DESCRIPTION OF WARRANTS</u>	7
<u>DESCRIPTION OF UNITS</u>	9
<u>LEGAL OWNERSHIP OF SECURITIES</u>	10
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	15
<u>EXPERTS</u>	15
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	15
<u>INCORPORATION BY REFERENCE</u>	16

ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement that we have filed with the Securities and Exchange Commission (the SEC). By using a shelf registration statement, we may sell, at any time and from time to time, in one or more offerings, any combination of the securities described in this prospectus. The exhibits to our registration statement contain the full text of certain contracts and other important documents we have summarized in this prospectus. Since these summaries may not contain all the information that you may find important in deciding whether to purchase the securities we offer, you should review the full text of these documents. The registration statement and the exhibits can be obtained from the SEC as indicated under the heading Where You Can Find More Information.

This prospectus only provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that contains specific information about the terms of those securities. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described below under the heading Where You Can Find More Information.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. No person has been authorized to give any information or make any representations other than the information and those representations contained or incorporated by reference in this prospectus. You should not assume that the information provided by this prospectus or the documents incorporated by reference herein is accurate as of any date other than the date of this prospectus or the incorporated documents, regardless of the date you receive them.

We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus or a prospectus supplement is accurate as of any date other than the date on the front of the document.

Unless the context otherwise requires, references in this prospectus to ADA-ES, we, us and our refer to ADA-ES, Inc. and our consolidated subsidiaries.

OVERVIEW

Incorporated in Colorado in 1997, ADA-ES, Inc. is a leader in clean coal technology and the associated specialty chemicals, serving the U.S. and Canadian coal-fueled power plant industry. Our proprietary environmental technologies and specialty chemicals enable power plants to enhance existing air pollution control equipment, minimize mercury, CO₂ and other emissions, maximize capacity, and improve operating efficiencies, to meet the challenges of existing and pending emission control regulations. ADA-ES became a stand-alone public company through a spin-off from its previous parent company, Earth Sciences, Inc. in September

Table of Contents

2003. 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 technologies in the isolation of a laboratory without feedback from users, we work on full-scale mercury control systems that are installed on plants operated by several of the largest power companies in the United States and Canada. We assist electric utility companies to remain competitive while meeting environmental regulations.

Our major activities include:

the development and marketing of our patented refined coal technology, CyClean, for control of NO_x and mercury, which also qualifies for certain tax credits, through our Clean Coal Solutions, LLC (Clean Coal) joint venture with NexGen Refined Coal, LLC, an affiliate of NexGen Resources Corporation (NexGen), and GSFS Investments I Corp., an affiliate of The Goldman Sachs Group, Inc.,

the sale of equipment, field testing and services related to emission control (EC) including mercury for coal-fired boilers used in electric generation,

under an exclusive development and licensing agreement with Arch Coal, Inc. (Arch Coal), development and commercialization of an enhanced Powder River Basin (PRB) coal with reduced emissions of mercury and other metals,

the research and development of carbon dioxide (CO₂) capture technology through contracts supported by the Department of Energy (DOE) and industry participants,

the sale of flue gas conditioning (FGC) equipment and chemicals, and other chemicals and technologies for coal-fired boilers, and

through ADA Carbon Solutions, LLC (Carbon Solutions), our joint venture with Energy Capital Partners I, LP and its affiliated funds (ECP), of which we owned 21.7% as of July 31, 2011, the construction and commencement of operations of a Greenfield facility in Coushatta, Red River Parish, Louisiana (the AC Facility) for the manufacture of activated carbon (AC) for mercury control applications.

General Information

The address of our principal executive office is 8100 SouthPark Way, Unit B, Littleton, Colorado 80120, and our telephone number is (303) 734-1727.

RISK FACTORS

You should carefully consider the specific risks set forth under the caption Risk Factors in the applicable prospectus supplement and in our annual report on Form 10-K for the year ended December 31, 2010, Part II Item 1A of the Form 10-Q for the quarter ended March 31, 2011 and Part II Item 1A of the Form 10-Q for the quarter ended June 30, 2011, filed with the SEC, as well as any amendments thereto reflected in subsequent filings with the SEC, and in any of our other filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act that are incorporated by reference herein, before making an investment decision. For more information, see Information Incorporated by Reference above.

FORWARD-LOOKING INFORMATION

This prospectus includes and incorporates forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other

Edgar Filing: ADA-ES INC - Form 424B5

than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words anticipates, believes, estimates, expects, intends, may, plans, projects, will, and would, the negative expressions of such statements, and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements included or incorporated in this prospectus include, without limitation, statements regarding the following:

when final Maximum Achievable Control Technology (MACT)- based mercury and other regulations or pollution control requirements become effective and the impact of such regulations;

Table of Contents

expected growth and anticipated opportunities in our target markets;

expected supply and demand for our products and services;

continued funding by Congress of our DOE CO2 projects, including industry cost share of such projects;

the effectiveness of our technologies;

expected timing of conducting additional demonstrations of our technology and completing a supply agreement with Arch Coal and the amount of benefit per ton of coal our technology could provide;

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

timing of construction, installation, meeting placed in service deadlines and commencement of full-time operations and expected production levels at the RC facilities of Clean Coal;

Clean Coal's expected use of its line of credit;

our ability to develop, place into service, generate tax credits under Section 45 of the Internal Revenue Code (Section 45 tax credits) and profitably sell, lease and/or operate additional RC facilities;

possible changes in the level of our ownership of Carbon Solutions;

the expected costs, capacity of, timing of full operational capacity and anticipated sales levels at the AC Facility and the need for additional AC production lines;

the willingness and ability of ECP to continue to fund operations of the AC Facility through contributions and loans to Carbon Solutions and its subsidiaries;

whether the guaranties and commitments the Company has made will be called upon;

timing and amounts of or changes in future revenues, funding for our business and projects, margins, expenses, earnings, dividends, tax rate, cash flow, working capital, liquidity, the value of recorded intangibles and other financial and accounting measures;

the issuance by the arbitration panel of the Stipulated Final Award and the amount of estimated royalties due to Norit;

the materiality of any future adjustments to previously recorded revenue as a result of DOE audits.

who are potential competitors are and who they will be in the future, expected levels of competition in our target markets and whether we have direct competition for our technology;

expected growth in the power industry's interest in and funding for CO2 capture projects;

availability of lease space in the states we do business; and

other factors set forth above under "Risk Factors" and in the accompanying prospectus, as well as in all filings incorporated by reference into this prospectus supplement.

We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included or incorporated in this prospectus, particularly under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as well as under the heading "Quantitative and Qualitative Disclosures About Market Risk" in such Form 10-K, under the heading "Risk Factors" in Part II Item 1A of the Form 10-Q for the quarter ended March 31, 2011 and Part II Item 1A of the Form 10-Q for the quarter ended June 30, 2011, and in other reports we file with the SEC which are incorporated by reference herein that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. Any such forward-looking statements represent management's views as of the date of the document in which such forward-looking statement is contained. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change, unless otherwise required by law.

Table of Contents

THE SECURITIES WE MAY OFFER

We may offer shares of our common stock and preferred stock and warrants to purchase any of such securities as well as units consisting of one or more of these securities, with a total value of up to \$140,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering, and subject to any requirements or restrictions imposed on us under our listing agreement with the NASDAQ Capital Market or any other exchange on which our securities may be listed at the time. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity, if applicable;

rates and times of payment of dividends, if any;

redemption or conversion terms, if any;

voting or other rights, if any;

conversion prices, if any; and

important federal income tax considerations.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may sell the securities directly to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them; and

the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of common stock are entitled to one vote per share on all matters submitted to a vote of shareholders. Subject to any preferences of outstanding shares of preferred stock, holders of common stock are entitled to dividends when and if declared by our board of directors.

Edgar Filing: ADA-ES INC - Form 424B5

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. Convertible preferred stock will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

Warrants. We may issue warrants for the purchase of common stock and preferred stock in one or more series. We may issue warrants independently or together with common stock and preferred stock, and the warrants may be attached to or separate from these securities. The warrants will be evidenced by warrant certificates issued under one or more warrant agreements, which are contracts between us and an agent for the holders of the warrants. In this prospectus, we have summarized certain general features of the warrants. We will incorporate by reference into the registration statement of which this prospectus is a part the form of warrant agreement, including a form of warrant certificate that describes the terms of the series of warrants we are offering before the issuance of the related series of warrants. We urge you to read the prospectus supplements related to the series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the applicable series of warrants.

Table of Contents

Units. We may issue units consisting of common stock, preferred stock and warrants for the purchase of common stock and preferred stock in one or more series. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the prospectus supplements related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Securities and Exchange Commission, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

We will evidence each series of units by unit certificates that we will issue under a separate agreement. We will enter into the unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

USE OF PROCEEDS

Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of the securities offered hereby to finance our growth plans including:

designing, constructing and placing additional refined coal facilities into service through Clean Coal;

expanding to meet the demands resulting from the expected MACT regulations; and

for general working capital purposes, including satisfying indemnity obligations.

Pending these uses, we will likely invest the net proceeds in investment-grade, interest-bearing securities.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and certain provisions of our Amended and Restated Articles of Incorporation is a summary and is qualified in its entirety by the provisions of our Amended and Restated Articles of Incorporation.

Our authorized capital stock consists of 50,000,000 shares of common stock, no par value, and 50,000,000 shares of preferred stock, no par value. As of October 5, 2011, there were 7,668,235 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the shareholders. The holders of common stock are not entitled to cumulative voting rights with respect to the election of directors, and as a consequence, minority shareholders will not be able to elect directors on the basis of their votes alone.

Subject to preferences that may be applicable to any then outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefore. In the event of our liquidation, dissolution or winding up, holders of the common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any then outstanding shares of preferred stock. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are, and all shares of common stock to be issued under this prospectus will be, fully paid and non-assessable.

Preferred Stock

Our Amended and Restated Articles of Incorporation provide that our Board of Directors has the authority, without further action by the shareholders, to issue up to 50,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions of this preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences,

Edgar Filing: ADA-ES INC - Form 424B5

sinking fund terms and the number of shares constituting any series or the designation of a series, without further vote or action by the shareholders.

Table of Contents

We will fix the rights, preferences, privileges and restrictions of the preferred stock of each series in the certificate of designation relating to that series. We will incorporate by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description will include:

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price;

the dividend rate, period and payment date and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;

voting rights, if any, of the preferred stock;

preemption rights, if any;

restrictions on transfer, sale or other assignment, if any;

Edgar Filing: ADA-ES INC - Form 424B5

a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

If we issue shares of preferred stock under this prospectus, the shares will be fully paid and non-assessable and will not have, or be subject to, any preemptive or similar rights.

The issuance of preferred stock, whether pursuant to this offering or otherwise, could adversely affect the voting power, conversion or other rights of holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Transfer Agent and Registrar

Computershare Investor Services has been appointed as the transfer agent and registrar for our common stock. It is located at 350 Indiana Street, Suite 800, Golden, Colorado 80401, telephone (303) 262-0600.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we so indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. However, no prospectus supplement shall fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K.

Table of Contents

General

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Holders of warrants will not have any of the rights of holders of the securities purchasable upon exercise of their warrants prior to such exercise, including in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Edgar Filing: ADA-ES INC - Form 424B5

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 p.m. Eastern Time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise or to make any demand

upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Table of Contents

DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under **Description of Capital Stock** and **Description of Warrants** will apply to each unit and to any common stock, preferred stock or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Table of Contents

Title

We, the unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary. See **Legal Ownership of Securities** below.

LEGAL OWNERSHIP OF SECURITIES

We may issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depositary or warrant agent maintain for this purpose as the **holders** of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as **indirect holders** of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in street name. Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

Table of Contents

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depository participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

how it handles securities payments and notices;

whether it imposes fees or charges;

how it would handle a request for the holders' consent, if ever required;

whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;

how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and

if the securities are in book-entry form, how the depository's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depository. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depository for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

Edgar Filing: ADA-ES INC - Form 424B5

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

An investor cannot cause the securities to be registered in his or her name and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;

An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;

Table of Contents

An investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;

An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;

The depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security. We and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depositary in any way;

The depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and

Financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

The global security will terminate if one of the following special situations occurs:

if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;

if we notify any applicable trustee that we wish to terminate that global security; or

if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus in one or more of the following ways from time to time:

to or through underwriters or dealers; or

directly to purchasers, including our affiliates, or to a single purchaser.

one or more agents;

a block trade in which the broker or dealer engaged to handle the block will attempt to sell the securities as agent, but may position and resell a portion of the block as principal to facilitate the transaction; or

through a combination of any of these methods of sale.

In addition, we may issue the securities being offered by this prospectus as a dividend or distribution.

We may effect the distribution of the securities from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices.

Table of Contents

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

the type and amount of securities we are offering;

the purchase price of our securities being offered and the net proceeds we will receive from the sale;

the method of distribution of the securities we are offering;

the name or names of any agents, underwriters or dealers;

any over-allotment options under which underwriters may purchase additional securities from us;

any underwriting discounts and commissions or agency fees and commissions and other items constituting underwriters' or agents' compensation;

any discounts or concessions allowed or reallocated or paid to dealers; and

any securities exchanges on which such securities may be listed.

Sale Through Underwriters or Dealers

If we use an underwriter or underwriters in the sale of securities offered by this prospectus, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If we use an underwriter or underwriters in the sale of securities, we will execute an underwriting agreement with the underwriter or underwriters at the time we reach an agreement for sale. We will set forth in the applicable prospectus supplement the names of the specific managing underwriter or underwriters, as well as any other underwriters, and the terms of the transactions, including compensation of the underwriters and dealers. This compensation may be in the form of discounts, concessions or commissions.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission, agency fees, or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement; however, we anticipate that the maximum commission or discount to be received in any particular offering of securities will be significantly less than this amount.

No FINRA member may participate in any offering of securities made under this prospectus if such member has a conflict of interest under FINRA Rule 2720, including if 5% or more of the net proceeds, not including underwriting compensation, of any offering of securities made under this prospectus will be received by a FINRA member participating in the offering or affiliates or associated persons of such FINRA members, unless a qualified independent underwriter has participated in the offering or the offering otherwise complies with FINRA Rule 2720.

Edgar Filing: ADA-ES INC - Form 424B5

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions. If we grant any over-allotment option, the terms of any over-allotment option will be set forth in the prospectus supplement relating to those securities.

Sale Through Dealers

If we use dealers in the sale of the securities offered by this prospectus, we or an underwriter will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices to be determined by the dealers at the time of resale. The applicable prospectus supplement will set forth the names of the dealers and the terms of the transactions.

Table of Contents

Direct Sales

We may directly solicit offers to purchase the securities offered by this prospectus. In this case, no underwriters or agents would be involved. We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Sales Through Agents

Securities also may be offered and sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the securities and will describe any commissions payable to the agent. Unless otherwise indicated in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment. Any agent may be deemed to be an underwriter within the meaning of the Securities Act with respect to any sale of those securities.

Delayed Delivery Contracts

If the applicable prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. Institutions with which contracts of this type may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions, but in all cases those institutions must be approved by us. The obligations of any purchaser under any contract of this type will be subject to the condition that the purchase of the securities shall not at the time of delivery be prohibited under the laws of the jurisdiction to which the purchaser is subject. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

Our common stock is listed on the Nasdaq Global Market. Any common stock sold pursuant to a prospectus supplement will be eligible for listing and trading on the Nasdaq Global Market, subject to official notice of issuance. Unless the applicable prospectus supplement states otherwise, each other class or series of securities issued will be a new issue and will have no established trading market. We may elect to list any other class or series of securities on an exchange, but we are not currently obligated to do so. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may

Table of Contents

effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic Auctions

We also may make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you will want to pay particular attention to the description of that system we will provide in a prospectus supplement.

Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against specified liabilities, including liabilities under the Securities Act, or to contribution by us to payments they may be required to make in respect to such liabilities. The applicable prospectus supplement will describe the terms and conditions of indemnification or contribution. Some of our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business. We will describe in the prospectus supplement the nature of any such relationship and the name of the parties involved. Any lockup arrangements will be set forth in the applicable prospectus supplement.

LEGAL MATTERS

The validity of the offered securities and other matters in connection with any offering of the securities will be passed upon for us by Schuchat, Herzog & Brenman LLC, Denver, Colorado. Any underwriters will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in the prospectus supplement.

EXPERTS

The consolidated financial statements of ADA-ES, Inc. as of and for the years ended December 31, 2010 and December 31, 2009 appearing in our Annual Reports on Form 10-K for such years have been audited by Ehrhardt Keefe Steiner & Hottman PC, an independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firms as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the SEC. You may read and copy any document we file at the SEC's public reference room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at www.sec.gov.

Table of Contents

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

Our Common Stock is currently traded in the over-the-counter market and is quoted on the NASDAQ Capital Market. Reports, proxy statements and other information filed by the Company therewith can be inspected at the National Association of Securities Dealers, Inc. 1735 K Street NW, Washington, D.C. 20006.

Information about us, including our SEC filings, is also available at our Internet site at <http://www.adaes.com>. However, the information on our Internet site is not a part of this prospectus or any accompanying prospectus supplement.

INFORMATION INCORPORATED BY REFERENCE

The SEC requires us to incorporate into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this prospectus. Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically updates and supersedes previously filed information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering.

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed with the SEC on March 28, 2011 and Amendment No. 1 to our Annual Report on Form 10-K/A for the fiscal year ended December 31, 2010, filed with the SEC on July 1, 2011;

The information specifically incorporated by reference into the Annual Report from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 9, 2011;

Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2011 and June 30, 2011, filed with the SEC on May 13, 2011 and August 12, 2011, respectively;

Amendment No. 2 to our Quarterly Report on Form 10-Q/A for the fiscal quarter ended September 30, 2008, filed with the SEC on April 1, 2011;

Our Current Reports on Form 8-K dated (i) January 5, 2011 (filed with the SEC on January 5, 2011), (ii) February 15, 2011 (filed with the SEC on February 15, 2011), (iii) March 14, 2011 (filed with the SEC on March 14, 2011), (iv) March 16, 2011 (filed with the SEC on March 16, 2011), (v) March 29, 2011 (filed with the SEC on March 29, 2011), (vi) April 11, 2011 (filed with the SEC on April 11, 2011), (vii) April 19, 2011 (filed with the SEC on April 19, 2011), (viii) May 9, 2011 (filed with the SEC on May 9, 2011), (ix) May 24, 2011 (filed with the SEC on May 24, 2011), (x) May 27, 2011 (filed with the SEC on June 3, 2011), (xi) June 7, 2011 (filed with the SEC on June 7, 2011), (xii) June 8, 2011 (filed with the SEC on June 8, 2011), (xiii) August 29, 2011 (filed with the SEC on August 30, 2011), (xiv) September 9, 2011 (filed with the SEC on September 14, 2011); and (xv) September 12, 2011 (filed with the SEC on September 12, 2011);

any other filings we make pursuant to the Exchange Act after the date of filing this amendment to the registration statement and prior to effectiveness of the registration statement; and

Edgar Filing: ADA-ES INC - Form 424B5

The description of our common stock contained in our Registration Statement on Form 10-SB filed with the SEC on March 24, 2003, as amended and declared effective by the SEC.

Table of Contents

Notwithstanding the foregoing, unless specifically stated otherwise, none of the information that we disclose under Items 2.02 and 7.01 of any Current Report on Form 8-K that may be listed above or that we furnish from time to time to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

Mark McKinnies

Secretary of ADA-ES

8100 SouthPark Way, Unit B,

Littleton, Colorado 80120

(303) 734-1727

E-mail: markm@adaes.com

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this document.

Table of Contents

2,000,000 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager

LAZARD CAPITAL MARKETS

Co-Lead Manager

Baird

Co-Manager

JMP Securities

October 25, 2011