

TECOGEN INC.
Form S-4/A
January 30, 2017
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As filed with the Securities and Exchange Commission on December 21, 2016
Registration No. 333-215231

U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Amendment No. 1 to

Form S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Tecogen Inc.

(Exact name of registrant as specified in its charter)

Delaware

3585

04-3536131

(State or other jurisdiction of (Primary Standard Industrial
incorporation or organization) Classification Code Number) (I.R.S. Employer Identification No.)

45 First Avenue

Waltham, MA 02451

(781) 466-6400

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John N. Hatsopoulos

Co-Chief Executive Officer

Tecogen Inc.

45 First Avenue

Waltham, MA 02451

(781) 466-6400

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of communications to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company.

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Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
 If applicable, place an x in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third Party Tender Offer)

Title of each class of securities to be registered	Amount to be registered ⁽¹⁾	Proposed maximum offering price per unit ⁽¹⁾	Proposed maximum aggregate offering price ⁽²⁾	Amount of registration fee
Common Stock	4,662,937 shares	Not applicable	\$20,061,818	\$2,325.16

⁽¹⁾ Represents the estimated maximum number of shares of common stock of the registrant issuable to holders of common stock of American DG Energy Inc. pursuant to the Merger Agreement described herein and assumes no adjustment to the exchange ratio described in the Merger Agreement.

⁽²⁾ Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(f) of the Securities Act of 1933. The proposed maximum aggregate offering price calculated pursuant to Rule 457(f) of the Securities Act represents the product of (a) 50,684,095 shares of American DG Energy Inc. common stock (includes the number of outstanding shares as of December 19, 2016 plus shares issuable in respect of outstanding stock awards being assumed multiplied by (b) 0.092 (which is the exchange ratio) multiplied by (c) \$4.095 (which is the average of the high and low trading prices for shares of the registrant's common stock, as reported on the Nasdaq Capital Market on December 19, 2016).

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The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary joint proxy statement/prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary joint proxy statement/prospectus is not an offer to sell these securities nor should it be considered a solicitation of an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. Subject to completion, dated [*]

JOINT PROXY STATEMENT/PROSPECTUS

To: The Stockholders of Tecogen Inc. and American DG Energy Inc.

Tecogen Inc, or Tecogen, American DG Energy Inc., or ADGE, and Tecogen.ADGE Acquisition Corp Inc., a Delaware corporation and a wholly-owned subsidiary of Tecogen formed for the purpose of effecting the merger described herein, or Merger Sub, have entered into a Merger Agreement dated November 1, 2016, or the Merger Agreement, pursuant to which Merger Sub will merge with and into ADGE, or the Merger. Following the Merger, ADGE will be the surviving entity in its Merger with Merger Sub and will become a wholly-owned subsidiary of Tecogen. The Tecogen Board of Directors and the ADGE Board of Directors have unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement. A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus.

This document is a prospectus relating to the proposed issuance by Tecogen of shares of its common stock to ADGE stockholders pursuant to the Merger Agreement. If the Merger is completed, each share of ADGE common stock issued and outstanding immediately prior to the merger effective time will be exchanged for the right to receive 0.092 of a share, or the Exchange Ratio, of Tecogen common stock. The Exchange Ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. No fractional shares will be issued in the Merger, and cash will be paid in lieu thereof. Tecogen common stock is listed and traded on the Nasdaq Capital Market under the ticker symbol "TGEN" and ADGE common stock is listed and traded on the NYSE MKT under the ticker symbol "ADGE." Based on the closing price of Tecogen common stock on the Nasdaq Capital Market on November 1, 2016 of \$4.03, the last trading day before public announcement of the Merger, the Exchange Ratio represented approximately \$0.37 in Tecogen common stock for each share of ADGE common stock. Tecogen stockholders will continue to own their existing Tecogen shares of common stock following the consummation of the Merger. Based on the closing price of Tecogen common stock on the Nasdaq Capital Market of \$3.84 on December 19, 2016, the last practicable date before the date of this joint proxy statement/prospectus, the exchange represented approximately \$0.35 in Tecogen common stock for each share of ADGE common stock.

Based on the number of shares of ADGE common stock outstanding on the record date for the stockholder meetings related to the Merger, Tecogen expects to issue approximately 4,662,937 shares of Tecogen common stock to ADGE stockholders in the Merger, and expects to reserve approximately 236,164 additional shares of Tecogen common stock for issuance in connection with equity awards and other arrangements that Tecogen will assume in connection with the Merger. Upon completion of the Merger, Tecogen estimates that current Tecogen stockholders will own approximately 81% of the combined company and former ADGE stockholders will own approximately 19% of the combined company.

This document is also a joint proxy statement of Tecogen and ADGE for soliciting proxies for their respective special meetings of stockholders. At Tecogen's special meeting, Tecogen common stockholders will be asked to consider and vote on a proposal to approve the issuance of Tecogen common stock pursuant to the Merger and the other transactions contemplated by the Merger Agreement, or the Tecogen Merger Approval Proposal.

At ADGE's special meeting, ADGE common stockholders will be asked to consider and vote on a proposal to approve the Merger and the other transactions contemplated by the Merger Agreement, or the ADGE Merger Approval Proposal.

The Tecogen special meeting of stockholders will be held on [*], at [*], local time, at Tecogen's principal executive offices at 45 First Avenue, Waltham, MA 02451.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Merger Approval Proposal.

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The ADGE special meeting of stockholders will be held on [*], at [*], local time, at ADGE's principal executive offices at 45 First Avenue, Waltham, MA 02451.

The ADGE Board of Directors unanimously recommends that ADGE common stockholders vote "FOR" the ADGE Merger Approval Proposal.

This joint proxy statement/prospectus contains important information about Tecogen, ADGE, the Merger and the matters to be voted upon by Tecogen stockholders and ADGE stockholders as part of the special meetings. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled "Risk Factors" beginning on page 31.

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YOUR VOTE IS IMPORTANT. Whether or not you plan to attend Tecogen's special meeting or ADGE's special meeting, as applicable, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, please complete, sign, date and mail your proxy in the pre-addressed postage-paid envelope provided or authorize your proxy by one of the other methods specified in this joint proxy statement/prospectus or the accompanying notices. If your shares of common stock are held in "street name" by your broker or other nominee, only your broker or other nominee can vote your shares and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or you obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares. You may revoke your proxy at any time before it is voted. Please review this joint proxy statement/prospectus for more complete information regarding the merger and the special meetings.

We look forward to the successful combination of Tecogen and ADGE.

Sincerely,

Sincerely,

John N. Hatsopoulos

Benjamin Locke

Co-Chief Executive Officer Co-Chief Executive Officer

American DG Energy Inc. Tecogen Inc.

Neither the Securities and Exchange Commission nor any state securities regulatory authority has approved or disapproved of the merger or the securities to be issued under this joint proxy statement/prospectus or has passed upon the adequacy or accuracy of the disclosure in this joint proxy statement/prospectus. Any representation to the contrary is a criminal offense.

This joint proxy statement/prospectus is dated [*], and is first being mailed to the Tecogen and ADGE common stockholders on or about [*].

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TECOGEN INC.
45 First Avenue
Waltham, Massachusetts 02451
(781) 466-6400

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON [*]

To the Stockholders of Tecogen Inc.:

We are pleased to invite you to attend a special meeting of the stockholders of Tecogen Inc., or Tecogen, a Delaware corporation, which will be held at our corporate headquarters at 45 First Avenue, Waltham, Massachusetts on [*], commencing at [*] a.m., local time, to consider and vote upon a proposal, or the Tecogen Merger Approval Proposal, to approve the merger of American DG Energy Inc. with and into a wholly-owned subsidiary of Tecogen, or the Merger, pursuant to the Agreement and Plan of Merger dated as of November 1, 2016, or the Merger Agreement. This joint proxy statement/prospectus contains important information about the matters to be voted upon at the Tecogen special meeting. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled “Risk Factors” beginning on page 31.

The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of Tecogen, and (iii) directed that the Tecogen Merger Approval Proposal be submitted for consideration at the Tecogen special meeting. The Tecogen Board of Directors unanimously recommends that the Tecogen stockholders vote “FOR” the Tecogen Merger Approval Proposal. The Merger cannot be completed without the approval by the Tecogen stockholders of the Tecogen Merger Approval Proposal.

The Tecogen Board of Directors has fixed the close of business on [*], as the record date for determination of Tecogen common stockholders entitled to receive notice of, and to vote at, Tecogen’s special meeting and any postponements or adjournments of the special meeting.

The Tecogen Merger Approval Proposal requires the affirmative vote of the holders of a majority of the votes cast.

YOUR VOTE IS IMPORTANT

Whether or not you plan to attend the special meeting, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, complete, sign, date and mail your proxy card in the pre-addressed postage-paid envelope provided or, if the option is available to you, call the toll free telephone number listed on your proxy card or use the Internet as described in the instructions on the enclosed proxy card to authorize your proxy. Authorizing a proxy will assure that your vote is counted at the special meeting if you do not attend in person. If your shares of Tecogen common stock are held in “street name” by your broker or other nominee, only your broker or other nominee can vote your shares of Tecogen common stock and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares of Tecogen common stock. You may revoke your proxy at any time before it is voted. Please review the joint proxy statement/prospectus accompanying this notice for more complete information regarding the Merger and Tecogen’s special meeting.

By Order of the Board of Directors,

Benjamin Locke
Co-Chief Executive Officer

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AMERICAN DG ENERGY INC.

45 First Avenue
Waltham, Massachusetts 02451
(781) 522-6000

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD ON [*]

To the Stockholders of American DG Energy Inc.:

We are pleased to invite you to attend a special meeting of the stockholders of American DG Energy Inc., or ADGE, a Delaware corporation, which will be held at , on [*], commencing at [*] a.m., local time, to consider and vote upon a proposal, or the ADGE Merger Approval Proposal, to approve the merger of ADGE with and into ADGE.Tecogen Merger Sub Inc., a Delaware corporation formed for the purpose of effecting the merger and a wholly-owned subsidiary of Tecogen Inc., a Delaware corporation, or the Merger, with ADGE continuing as the surviving entity, pursuant to the Agreement and Plan of Merger dated as of November 1, 2016, or the Merger Agreement, by and among ADGE, Tecogen Inc and ADGE.Tecogen Merger Sub Inc., or the ADGE Merger Approval Proposal, and the other transactions contemplated by the Merger Agreement.

This joint proxy statement/prospectus contains important information about the matters to be voted upon at the ADGE special meeting. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled “Risk Factors” beginning on page 31.

The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the foregoing proposals be submitted for consideration at the ADGE special meeting. The ADGE Board of Directors unanimously recommends that the ADGE stockholders vote “FOR” the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal.

The ADGE Board of Directors has fixed the close of business on [*] as the record date for the determination of ADGE common stockholders entitled to receive notice of, and to vote at, ADGE’s special meeting and any postponements or adjournments of the special meeting.

The ADGE Merger Approval Proposal requires the affirmative vote of the holders of a majority of the votes entitled to be cast.

YOUR VOTE IS IMPORTANT

Whether or not you plan to attend the special meeting, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, complete, sign, date and mail your proxy card in the pre-addressed postage-paid envelope provided or, if the option is available to you, call the toll free telephone number listed on your proxy card or use the Internet as described in the instructions on the enclosed proxy card to authorize your proxy. If your shares of ADGE common stock are held in “street name” by your broker or other nominee, only your broker or other nominee can vote your shares of ADGE common stock and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares of ADGE common stock. You may revoke your proxy at any time before it is voted. Please review the joint proxy statement/prospectus accompanying this notice for more complete information regarding the Merger and ADGE’s special meeting.

By Order of the Board of Directors

John N. Hatsopoulos
Co-Chief Executive Officer

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ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Tecogen and ADGE from other documents that are not included in or delivered with this joint proxy statement/prospectus. See “Where You Can Find More Information; Incorporation by Reference.” This information is available from the Securities and Exchange Commission’s, or the SEC’s, website at www.sec.gov. You can also obtain the documents incorporated by reference into this joint proxy statement/prospectus, without charge, by requesting them in writing or by telephone from the appropriate company at the following addresses and telephone numbers:

Tecogen common stockholders: ADGE common stockholders:

Tecogen Inc.	American DG Energy Inc.
Attention: Investor Relations	Attention: Investor Relations
45 First Avenue	45 First Avenue
Waltham, MA 02451	Waltham, MA 02451
(781) 466-6413	(781) 522-6000
www.tecogen.com	www.americandg.com

Information included on the companies’ respective websites is not incorporated by reference into this joint proxy statement/prospectus except where specific content is expressly set forth herein.

To receive timely delivery of the requested documents in advance of the applicable special meeting, please make your request no later than , 2017.

ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS

This joint proxy statement/prospectus, which forms part of a registration statement on Form S-4 (Registration No. 333-215231) filed with the SEC by Tecogen, constitutes a prospectus of Tecogen under the Securities Act of 1933, as amended, or the Securities Act, with respect to the shares of Tecogen common stock to be issued to ADGE stockholders pursuant to the Merger Agreement. This joint proxy statement/prospectus also constitutes a proxy statement under the Securities Exchange Act of 1934, as amended, or the Exchange Act, with respect to the Tecogen special meeting and the ADGE special meeting. It also constitutes a notice of meeting with respect to each of the Tecogen and the ADGE special meetings.

You should rely only on the information contained or incorporated by reference into this joint proxy statement/prospectus. No one has been authorized to provide you with information that is different from that contained in, or incorporated by reference into, this joint proxy statement/prospectus. This joint proxy statement/prospectus is dated [*]. You should not assume that the information contained in, or incorporated by reference into, this joint proxy statement/prospectus is accurate as of any date other than the date of this document. Neither our mailing of this joint proxy statement/prospectus to Tecogen stockholders or ADGE stockholders nor the issuance by Tecogen of common stock in connection with the Merger will create any implication to the contrary.

This joint proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction in which or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Information contained in this joint proxy statement/prospectus regarding Tecogen has been provided by Tecogen, and information contained in this joint proxy statement/prospectus regarding ADGE has been provided by ADGE.

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QUESTIONS AND ANSWERS

The following are some questions that you may have regarding the proposals being considered at Tecogen and the ADGE special meetings and brief answers to those questions. You should carefully read this entire joint proxy statement/prospectus, including the Annexes and the other documents to which this joint proxy statement/prospectus refers or which it incorporates by reference because the information in this section does not provide all the information that might be important to you.

Q: What is the proposed transaction?

A: Tecogen, ADGE and ADGE.Tecogen Merger Sub Inc., or Merger Sub, a wholly-owned subsidiary of Tecogen formed for the purpose of effecting the Merger, have entered into a Merger Agreement dated November 1, 2016, pursuant to which Merger Sub will merge with and into ADGE. Following the Merger, ADGE will be the surviving entity in the Merger and will become a wholly-owned subsidiary of Tecogen. See “The Merger Agreement - Form, Effective Time and Closing.”

Q: Why is Tecogen proposing the Merger?

A: Tecogen believes that the integration of the operations of ADGE, its affiliated company, will enhance the value of the shares of Tecogen common stock held by its stockholders.

Q: Why is ADGE proposing the Merger?

A: ADGE believes that the shares of Tecogen common stock to be received by ADGE stockholders will enhance the value of the equity interest of ADGE stockholders by participation in the growth of Tecogen.

Q: If I am an ADGE stockholder, what will I receive in the proposed transaction?

A: If the Merger is completed, ADGE stockholders will receive 0.092 of a share of Tecogen common stock for each share of ADGE common stock, subject to adjustment as set forth in the Merger Agreement. You will not receive any fractional shares of Tecogen common stock in the Merger. Instead, you will be paid cash (without interest) in lieu of any fractional share interest to which you would otherwise be entitled. See “The Merger Agreement - Consideration to be Received in the Merger.”

Q: What happens if the market price of Tecogen common stock or ADGE common stock changes before the closing of the Merger?

A: No change will be made to the exchange ratio due to a change in the market price of Tecogen common stock or ADGE common stock before the Merger. Because the exchange ratio is fixed, the value of the consideration to be received by ADGE stockholders in the Merger will not depend on the market price of shares of Tecogen common stock at the time of the Merger. See “The Merger Agreement - Consideration to be Received in the Merger Agreement.”

Q: If I am a Tecogen stockholder how will I be affected by the Merger and the issuance of shares of Tecogen common stock to ADGE stockholders in the Merger?

A: After the Merger, each Tecogen stockholder will continue to own the shares of Tecogen common stock that the stockholder held immediately prior to the Merger effective time. As a result, each Tecogen stockholder will own shares of common stock in a larger company with more assets. Because Tecogen will be issuing new shares of Tecogen common stock to ADGE stockholders in the Merger, each outstanding share of Tecogen common stock immediately prior to the Merger effective time will represent a smaller percentage of the aggregate number of shares of the combined company common stock outstanding after the Merger. Upon completion of the Merger, Tecogen estimates that Tecogen stockholders will own approximately 81% of the outstanding Tecogen common stock on a fully diluted basis and former ADGE stockholders will own approximately 19% of Tecogen common stock on a fully diluted basis after giving effect to various assumptions regarding share issuances by Tecogen prior to the Merger effective time. See “Risk Factors - Risks Relating to the Merger.”

Q: Who will be the Board of Directors and management of Tecogen if the Merger is completed?

A: It is not anticipated that the Board of Directors of Tecogen will not change. Concurrent with the closing, Tecogen’s Chief Financial Officer will be replaced.

Q: Do ADGE stockholders have appraisal rights in connection with the Merger?

A: No. Under the appraisal rights provisions of the Delaware General Corporation Law, or the DGCL, ADGE stockholders are not entitled to exercise the right of objecting stockholders to receive payment of the fair value of their

shares because shares of ADGE common stock are listed on a national securities exchange. See “The Merger - No Appraisal Rights.”

Q: When is the proposed transaction expected to close?

A: The closing of the Merger will take place shortly after both ADGE and Tecogen stockholder meetings have taken place, assuming that the requisite stockholder approvals have been obtained and the other conditions to closing have been satisfied or waived (See “The Merger Agreement - Conditions to Completion of the Merger”) or such other date as agreed to by ADGE and Tecogen in writing. The Merger is expected to close in approximately 90 days on or about March 21, 2017.

Q: Why am I receiving this joint proxy statement/prospectus?

A: To complete the Merger, ADGE stockholders must vote to approve the Merger and the other transactions contemplated by the Merger Agreement, or the ADGE Merger Approval Proposal, and Tecogen stockholders must vote to approve the issuance of the shares of Tecogen common stock to be issued in connection with the Merger, or the Tecogen Merger Approval Proposal.

Tecogen and ADGE will hold separate special meetings to obtain the approval of the foregoing proposals. This joint proxy statement/prospectus contains important information about the Merger and the special meetings, which you should read carefully. The enclosed voting materials allow you to vote your shares without attending your respective meeting.

Your vote is important. Please authorize a proxy to vote your shares as promptly as possible.

Q: When and where is the Tecogen special meeting?

A: The Tecogen special meeting will be held on [*], beginning at [*], local time, at Tecogen’s principal executive offices at 45 First Avenue, Waltham, MA 02451, unless postponed to a later date or dates. See “The Tecogen Special Meeting - Date, Time, Place and Purpose of Tecogen’s Special Meeting.”

Q: When and where is the ADGE special meeting?

A: The ADGE special meeting will be held on [*], beginning at [*], local time, at ADGE’s principal executive offices at 45 First Avenue, Waltham, MA 02451, unless postponed to a later date or dates. See “The ADGE Special Meeting - Date, Time, Place and Purpose of ADGE’s Special Meeting.”

Q: Who can vote at the Tecogen special meeting?

A: All holders of record of Tecogen common stock as of the close of business on [*], the record date for determining Tecogen stockholders entitled to notice of and to vote at the Tecogen special meeting, are entitled to receive notice of and to vote at the Tecogen special meeting.

As of the record date, there were [*] shares of Tecogen common stock issued and outstanding and entitled to vote at the Tecogen special meeting, held by approximately [*] holders of record. Each share of Tecogen common stock is entitled to one vote on each proposal presented at the Tecogen special meeting. See “The Tecogen Special Meeting - Record Date; Who Can Vote at Tecogen’s Special Meeting.”

Q: Who can vote at the ADGE special meeting?

A: All holders of record of ADGE common stock as of the close of business on [*], the record date for determining ADGE stockholders entitled to notice of and to vote at the ADGE special meeting, are entitled to receive notice of and to vote at the ADGE special meeting.

As of the record date, there were [*] shares of ADGE common stock issued and outstanding and entitled to vote at the ADGE special meeting, held by approximately [*] holders of record. Each share of ADGE common stock is entitled to one vote on each proposal presented at the ADGE special meeting. See “The ADGE Special Meeting - Record Date; Who Can Vote at ADGE’s Special Meeting.”

Q: What constitutes a quorum for the Tecogen special meeting?

A: At the Tecogen special meeting, the presence in person or by proxy of stockholders entitled to cast a majority of all of the votes entitled to be cast at such meeting shall constitute a quorum. Abstentions will be counted in determining whether a quorum is present at the Tecogen special meeting. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in “street name,” will not be counted in determining whether a quorum is present. See “The Tecogen Special Meeting - Vote Required for Approval; Quorum.”

Q: What constitutes a quorum for the ADGE special meeting?

A: At the ADGE special meeting, the presence in person or by proxy of stockholders entitled to cast a majority of all of the votes entitled to be cast at such meeting on any matter shall constitute a quorum. Abstentions will be counted in

determining whether a quorum is present at the ADGE special meeting. Failures to vote, which include a failure to provide instructions to your broker or other nominee if your shares are held in “street name,” will not be counted in determining whether a quorum is present. See “The ADGE Special Meeting - Vote Required for Approval: Quorum.”

Q: What vote is required to approve each proposal at the Tecogen special meeting?

A: The Tecogen Merger Approval Proposal requires the affirmative vote of holders of a majority of the shares of Tecogen common stock voting on such proposal, assuming that a quorum is present at the Tecogen special meeting. See “The Tecogen special meeting - Vote Required for Approval: Quorum.”

Q: What vote is required to approve each proposal at the ADGE special meeting?

A: The ADGE Merger Approval Proposal requires the affirmative vote of holders of a majority of the outstanding shares of ADGE common stock entitled to vote on such proposal. See “The ADGE special meeting - Vote Required for Approval: Quorum.”

Concurrently with the execution of the Merger Agreement, Tecogen stockholders holding approximately 24.76% of Tecogen’s outstanding common stock and ADGE stockholders holding approximately 18.03% of ADGE’s outstanding common stock have indicated that they intend to vote FOR the Merger. No binding voting agreements, however, have been signed by such stockholders.

Q: How do I vote?

A: If you are a stockholder of record of Tecogen as of the record date for the Tecogen special meeting or a stockholder of record of ADGE as of the record date for the ADGE special meeting, you may vote in person by attending your special meeting or, to ensure your shares are represented at the meeting, you may authorize a proxy by:

- accessing the Internet website specified on your proxy card;
- calling the toll-free number specified on your proxy card; or
- signing and returning the enclosed proxy card in the postage-paid envelope provided.

If you hold shares of common stock of Tecogen or ADGE in the name of a broker, bank or nominee, please follow the voting instructions provided by your broker, bank or nominee to ensure that your shares are represented at the applicable special meeting. If you are a Tecogen stockholder, see “The Tecogen Special Meeting - Manner of Voting.” If you are an ADGE stockholder, see “The ADGE Special Meeting - Manner of Voting.”

Q: If my shares of Tecogen common stock are held in “street name” by my broker or other nominee, will my broker or other nominee vote my shares of Tecogen common stock for me? What happens if I abstain or my broker does not vote my shares?

A: Your shares will NOT be voted unless you instruct your broker or other nominee how to vote your shares of Tecogen common stock held in street name. If you hold your shares in a stock brokerage account or if your shares are held by a bank or other nominee (that is, in street name), you must provide your broker or other nominee with instructions on how to vote your shares. Please follow the voting instructions provided by your broker or other nominee on the enclosed voting instruction card. You may not vote shares of Tecogen common stock held in street name by returning a proxy card directly to Tecogen or by voting in person at the Tecogen special meeting unless you provide a “legal proxy,” which you must obtain from your broker or other nominee.

If you are a Tecogen stockholder, abstentions will be counted in determining the presence of a quorum. Abstentions and failures to vote, which include failures to provide instructions to your broker or other nominee if your shares are held in “street name,” will have no effect on the Tecogen Merger Approval Proposal assuming that a majority of a quorum votes FOR the Tecogen Merger Approval Proposal. See “The Tecogen Special Meeting - Abstentions and Broker Non-Votes.”

Q: If my shares of ADGE common stock are held in “street name” by my broker or other nominee, will my broker or other nominee vote my shares of ADGE common stock for me? What happens if I abstain or my broker does not vote my shares?

A: Your shares will NOT be voted unless you instruct your broker or other nominee how to vote your shares of ADGE common stock held in street name. If you hold your shares in a stock brokerage account or if your shares are held by a bank or other nominee (that is, in street name), you must provide your broker or other nominee with instructions on how to vote your shares. Please follow the voting instructions provided by your broker or other nominee on the enclosed voting instruction card. You may not vote shares of ADGE common stock held in street name by returning a proxy card directly to ADGE or by voting in person at the ADGE special meeting unless you provide a “legal proxy,” which you must obtain from your broker or other nominee.

If you are an ADGE stockholder, abstentions will be counted in determining the presence of a quorum. Abstentions will have the same effect as a vote "AGAINST" the ADGE Merger Approval Proposal. Failures to vote, which include failures to provide instructions to your broker or other nominee if your shares are held in "street name," will have the same effect as a vote "AGAINST" the ADGE Merger Approval Proposal. See "The ADGE Special Meeting - Abstentions and Broker Non-Votes."

Q: What are the anticipated material United States federal income tax consequences of the proposed Merger?

A: The Merger is intended to qualify as a reorganization, within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code. Assuming the Merger qualifies as a reorganization, a U.S. holder of ADGE common stock generally will not recognize any gain or loss upon receipt of Tecogen common stock in exchange for ADGE common stock in the Merger. It is a condition to the completion of the Merger that Tecogen and ADGE receive written opinions from their respective counsel to the effect that the Merger will qualify as a reorganization, within the meaning of Section 368(a) of the Internal Revenue Code.

Tax matters are very complicated and the tax consequences of the Merger to each ADGE stockholder may depend on such stockholder's particular facts and circumstances. ADGE stockholders are urged to consult their tax advisors to understand fully the tax consequences of the Merger. See "Material U.S. Federal Income Tax Consequences of the Merger."

Q: Where will my shares of Tecogen common stock be traded?

A: The shares of Tecogen common stock currently trade on the Nasdaq Capital Market under the symbol "TGEN." Tecogen will apply to have the new shares of Tecogen common stock issued as consideration in the Merger listed on the Nasdaq Capital Market prior to the Merger effective time, subject to official notice of issuance.

Q: How does the Tecogen Board of Directors recommend that Tecogen stockholders vote on the Merger proposal?

A: The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement, and directed that the Merger proposal described herein be submitted for consideration at the Tecogen special meeting.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Merger Approval Proposal. The Merger cannot be completed without the approval by the Tecogen stockholders of the Tecogen Merger Approval Proposal. See "The Tecogen Special Meeting - Recommendation of the Tecogen Board."

Q: How does the ADGE Board of Directors recommend that ADGE stockholders vote on the ADGE merger Approval Proposal?

A: The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the ADGE Merger Approval Proposal be submitted for consideration at the ADGE special meeting.

The ADGE Board of Directors unanimously recommends that ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal. See "The ADGE Special Meeting - Recommendation of the ADGE Board."

Q: Are there risks associated with the Merger that I should consider in deciding how to vote?

A: Yes. There are a number of risks related to the Merger that are discussed in this joint proxy statement/prospectus described under "Risk Factors."

Q: Will my rights as a stockholder of Tecogen or ADGE change as a result of the Merger?

A: The rights of Tecogen stockholders will be unchanged as a result of the Merger. Because the governing documents of Tecogen and ADGE are the same in all material respects, the rights of ADGE stockholders will not be changed, in any material respect, as a result of the Merger. At the Merger effective time, the existing charter and bylaws of Tecogen will continue to be the charter and bylaws governing all Tecogen stock. For more information regarding stockholder rights, see "Comparison of Rights of Tecogen Stockholders and ADGE Stockholders."

Q: What do I need to do now?

A: After you have carefully read this joint proxy statement/prospectus, please complete, sign and date your proxy card or voting instruction form and return it in the enclosed pre-addressed postage-paid envelope or, by authorizing your proxy by one of the other methods specified in your proxy card or voting instruction form as promptly as possible so that your shares of Tecogen common stock or ADGE common stock will be represented and voted at the Tecogen

special meeting or the ADGE special meeting, as applicable.

Please refer to your proxy card, which is included with this joint proxy statement/prospectus, or the voting instruction form forwarded by your broker or other nominee to see which voting options are available to you.

The method by which you authorize your proxy will in no way limit your right to vote at the Tecogen special meeting or the ADGE special meeting if you later decide to attend the meeting in person. However, if your shares of Tecogen common stock or ADGE common stock are held in the name of a broker or other nominee, you must obtain a “legal proxy,” executed in your favor, from your broker or other nominee, to be able to vote in person at the Tecogen special meeting or the ADGE special meeting, as applicable. Obtaining a legal proxy may take several days.

Q: How will my proxy be voted?

A: All shares of Tecogen common stock entitled to vote and which are represented by properly completed proxies received prior to the Tecogen special meeting, which are not revoked, will be voted at the Tecogen special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of Tecogen common stock should be voted on a matter, the shares of Tecogen common stock represented by your proxy card will be voted as the Tecogen Board of Directors unanimously recommends and therefore “FOR” the Tecogen Merger Approval Proposal. If you do not provide voting instructions to your broker or other nominee, your shares of Tecogen common stock will NOT be voted at the Tecogen special meeting and will be considered broker non-votes. See “The Tecogen Special Meeting - Manner of Voting.”

All shares of ADGE common stock entitled to vote and which are represented by properly completed proxies received prior to the ADGE special meeting, which are not revoked, will be voted at the ADGE special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of ADGE common stock should be voted on a matter, the shares of ADGE common stock represented by your proxy card will be voted as ADGE Board of Directors unanimously recommends and therefore “FOR” the ADGE Merger Approval Proposal.

Failures to vote, which include failures to provide instructions to your broker or other nominee if your shares are held in “street name,” will have the same effect as a vote “AGAINST” the ADGE Merger Approval Proposal. See “The ADGE Special Meeting - Manner of Voting.”

Q: Can I change my vote after I have returned a proxy or voting instruction card?

A: Yes. You may revoke your proxy or change your vote at any time before your proxy is voted at the Tecogen special meeting or the ADGE special meeting, as applicable. If you are a holder of record, you can do this in any of the three following ways:

by sending a written notice to the Secretary of Tecogen or the Secretary of ADGE, as applicable, at the applicable address set forth below, in time to be received before the Tecogen special meeting or the ADGE special meeting, as applicable, stating that you would like to revoke your proxy;

by completing, signing and dating another proxy card and returning it by mail in time to be received before the Tecogen special meeting or the ADGE special meeting, as applicable, or by completing a later dated proxy over the Internet or by telephone, in which case your later dated proxy will be recorded and your earlier proxy revoked; or if you are a holder of record, you can attend the Tecogen special meeting or the ADGE special meeting, as applicable, and vote in person, which will automatically cancel any proxy previously given, or you may revoke your proxy in person, but your attendance alone at the special meeting will not revoke any proxy that you have previously given. If you choose either of the first two methods, you must submit your notice of revocation or your new proxy to the Corporate Secretary of Tecogen or the Corporate Secretary of ADGE, as appropriate, no later than the beginning of the applicable special meeting. If your shares are held in street name by your broker or nominee, you should contact them to change your vote. If you are a Tecogen stockholder see “The Tecogen Special Meeting - Revocation of Proxies or Voting Instructions.” If you are an ADGE stockholder see “The ADGE Special Meeting - Revocation of Proxies or Voting Instructions.”

Q: If I am an ADGE stockholder that holds certificated shares of ADGE common stock, do I need to do anything now with my common stock certificates?

A: Not at the present time. After the Merger is completed, if you held certificates representing shares of ADGE common stock prior to the completion of the Merger, Tecogen’s exchange agent will send you a letter of transmittal and instructions for exchanging your shares of ADGE common stock for shares of Tecogen common stock. Upon surrender of the certificates for cancellation along with the executed letter of transmittal and other required documents described in the instructions, you will receive whole shares of Tecogen common stock and cash in lieu of any

fractional shares of ADGE common stock. Unless you specifically request to receive Tecogen stock certificates, the shares of Tecogen common stock you receive in the Merger will be issued in book-entry form. See “The Merger Agreement - Consideration to be Received in the Merger - Procedures for Surrendering of ADGE Shares.”

Q: If I am a Tecogen stockholder, do I need to do anything with respect to my common stock certificates or book-entry shares?

A: No, you are not required to take any action with respect to your Tecogen shares.

Q: What should I do if I receive more than one set of voting materials for Tecogen’s special meeting and/or ADGE’s special meeting?

A: You may receive more than one set of voting materials for Tecogen’s special meeting and/or ADGE’s special meeting, including multiple copies of this joint proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your shares of Tecogen common stock and/or ADGE common stock in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares of Tecogen common stock and/or ADGE common stock. If you are a holder of record and your shares of Tecogen common stock or ADGE common stock are registered in more than one name, you may receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive or, please authorize your proxy by telephone, or over the Internet.

Q: What happens if I am a stockholder of both Tecogen and ADGE?

A: You will receive separate proxy cards for each of Tecogen and ADGE and you must complete, sign and date each proxy card and return each proxy card in the appropriate pre-addressed postage-paid envelope or, by authorizing a proxy by one of the other methods specified in your proxy card or voting instruction card for each of Tecogen and ADGE.

Q: Do I need identification to attend Tecogen or the ADGE special meeting in person?

A: Yes. Please bring proper identification, together with proof that you are a record owner of Tecogen or ADGE common stock, as the case may be. If your shares are held in street name, please bring acceptable proof of ownership, such as a letter from your broker or an account statement showing that you beneficially owned shares of Tecogen or ADGE common stock, as applicable, on the record date.

Q: Who can help answer my questions?

A: If you have questions about the Merger or the other matters to be voted on at the special meetings or desire additional copies of this joint proxy statement/prospectus or additional proxy or voting instruction cards, please contact:

Tecogen common stockholders:	ADGE common stockholders:
Tecogen Inc.	American DG Energy Inc.
Attention: Investor Relations	Attention: Investor Relations
45 First Avenue	45 First Avenue
Waltham, MA 02451	Waltham, MA 02451
(781) 466-6413	(781) 522-6000
www.tecogen.com	www.americandg.com

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SUMMARY

The following summary highlights some of the information contained elsewhere in this joint proxy statement/prospectus and may not contain all the information that is important to you. For a more complete description of the Merger Agreement and the transactions contemplated by the Merger Agreement, Tecogen and ADGE encourage you to carefully read this entire joint proxy statement/prospectus, including the attached Annexes. We also encourage you to read the information incorporated by reference into this joint proxy statement/prospectus, which includes important business and financial information filed with the SEC regarding Tecogen and ADGE. You may obtain the information incorporated by reference into this joint proxy statement/prospectus without charge by following the instructions described under “Where You Can Find More Information: Incorporation by Reference.”

The Companies

Tecogen Inc.

Tecogen designs, manufactures, sells, and services systems that produce electricity, hot water, and air conditioning for commercial installations and buildings and industrial processes. Tecogen’s systems, powered by natural gas engines, drive electricity generators or compressors, which reduce the amount of electricity purchased from local utilities. Because Tecogen’s systems are designed to capture waste engine heat, they tend to be more energy efficient since otherwise-wasted energy can be used for water heating, space heating and/or air conditioning. The relative costs of natural gas and electricity at a proposed system site determine whether a system is economically efficient as well as energy efficient. This type of cogeneration technology is referred to as combined heat and power, or CHP.

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water; and
- High-efficiency water heaters.

All of Tecogen’s products are standardized, modular, small-scale CHP products that reduce energy costs, carbon emissions, and dependence on the electric grid. Market drivers include the price of natural gas, local electricity costs, and governmental energy policies, as well as customers’ desire to become more socially responsible. Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations; however, the economic feasibility of using our systems is not limited to these customer types. Tecogen has shipped approximately 2,500 units, some of which have been operating for over 30 years. Tecogen has 79 full-time employees and three part-time employees, including six sales and marketing personnel and 40 service personnel.

Tecogen was incorporated in the State of Delaware on September 15, 2000. Its offices are located at 45 First Avenue, Waltham, Massachusetts 02451, and its telephone number is 781-466-6400. Tecogen’s Internet address is www.tecogen.com. That website address is a textual reference only and the information on the website is not incorporated by reference herein.

American DG Energy Inc.

ADGE distributes, owns and operates clean, on-site energy systems that produce electricity, hot water, heat and cooling. ADGE’s business model is to own the equipment that it installs at customers’ facilities and to sell the energy produced by these systems to the customer on a long-term contractual basis. ADGE calls this business the ADGE “On-Site Utility”.

ADGE offers natural gas powered cogeneration systems that are highly reliable and energy efficient. Its cogeneration systems produce electricity from an internal combustion engine driving a generator, and the heat from the engine and exhaust is recovered and typically used to produce heat and hot water for use at the site. ADGE also distributes and operates water chiller systems for building cooling applications that operate in a similar manner, except that the engine’s power drives a large air-conditioning compressor while recovering heat for hot water. Cogeneration systems reduce the amount of electricity that the customer must purchase from the local utility and produce valuable heat and hot water for the site to use as required. By simultaneously providing electricity, hot water and heat, cogeneration systems also have a significant, positive impact on the environment by reducing the carbon, or CO₂, produced by

offsetting the traditional energy supplied by the electric grid and conventional hot water boilers.

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Distributed Generation of electricity, or DG, often referred to as cogeneration systems, or combined heat and power systems, or CHP, is an attractive option for reducing energy costs and increasing the reliability of available energy. DG has been successfully implemented by others in large industrial installations over 10 Megawatts, or MW, where the market has been growing for several years, and is increasingly being accepted in smaller size units because of technology improvements, increased energy costs and better economics. ADGE believes that its target market (users of up to 1 MW) has been barely penetrated and that the reduced reliability of the utility grid, increasing cost pressures experienced by energy users, advances in new, low cost technologies and DG-favorable legislation and regulation at the state and federal level will drive our near-term growth and penetration into our target market. ADGE maintains a website at www.americandg.com, but that website address is a textual reference only and the information on the website is not incorporated by reference herein.

ADGE was incorporated as a Delaware corporation on July 24, 2001 to install, own, operate and maintain complete DG systems, or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2015, ADGE had installed energy systems, representing approximately 5,445 kilowatts, or kW, 59 million British thermal units, or MMBtu's, of heat and hot water and 4,525 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated. Due to the high efficiency CHP systems, the Environmental Protection Agency, or EPA, has recognized them as a means to improve the environment.

Merger Sub

Merger Sub is a recently organized Delaware corporation formed for the purpose of effecting the Merger. Upon completion of the Merger, Merger Sub will be merged with and into ADGE and the name of the combined company will be unchanged. Merger Sub has not conducted any activities other than those incidental to its formation and the matters contemplated by the Merger Agreement.

The Merger and the Merger Agreement

Subject to the terms and conditions of the Merger Agreement, at the Merger effective time, Merger Sub will merge with and into ADGE. ADGE will be the surviving entity in the Merger and, following completion of the Merger, ADGE will become a wholly-owned subsidiary of Tecogen.

Upon completion of the Merger, each share of ADGE common stock issued and outstanding immediately prior to the Merger effective time will be exchanged for the right to receive 0.092 of a share of Tecogen common stock, or the Exchange Ratio. The Exchange Ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. No fractional shares will be issued in the Merger, and cash will be paid in lieu thereof. See "The Merger Agreement - Consideration to be Received in the Merger". Tecogen common stock is listed and traded on the Nasdaq Capital Market, and ADGE common stock is listed and traded on the NYSE MKT under the ticker symbols "TGEN" and "ADGE," respectively. Based on the closing price of Tecogen common stock on the Nasdaq National Market of \$4.03 on November 1, 2016, the last trading day before public announcement of the Merger, the Exchange Ratio represented approximately \$0.37 in Tecogen common stock for each share of ADGE common stock. Based on the closing price of Tecogen common stock on the Nasdaq Capital Market of \$3.84 on December 19, 2016, the last practicable date before the date of this joint proxy statement/prospectus, the Exchange Ratio represented approximately \$0.35 in Tecogen common stock for each share of ADGE common stock. Tecogen stockholders will continue to own their existing Tecogen shares of common stock following the consummation of the Merger. See "Comparative Tecogen and ADGE Market Price and Distribution Information" below. The value of the Merger consideration will fluctuate with changes in the market price of Tecogen and ADGE common stock. We urge you to obtain current market quotations of Tecogen common stock and ADGE common stock.

Each option to acquire shares of ADGE common stock, and each restricted stock award relating to ADGE common stock, granted before the Merger closing date under ADGE's equity plans to an employee or a non-employee director, or a participant, will remain in effect and will be exercisable for or relate to shares of Tecogen common stock based on the Exchange Ratio (with similar adjustment to the exercise price per share of each stock option). All restricted stock awards and all stock options will become 100% vested.

For a description of the treatment of all outstanding ADGE equity awards, see “The Merger Agreement - Consideration to be Received in the Merger - Treatment of Stock Options and Restricted Stock Awards.”

A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus and is incorporated herein by reference. We encourage you to carefully read the Merger Agreement in its entirety as it is the principal document governing the Merger.

Directors Following the Merger

The Board of Directors of Tecogen is not expected to change as a result of the Merger.

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Recommendation of the Tecogen Board of Directors

The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, and (ii) directed that the Tecogen Merger Approval Proposal be submitted for consideration at the Tecogen special meeting.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote “FOR” the Tecogen Merger Approval Proposal. The Merger cannot be completed without the approval by Tecogen stockholders of the Tecogen Merger Approval Proposal.

Recommendation of ADGE Board of Directors

The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the ADGE Merger Approval Proposal be submitted for consideration at the ADGE special meeting.

The ADGE Board of Directors unanimously recommends that ADGE stockholders vote “FOR” the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal.

Summary of the Risk Factors Related to the Merger

You should consider carefully all of the risk factors and other information included or otherwise incorporated by reference in this joint proxy statement/prospectus before deciding how to vote. Certain of the risks related to the Merger and the related transactions are described under “Risk Factors.” The principal risks relating to the Merger include the following:

• The exchange ratio is fixed and will not be adjusted in the event of any change in either Tecogen’s or ADGE’s stock price.

• Completion of the Merger is subject to certain conditions and if these conditions are not satisfied or waived, the Merger will not be completed. Failure to complete the Merger could have material adverse effects on Tecogen and ADGE.

• Failure to complete the Merger could negatively impact the stock prices and future business and financial results of Tecogen and ADGE.

• The pendency of the Merger could adversely affect the business and operations of Tecogen and ADGE.

• The ownership percentage of Tecogen and ADGE common stockholders will be diluted by the Merger.

Certain of Tecogen’s and ADGE’s respective directors and officers have interests in the transactions contemplated by the Merger Agreement that are different from, or in addition to, the interests of Tecogen’s and ADGE’s stockholders generally, which may create potential conflicts of interest or the appearance thereof.

• If the Merger is approved, the date on which ADGE common stockholders will receive the Merger consideration is uncertain.

The Special Meetings

Tecogen

Holders of shares of Tecogen common stock at the close of business on [*], or the Tecogen record date, are entitled to notice of, and to vote at, the Tecogen special meeting. On the Tecogen record date, there were [*] shares of Tecogen common stock outstanding and entitled to vote at the Tecogen special meeting, held by approximately [*] holders of record. Each share of Tecogen common stock is entitled to one vote.

At the Tecogen special meeting, the presence in person or by proxy of stockholders entitled to cast a majority of all of the votes entitled to be cast at such meeting shall constitute a quorum. Abstentions will be counted in determining whether a quorum is present at the Tecogen special meeting. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in “street name,” will not be counted in determining whether a quorum is present.

At the Tecogen special meeting, Tecogen stockholders will be asked to consider and vote on the Tecogen Merger Approval Proposal. The Tecogen Merger Approval Proposal requires the affirmative vote of the holders of a majority

of the votes cast on the proposal.

Your vote is very important. You are encouraged to authorize your proxy to vote your shares as promptly as possible. If you are a stockholder of record and you properly sign, date and return a proxy card, but do not indicate how your shares of Tecogen stock should be voted on a matter, the shares of Tecogen stock represented by your proxy cannot be voted. If you are a “street name” holder and you do not provide voting instructions to your broker or other nominee, your shares of Tecogen stock will NOT be voted at the Tecogen special meeting will NOT be counted towards the presence of a quorum, and will have no effect on the Tecogen Merger Approval Proposal.

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ADGE

Holders of shares of ADGE common stock at the close of business on [*], or the ADGE record date, are entitled to notice of, and to vote at, the ADGE special meeting. On the ADGE record date, there were [*] shares of ADGE common stock outstanding and entitled to vote at the ADGE special meeting, held by approximately [*] holders of record. Each share of ADGE common stock is entitled to one vote on each proposal to be voted on at the ADGE special meeting.

At the ADGE special meeting, the presence in person or by proxy of stockholders entitled to cast a majority of all of the votes entitled to be cast at such meeting on any matter shall constitute a quorum. Abstentions will be counted in determining whether a quorum is present at the ADGE special meeting. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in “street name,” will not be counted in determining whether a quorum is present.

At the ADGE special meeting, ADGE stockholders will be asked to consider and vote on the ADGE Merger Approval Proposal. The ADGE Merger Approval Proposal requires the affirmative vote of holders of a majority of the outstanding shares of ADGE common stock entitled to vote on such proposal.

Your vote is very important. You are encouraged to authorize your proxy to vote your shares as promptly as possible. If you are a stockholder of record and you properly sign, date and return a proxy card, but do not indicate how your shares of ADGE stock should be voted on a matter, the shares of ADGE stock represented by your proxy cannot be voted. If you are a “street name” holder and you do not provide voting instructions to your broker or other nominee, your shares of ADGE stock will NOT be voted at the ADGE special meeting and will NOT be counted towards the presence of a quorum and will have the same effect as a vote “AGAINST” the ADGE Merger Approval Proposal.

Opinion of Tecogen’s Financial Advisor Regarding the Merger

In connection with the Merger, at the meeting of the Tecogen Board of Directors on November 1, 2016, Tecogen’s financial advisor, Scarsdale Equities LLC, or Scarsdale, delivered to the Tecogen Board of Directors its oral opinion, later confirmed by delivery of a written opinion dated November 10, 2016, that, based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by Scarsdale as set forth in its written opinion, the Exchange Ratio of 0.092 of a share of Tecogen common stock for each share of ADGE common stock pursuant to the Merger Agreement was fair, from a financial point of view, to Tecogen.

The full text of the written opinion of Scarsdale is attached to this proxy statement/prospectus as Annex B and is incorporated herein by reference. The summary of the opinion of Scarsdale in this proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion and you should read the opinion in its entirety for a discussion of the assumptions made, procedures followed, matters considered and qualifications and limitations upon the review undertaken by Scarsdale in rendering its opinion. Scarsdale’s opinion addresses only the fairness from a financial point of view of the exchange ratio pursuant to the Merger Agreement to Tecogen as of the date of such opinion and does not address any other aspect of the Merger. The opinion did not in any manner address the prices at which Tecogen common stock will trade following consummation of the Merger or at any time. Scarsdale’s opinion does not constitute a recommendation to any holder of Tecogen common stock or ADGE common stock as to how to vote at the special meetings to be held in connection with the Merger or whether to take any other action with respect to the Merger. See “The Merger - Opinion of Tecogen’s Financial Advisor.”

Opinion of Financial Advisor to the ADGE Special Committee

At the meeting of the ADGE Special Committee on October 31, 2016, the financial advisor to the ADGE Special Committee, Cassel Salpeter & Co., LLC, or Cassel Salpeter, delivered its oral opinion to the ADGE Special Committee, which was later confirmed by delivery of a written opinion dated October 31, 2016, that, as of such date, and based upon and subject to the factors, assumptions and limitations set forth therein, the Exchange Ratio of 0.092 of a share of Tecogen common for each share of ADGE common stock in the Merger pursuant to the Merger Agreement was fair from a financial point of view to the holders ADGE common stock other than John Hatsopoulos, George Hatsopoulos and their respective affiliates (the “Unaffiliated Holders”).

The full text of the written opinion of Cassel Salpeter, dated October 31, 2016, which sets forth assumptions made, procedures followed, matters considered and limitations on the review undertaken in connection with the opinion, is attached to this proxy statement as Annex C. The summary of the Cassel Salpeter opinion provided in this proxy statement is qualified in its entirety by reference to the full text of the written opinion. Cassel Salpeter provided its opinion for the information and assistance of the ADGE Special Committee and, with the consent of the ADGE Special Committee, ADGE's Board of Directors in connection with the ADGE Special Committee's and, as applicable, the ADGE Board of Directors' consideration of the Merger. The Cassel Salpeter opinion is not a recommendation as to how any holder of ADGE's common stock should vote with respect to the transaction contemplated by the Merger Agreement or any other matter. See "The Merger - Opinion of Financial Advisor to the ADGE."

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Stock Ownership of Directors and Executive Officers of Tecogen

At the close of business on Tecogen's record date, Tecogen's directors and executive officers and affiliates held and were entitled to vote 3,617,058 shares of Tecogen common stock, collectively representing 18.13% of the shares of Tecogen common stock issued and outstanding and entitled to vote on that date. Tecogen's directors and executive officers and their affiliates have indicated that they expect to vote "FOR" the Tecogen Merger Approval Proposal. See "The Tecogen Special Meeting - Vote Required for Approval: Quorum."

Stock Ownership of Directors and Executive Officers of ADGE

At the close of business on the ADGE record date, ADGE's directors and executive officers and affiliates held and were entitled to vote 4,292,413 shares of ADGE common stock, collectively representing 8.47 % of the shares of ADGE common stock issued and outstanding and entitled to vote on that date. ADGE's directors and executive officers have indicated that they expect to vote "FOR" the ADGE Merger Approval Proposal. See "The ADGE Special Meeting - Vote Required for Approval: Quorum."

Interests of Tecogen's Directors and Executive Officers in the Merger

Aside from Charles Maxwell and Benjamin Locke, no director or officer of Tecogen has an interest in the Merger that is different from, or in addition to, the interests of an ordinary Tecogen stockholder . The Tecogen Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, approving the Merger Agreement, and recommending that Tecogen stockholders approve the Tecogen Merger Approval Proposal. For detail regarding Charles Maxwell's and Benjamin Locke's interest in the Merger, please see "The Merger - Interests of Tecogen's Directors and Executive Officers in the Merger."

Interests of ADGE's Directors and Executive Officers in the Merger

In considering the recommendation of ADGE's Board of Directors to approve the ADGE Merger Approval Proposal, ADGE's stockholders should be aware that ADGE's directors and executive officers have financial interests in the Merger that are different from, or in addition to, the interests of ADGE stockholders generally. These interests may create potential conflicts of interest. ADGE's Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, and in reaching its decision to approve the Merger Agreement and recommend that ADGE stockholders approve the ADGE Merger Approval Proposal. See "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger."

Listing of Tecogen Common Shares

Approval of the listing on the Nasdaq Capital Market of the shares of Tecogen common stock to be issued as consideration for the Merger, subject to official notice of issuance, is a condition precedent to each party's obligation to complete the Merger. Tecogen has agreed to use its reasonable best efforts to cause such shares of Tecogen common stock to be approved for listing on the Nasdaq Capital Market prior to the Merger effective time, subject to official notice of issuance. If the Merger is completed, shares of ADGE common stock will cease to exist and will be deregistered under the Exchange Act. See "The Merger - Listing of Tecogen Common Stock" and "The Merger - Deregistration of ADGE Common Stock."

No Appraisal Rights

No appraisal, dissenters or similar rights will be available in connection with the Merger or other transactions contemplated by the Merger Agreement. See "The Merger - No Appraisal Rights."

Expected Timing of the Merger

Tecogen and ADGE currently expect to complete the Merger by approximately March 21, 2017, subject to receipt of required stockholder approvals and the satisfaction or waiver of other closing conditions.

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Conditions to Completion of the Merger

As more fully described elsewhere in this joint proxy statement/prospectus and in the Merger Agreement, the completion of the Merger depends on a number of conditions being satisfied or, where legally permissible, waived.

These conditions include, among others:

- ADGE stockholder approval of the ADGE Merger Approval Proposal;
- Tecogen stockholder approval of the Tecogen Merger Approval Proposal;
- the absence of any law or order prohibiting the Merger;
- the SEC having declared effective the registration statement of which this joint proxy statement/prospectus is a part;
- and
- the approval for listing on the Nasdaq Capital Market of the shares of Tecogen common stock to be issued in connection with the Merger.