United States SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

File	d by the Registrant □ Filed by a Party other than the Registrant □
Chec	ck the appropriate box:
	Preliminary Proxy Statement
	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
X	Definitive Proxy Statement
	Definitive Additional Materials
	Soliciting Material under §240.14a-12
	Advanced Emissions Solutions, Inc. (Name of Registrant as specified in its Charter)
	(Name of Person(s) Filing Proxy Statement, if other than the Registrant)
Payr	nent of Filing Fee (Check all boxes that apply):
X	No fee required
	Fee paid previously with preliminary materials.
П	Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11



April 27, 2023

Dear Fellow Stockholder:

On behalf of the Board of Directors, we are pleased to invite you to the 2023 Annual Meeting of Advanced Emissions Solutions, Inc.'s Stockholders, which will be held at 9:00 a.m. (Mountain Time) on June 13, 2023. We are pleased to announce that this year's Annual Meeting will again be a virtual meeting via live webcast on the Internet. You will be able to electronically attend the Annual Meeting and vote during the meeting by visiting www.virtualshareholdermeeting.com/ADES2023. To enter the Annual Meeting, you will need the 16-digit control number located on the Notice of Internet Availability of the Proxy Materials, on your proxy card or in the instructions that accompanied your proxy materials. We recommend that you log in at least 10 minutes before the meeting to ensure you are logged in when the meeting starts.

At the Annual Meeting, you will be asked to elect seven directors named in the Proxy Statement, provide your advisory approval of our executive compensation, ratify the appointment of Moss Adams LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023, approve the issuance of our common stock, upon conversion of our Series A Preferred Stock issued on February 1, 2023, and approve the Sixth Amendment of the Company's Tax Asset Protection Plan.

The accompanying notice of meeting and this Proxy Statement provide specific information about the Annual Meeting and explain the various proposals. Please read these materials carefully.

Thank you for your continued support of and interest in our Company.

Greg P. Marken
President, Chief Executive Officer and Treasurer



ADVANCED EMISSIONS SOLUTIONS, INC.

8051 E. Maplewood Ave., Ste. 210 Greenwood Village, Colorado 80111 Telephone: (888) 822-8617

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Our Stockholders:

The Annual Meeting of Stockholders of Advanced Emissions Solutions, Inc. ("ADES" or the "Company"), a Delaware corporation, will be held at 9:00 a.m. (Mountain Time) on June 13, 2023 via live webcast on the Internet, which can be accessed by visiting www.virtualshareholdermeeting.com/ADES2023, where you will be able to electronically attend the Annual Meeting and vote on the following:

- 1. To elect seven directors of the Company named in this Proxy Statement;
- 2. To approve, in an advisory vote, our executive compensation;
- 3. To ratify the appointment of Moss Adams LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023;
- 4. To approve the issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series A Preferred Stock issued on February 1, 2023;
- 5. To approve the Sixth Amendment of the Company's Tax Asset Protection Plan; and
- 6. To transact such other business as may properly come before the Annual Meeting or any postponement or adjournment thereof.

Stockholders of record at the close of business on April 17, 2023 are entitled to notice of and to vote at the Annual Meeting. The approximate date on which the proxy materials, including this Proxy Statement, are first being made available to stockholders is April 27, 2023.

Our stockholders are cordially invited to attend the Annual Meeting via a virtual meeting. Stockholders of record and many of our stockholders will be able to electronically attend the Annual Meeting as well as vote during the live webcast of the meeting by visiting www.virtualshareholdermeeting.com/ADES2023 and entering the 16-digit control number included in our notice of Internet Availability of the Proxy Materials, on your proxy card or in the instructions that accompanied your proxy materials. We recommend that you log in at least 10 minutes before the meeting to ensure you are logged in when the meeting starts. For specific instructions, please refer to "General Matters" in this proxy statement and the instructions on the proxy card.

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

By Order of the Board of Directors,

Greg P. Marken President, Chief Executive Officer and Treasurer April 27, 2023

Important Notice

Regarding Internet Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on June 13, 2023

The Company's Proxy Statement and Annual Report to Stockholders are Available at: www.proxyvote.com

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Please note that website references throughout this document are provided for convenience only, and the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

PROXY STATEMENT - GENERAL MATTERS

This Proxy Statement is furnished to the stockholders of Advanced Emissions Solutions, Inc., a Delaware corporation, ("ADES" or the "Company") in connection with the solicitation of proxies by the Company's Board of Directors (the "Board"), to be voted at our annual meeting of stockholders ("Annual Meeting" or "meeting" or "annual meeting") to be held at 9:00 AM (Mountain Time) on Tuesday, June 13, 2023, via virtual meeting, and any postponements or adjournments thereof. This Proxy Statement and accompanying form of proxy are first being made available to our stockholders on or about April 27, 2023. The shares represented by all proxies that are properly executed and submitted will be voted at the meeting in accordance with the instructions indicated thereon, and if no instructions are given, then to the extent permitted by law, in the discretion of the proxy holder. Throughout this Proxy Statement, the terms "we," "us," "our" and "our Company" refer to Advanced Emissions Solutions, Inc. and, unless the context indicates otherwise, our consolidated subsidiaries.

PARTICIPATION IN VIRTUAL MEETING

In accordance with Delaware law, the Board has authorized that the Annual Meeting be held via virtual meeting, and accordingly, stockholders and proxy holders virtually attending the Annual Meeting are deemed present in person for purposes of determining the presence of a quorum.

For stockholders of record, the only item of information needed to access the Annual Meeting from the website is the 16-digit control number located in the Notice of Internet Availability of Proxy Materials or on your proxy card. If your shares are held in street name (as explained below) and your voting instruction form or Notice of Internet Availability indicates that you may vote those shares through the http://www.proxyvote.com website, then you may access, participate in, and vote at the annual meeting with the 16-digit access code indicated on that voting instruction form or Notice of Internet Availability. Otherwise, stockholders who hold their shares in street name should contact their bank, broker or other nominee (preferably at least 5 days before the annual meeting) and obtain a "legal proxy" in order to be able to attend, participate in or vote at the annual meeting.

Please have the Notice of Internet Availability of Proxy Materials or proxy card in hand when you access the website and then follow the instructions.

VOTING RIGHTS AND VOTE REQUIRED

Our Board has fixed the close of business on April 17, 2023 as the record date (the "Record Date") for determination of stockholders entitled to notice of and to vote at the meeting. On the Record Date, 32,599,417 shares of our common stock were issued and outstanding, each of which entitles the holder thereof to one vote on all matters that may come before the Annual Meeting. Of the shares of our common stock issued and outstanding and entitled to vote, 3,814,864 shares of common stock were issued to Arq Limited in the Transaction, as described further below under "Proposal Four—Approval of Preferred Stock Conversion Proposal," and are not entitled to vote on Proposal Four under the listing rules of the Nasdaq Stock Market ("Nasdaq"). We anticipate that these 3,814,864 shares of common stock will be voted in favor of Proposal Four for purposes of adopting the proposal under Delaware law. However, to comply with Nasdaq rules, we will instruct the inspector of elections to conduct a separate tabulation that subtracts the votes represented by these shares from the total number of shares voted on Proposal Four to determine whether that proposal has been adopted in accordance with applicable Nasdaq rules. As of the Record Date, there were 5,362,927 shares of Preferred Stock issued and outstanding (as described below under "Proposal Four—Approval of Preferred Stock Conversion Proposal"). The Preferred Stock is not entitled to vote on the matters being considered at the Annual Meeting.

We do not have any class of voting securities outstanding other than our common stock. A minimum of one-third of the shares of our common stock issued and outstanding entitled to vote at the Annual Meeting must be represented at the Annual Meeting in person or by proxy in order to constitute a quorum. An abstention or a "broker non-vote" (as explained below) will be counted as present for determining whether the quorum requirement is satisfied. If a quorum exists, actions or matters other than the election of the Board are approved if the votes cast in favor of the action exceed the votes cast opposing the action unless a greater number is required by the Delaware General Corporation Law (the "DGCL") or our Second Amended and Restated Certificate of Incorporation. In accordance with our bylaws, our Board designated any uncontested election of directors, including election of directors at this Annual Meeting, as a proposal to be subject to the plurality voting standard. As such, the seven nominees receiving the highest number of votes cast will be elected as directors. Cumulative voting is not allowed for any purpose.

If, as of the Record Date your shares were held in an account at a brokerage firm, bank, dealer, or other similar organization, then that firm or organization is the stockholder of record for purposes of voting at the Annual Meeting and you are considered the beneficial owner of shares held in "street name." If you are a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares held in your account. If you do not instruct your broker or other agent on how to vote your shares, your broker or other agent, in its discretion, may vote your shares on routine matters or they may elect not to vote your shares. Whether or not a matter is routine is subject to the determination by the stock exchange. When a broker or other agent holding shares for a beneficial holder does not receive voting instructions from the beneficial owner and the broker or other agent does not have discretionary voting power on the matter(s), it will result in a "broker non-vote" for the matters on which the broker or other agent cannot vote. Broker non-votes on a particular proposal are considered present for purposes of determining a quorum, but will not be treated as votes cast with respect to any proposal.

Abstentions and "broker non-votes" will have no effect on the outcome of proposals voted upon at the Annual Meeting, except we do not expect there to be any "broker non-votes" for purposes of the ratification of our independent registered public accounting firm, as broker or other agents are expected to have discretionary authority to vote on this proposal (although they are not required to do so).

Unless instructions to the contrary are marked, or if the proxy card is properly executed but no instructions are specified, shares represented by proxies will be voted:

FOR ALL the persons nominated by the Board for Directors for election at the Annual Meeting, being: Laurie Bergman, Jeremy Blank, Richard Campbell-Breeden, Carol Eicher, Gilbert Li, Julian McIntyre, and L. Spencer Wells;

FOR the approval, on an advisory basis, of the compensation of the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including compensation tables and narrative discussion as set forth under the Executive Compensation section of this Proxy Statement;

FOR the ratification of the appointment of Moss Adams LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023;

FOR the issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series A Preferred Stock issued on February 1, 2023; and

FOR the approval of the Sixth Amendment of the Company's Tax Asset Protection Plan.

We do not know of any other matter or motion to be presented at the Annual Meeting. If any other matter or motion should be presented at the Annual Meeting upon which a vote must be properly taken, to the extent permitted by law, the persons named in the accompanying form of proxy intend to vote such proxy in the discretion of such person as the directors of the Company may recommend, including any matter or motion dealing with the conduct of the Annual Meeting.

Voting by Mail, via the Internet or by Telephone

Stockholders whose shares are registered in their own names may vote by mailing a completed proxy card, via the internet or by telephone. Instructions for voting via the internet or by telephone are set forth on the included proxy card. To vote by mailing a proxy card, sign and return the available proxy card to the address set forth on the proxy card and your shares will be voted at the Annual Meeting in the manner you direct. If no directions are specified but the proxy card is properly executed, your shares will be voted as described above.

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

Any stockholder who completes a proxy or votes via the internet or by telephone may revoke the action at any time before it is exercised at the Annual Meeting by delivering written notice of such revocation to the Company's General Counsel and Secretary (Clay Smith), 8051 E. Maplewood Ave., Ste. 210, Greenwood Village, Colorado 80111, by submitting a new proxy executed at a later date, or by joining the virtual meeting and voting such stockholder's shares in a manner different to his, her, or its previously completed proxy card.

The Company is bearing the costs of this solicitation of proxies. In addition to the mailing of these proxy materials, the solicitation of proxies or votes may be made in person, by telephone, or by electronic communication by certain of our directors, officers, and employees, who will not receive any additional compensation for such solicitation activities.

PROPOSAL ONE

ELECTION OF DIRECTORS OF THE COMPANY

Our Nominating and Governance Committee has recommended to our Board the slate of seven directors— Laurie Bergman, Jeremy Blank, Richard Campbell-Breeden, Carol Eicher, Gilbert Li, Julian McIntyre, and L. Spencer Wells—for election by our stockholders, and the Board approved the recommendation and the slate of directors. Laurie Bergman was appointed to the Board to fill the vacancy created by Mr. Simonton's resignation from the Board, which is effective of 8 am (Mountain Time) on the date of the Annual Meeting. As such, Ms. Bergman is standing for re-election at this Annual Meeting. We thank Mr. Simonton for his years of service. Ms. Bergman was recommended to the Board by third-party search firm. Jeremy Blank, Richard Campbell-Breeden and Julian McIntyre were recommended by Arq Limited as stipulated in the Purchase Agreement (defined below) and appointed as directors by the Board in connection with the acquisition of Arq Limited's subsidiaries ("Arq Acquisition") (see - "Related Person Transactions" below for more information). The other nominees were most recently elected at the 2022 Annual Meeting. Each director will hold office until the next annual meeting of stockholders and thereafter until a successor is elected and qualified. The seven nominees receiving the highest number of votes cast will be elected as directors. Cumulative voting is not permitted in the election of directors.

Each of the nominees has consented to be named herein and to serve if elected. We do not anticipate that any nominee will become unable or unwilling to accept nomination or election, but if this should occur, the persons named in the proxy intend to vote for the election in his or her stead of such other person as the Board may recommend or the size of the Board may be decreased. Because the Annual Meeting will be held virtually this year, we anticipate that all directors will participate in the Annual Meeting this year. Last year all four directors then serving participated in the annual meeting.

Detailed biographical information about each director nominee can be found under the Corporate Governance section of this Proxy Statement. The following table sets forth certain information, including expected committee membership as of June 13, 2023, as to each director nominee of the Company:

Director Name	Audit	Compensation	Nominating and Governance
Laurie Bergman	•		*
Jeremy Blank			
Richard Campbell-Breeden		•	
Carol Eicher	•	•	♦
Gilbert Li			*
Julian McIntyre			
L. Spencer Wells (1)	•	•	
♦ = Chair			
◆ = Member			

No family relationship exists between any directors or executive officers.

The Company does not have a specific policy on diversity of the Board. Instead, the Board evaluates nominees in the context of the Board as a whole, with the objective of recommending a group that can best support the success of the business and, based on the group's diversity of experience, backgrounds, represent stockholder interests through the exercise of sound judgment. The following table sets forth the Board diversity as of the Record Date:

Total number of Directors:

7

	Female	Male	Non-Binary	Did not disclose gender
Gender Identity ⁽¹⁾	1	6	_	_
Demographic Background:				
Asian		1		_
White	1	5	-	_

⁽¹⁾ Upon the effective time of Ms. Bergman's appointment to the Board right before the Annual Meeting, the Company will have 2 female and 5 male Board members.

Director Compensation information for the fiscal year ended December 31, 2022 can be found under the "Director Compensation" section of this Proxy Statement.

Board Recommendation

Our Board recommends that you vote "FOR ALL" of the persons nominated above, being Laurie Bergman, Jeremy Blank, Richard Campbell-Breeden, Carol Eicher, Gilbert Li, Julian McIntyre and L. Spencer Wells.

CORPORATE GOVERNANCE

Board Membership Criteria

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

- An understanding of business and financial affairs and the complexities of an organization that operates as a public company;
- A genuine interest in representing all of our stockholders and the interests of the Company overall;
- A willingness and ability to spend the necessary time required to function effectively as a director;
- An open-minded approach to matters and the resolve and ability to independently analyze matters presented for consideration;
- A reputation for honesty and integrity that is above reproach;
- Any qualifications required of independent directors by the Nasdaq Stock Market and applicable law;
 and
- As to any candidate who is an incumbent director (who continues to be otherwise qualified), the extent to which the continuing service of such person would promote stability and continuity amongst the Board as a result of such person's familiarity and insight into the Company's affairs, and such person's prior demonstrated ability to work with the Board as a collective body.

The Nominating and Governance Committee of the Board seeks directors with strong reputations and experience in areas relevant to our strategy and operations, such as environmental and diversified chemical technologies, and government regulation and relations, as well as those with overall business acumen and experience in financial matters. Each of our director nominees set forth in this Proxy Statement holds or has held senior executive positions in complex organizations and has operating experience that meets this objective, as described below. In these positions, the director nominees have also gained experience in core management skills, such as strategic and financial planning, public company financial reporting, corporate governance, executive compensation, risk management and leadership development. The Nominating and Governance Committee also believes that each of the director nominees has other key attributes that are critical to the composition of an effective Board: integrity and demonstrated impeccable ethical standards, sound judgment, analytical skills, the ability to work together in a constructive and collaborative fashion and the commitment to devote significant time and energy to service on the Board and its Committees.

The specific experience, qualifications and background of each director for election by our stockholders is as follows:



Laurie Bergman

Director Nominee

Age 45

Ms. Bergman has extensive financial and executive leadership expertise, including serving as the Chief Financial Officer of Liquid Environmental Solutions, provider of waster removal services, since June 2021. Prior to that, Ms. Bergman served as Vice President, Chief Accounting Officer and Corporate Controller of UGI Corporation, a natural gas and electric power distribution company (February 2019 to June 2021). She previously served as the Chief Accounting Officer and Corporate Controller of AmeriGas Propane, Inc., a propane delivery company (2016 to 2019) and as its Group Director – Financial Planning and Operations (2014 to 2016). Ms. Bergman joined AmeriGas Propane, Inc. in 2006 as Manager – Disbursements and served in various roles for AmeriGas Propane, Inc., including Assistant Controller (2011 to 2012), Director of Financial Analysis and Planning (2012 to 2013), and Group Director of Financial Planning and Revenue Management (2013 to 2014). Prior to that, she held positions of increasing responsibility at AmeriGas Propane, Inc. Previously, Ms. Bergman served as a Financial Analysis Specialist and a Disbursement Operations Manager at CIGNA Corporation from 2001 to 2005.

Ms. Bergman's qualifications to serve as director on the Board include her extensive leadership of corporate accounting functions in large publicly traded organizations and skills to serve as a director, with specific expertise as a financial expert. Further, Ms. Bergman's educational background includes a Bachelor of Business Administration degree in Finance from Temple University and a Master of Business Administration from Temple University.

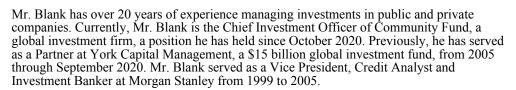
Other Boards and Positions:

- QNB Corporation (OTC Bulletin Board: QNBC) since 2020: independent director, member of Audit Committee
- Institute of Management Accountants since 2020: Global Board of Directors

Jeremy Blank

Director since 2023

Age 44



Mr. Blank's qualifications to serve as director on the Board include his service on several boards of both private and public companies for over 18 years, with a specific expertise in finance.

Other Boards and Positions:

- Insightee Ltd since 2014: Director, Audit Committee Chair
- Arg Limited 2015 2023: Director
- Enovix Corp (NASDAQ: ENVX) 2018 2021: Director



Richard Campbell-Breeden

Director since 2023

Age 61

Mr. Campbell-Breeden possesses over 30 years of investment banking and mergers & acquisitions related expertise. He spent 28 years at Goldman Sachs, of which he was a partner for 16 years. During his tenure at Goldman Sachs, Mr. Campbell-Breeden ran the UK investment banking businesses in Europe (London) was Vice Chairman of Investment Banking for Asia Pacific (Hong Kong), was a director of Goldman Sachs (Asia) LLC and was a member of the Asian Commitments Committee. Mr. Campbell-Breeden is the founder of Omeshorn Capital Advisors, a firm that specializes in M&A and capital raising advice, which was founded in 2016.

Mr. Campbell-Breeden's qualifications to serve as director on the Board include his service on several public and private company boards, having over 10 years of experience, with a specific expertise in finance.

Other Boards and Positions:

- Julius Bear Group, Swiss bank listed in Zurich, since 2018: Director, Chair of the Nominations and Compensation Committee, member of the Risk and Governance Committee
- Arg Limited 2018 2023: Director, Chairman of the Board
- Parkinson's UK, since 2022, Co-chair of Virtual Biotech Fund Raising Board



Carol Eicher

Director since 2019

Age 64

Ms. Eicher has extensive public company executive leadership and operational expertise, having worked more than 35 years in the chemical industry. She held senior management roles with Dow Chemical Co., Rohm and Haas Co., Ashland, Inc. and E.I. DuPont de Nemours and Co. In addition, she was CEO and Chair of a private equity portfolio company and led the successful sale of that company.

Ms. Eicher's qualifications to serve as director on the Board include her extensive public and private company board leadership experience having served on public company boards for more than 10 years, with a specific expertise in governance.

Other Boards and Positions:

- Arconic Corporation (NYSE: ARNC) since 2020: independent director, member of Governance Committee
- Tennant Company (NYSE: TNC) since 2008: independent director, Chair of the Governance Committee, member of the Compensation Committee, former member of the Audit Committee
- A Schulman Company (Nasdaq: SHLM): 2017-2018; independent director and member of the Audit and Compensation Committees
- Innocor, Inc.: 2014 -2017 CEO; 2017-2018 non-executive board chair



Gilbert Li

Director since 2016

Age 45

Mr. Li is currently the Co-Founder and Managing Partner of Alta Fundamental Advisers LLC, a private investment company, holding this position since January 2013. Alta Fundamental Advisers LLC holds approximately 6.2% of the equity interests in the Company. From February 1, 2018 to May 1, 2021, Mr. Li also served as a manager on the Board of Managers of Tinuum Group, LLC ("Tinuum Group"), in which we hold equity interests of 42.5% as of December 31, 2022. He has spent his career focused on value-oriented investing across the capital structure. From January 2009 through January 2013, Mr. Li was an investment analyst for JMB Capital Partners, a \$1.3 billion hedge fund. He has also previously held the roles of portfolio manager, trader and investment analyst at Merrill Lynch, Watershed Asset Management and J.P. Morgan Investment Management.

Mr. Li's qualifications to serve as director on the Board include his over 20 years of industry experience and provides unique insights to various energy, alternative energy, coal and tax credit-related companies.

Other Boards and Positions:

Alta Fundamental Advisers since 2013: Co-Founder and Managing Partner



Julian McIntyre

Director since 2023

Age 48

Mr. McIntyre is the founder and former Chief Executive Officer of Arq Limited (between 2015 and 2023). He has extensive experience as an entrepreneur, founding several companies in the oil and gas, energy, and telecommunications industries. In 2021, Mr. McIntyre was a founding shareholder of Greenfire Resources, a large oil producer in Alberta, Canada. He was, in 2014, the founder of a large natural gas operator in the Rocky Mountains and served as director until 2017.

Mr. McIntyre's qualifications to serve as director on the Board include his service on several public and private company boards, having over 20 years of experience, with a specific expertise in entrepreneurial business growth.

Other Boards and Positions:

Greenfire Resources Inc. since 2020: Director



L. Spencer Wells

Director since 2014

Age 52

Mr. Wells has over 20 years of experience as an investor and financial analyst and is a founding Partner of Drivetrain Advisors, a provider of fiduciary services to the alternative investment community. Prior to founding Drivetrain Advisors in 2013, Mr. Wells served as a Senior Advisor at TPG Special Situations Partners from 2010 to 2012. Mr. Wells was a partner of TPG Special Situations Partners, during which time he helped to create and manage an investment portfolio approximated at \$2.5 billion. From 2002 until 2009, Mr. Wells served as a Partner and a member of the Investment Committee at Silverpoint Capital. While at Silverpoint, he covered the energy, chemicals and building products sectors and managed an investment portfolio estimated at \$1.3 billion. Mr. Wells has previously served on the Boards of over 20 public and private companies over the last ten years, including Roust Corporation, Affinion Group, Inc. and Syncora Holdings, Ltd.

Mr. Wells has extensive executive leadership and financial expertise, having over 20 years of involvement as a financial analyst and senior advisor to various companies.

Mr. Wells' qualifications to serve as director on the Board include extensive public and private company board leadership experience having served on public company boards for more than 10 years, with specific expertise in governance of companies undergoing significant change such as asset purchases and sales, incourt or out-of-court restructurings and liability management.

Other Boards and Positions:

- NextDecade Corporation (Nasdaq: NEXT) since 2017: Director, Chair of the Audit Committee, member of the Nominating and Corporate Governance Committee
- Vantage Drilling International since 2016: Director, Chair of the Compensation Committee, member of the Audit Committee
- Parker Drilling Company since 2018: Director, Chair of the Compensation Committee, member of the Finance and Strategic Planning Committee, member of the Nominating and Corporate Governance Committee
- Town Sports International Holdings, Inc. from 2014 to 2020: Director, Chair of the Compensation Committee and member of the Audit Committee
- Samson Resources II, LLC since 2017: Director
- Jones Energy, Inc. from 2018 -2019: Director

Director Independence

Currently our current directors consists of six independent directors, as defined under the applicable Nasdaq listing standards (J. Taylor Simonton, Richard Campbell-Breeden, Carol Eicher, Gilbert Li, Julian McIntyre, and L. Spencer Wells). The Board has also determined that Laurie Bergman is independent, as defined under the applicable Nasdaq listing standards. The Board determined that Mr. Blank is not independent due to his affiliation with the Community Fund, as described below under "Related Person Transactions." The Board considered Mr. McIntyre's prior employment with Arq, which terminated upon him becoming a director of the Company and determined that it would not impair Mr. McIntyre's independence under the applicable SEC and Nasdaq rules.

The Board maintains audit, compensation, and nominating and governance committees, each of which was at all times during 2022, is currently comprised and will be comprised as of the Annual Meeting and thereafter solely of independent directors under applicable independence standards of the Nasdaq listing rules.

Board and Committee Meetings and Attendance at Meeting of Stockholders

The Board currently has three committees: the Audit Committee, the Compensation Committee, the Nominating and Governance Committee.

The Board met 19 times in 2022. At each of the Board meetings, the independent directors then serving on the Board were polled to determine if they believed an "executive session" was needed. In 2022, the Board or Committees held eight executive sessions of independent directors only where management of the Company was excluded. The Audit Committee met eight times in 2022. The Compensation Committee met four times in 2022. The Nominating and Governance Committee met five times in 2022. All of the incumbent directors attended more than 75% of the meetings of the Board and the committees of which they were members during 2022.

Directors are expected to attend all Board and respective Committee meetings. In addition, directors are expected to make their best efforts to attend the Company's annual meeting of stockholders either in person or telephonically. All four then incumbent directors attended last year's Annual Meeting of Stockholders.

Stockholder Communications to Directors

Any stockholder or any other interested party may communicate directly with the Board (or any individual director or Chair of the Board) by writing to the Chair of the Board, Advanced Emissions Solutions, Inc., 8051 E.

Maplewood Ave., Ste. 210 Greenwood Village, Colorado 80111 or by emailing the Board through the "Contact" page on our website at www.advancedemissionssolutions.com. Any such communication should state the number of shares owned of record or beneficially owned by the stockholder making the communication. Provided that such communication addresses a legitimate business issue, the Company or the Chair will forward the stockholder's communication to the appropriate director. For any communication relating to accounting, auditing or fraud, such communication will be forwarded promptly to the Chair of the Audit Committee.

Code of Ethics

We have adopted a Code of Ethics and Business Conduct that includes a code of ethics as defined in Item 406(b) of SEC Regulation S-K. Our Code of Ethics and Business Conduct incorporates our Insider Trading Policy, which applies to our officers, directors, and employees, including the principal executive officer, principal financial officer, principal accounting officer or controller or other persons performing similar functions. A copy of our Code of Ethics and Business Conduct is available on our website at www.advancedemissionssolutions.com. We intend to disclose any amendments to our Code of Ethics and Business Conduct, or waivers of such provisions granted to executive officers and directors, on our website in accordance with, and to the extent required by, the SEC and Nasdaq rules. Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

Board Leadership Structure and Role in Risk Oversight

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

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

Our Board receives quarterly updates from our CEO and other members of executive management regarding enterprise risks, including operation, financial, legal and regulatory and strategic. These risks are evaluated on a short-term, intermediary and long-term basis. Management has a systemic and integrated approach to overall risk management that includes the identification of risks and mitigation plans.

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

Audit Committee

Our Board has appointed an Audit Committee currently consisting of Messrs. Simonton and Wells and Ms. Eicher. Mr. Simonton currently serves as the Chair of the Audit Committee. Mr. Simonton has resigned from the Board and will no longer be a member of the Audit Committee, effective as of 8 am (Mountain Time) on the date of the Annual Meeting (the "Effective Time"). Ms. Bergman has been appointed to fill his vacancy on the Board and as Audit Committee Chair effective as of the Effective Time. Our Board determined that Messrs. Simonton and Wells and Ms. Bergman and Eicher are each an "audit committee financial expert." Each Audit Committee member, including Ms. Bergman, is "independent" under the applicable independence standards of the SEC and Nasdaq Stock Market, including heightened independent standards applicable to audit committee members, and a brief listing of their relevant experience is stated in their biography above under the caption entitled "Directors of the Company."

The role and functions of the Audit Committee are set out in the Audit Committee Charter. The role of the Audit Committee is one of oversight of the services performed by the Company's independent registered public accounting firm. The Audit Committee's functions include the following:

- Reviewing and assessing the Audit Committee Charter annually;
- Overseeing the Company's compliance with legal and regulatory requirements, including the Code of Ethics and Business Conduct and approving related party transactions;
- Overseeing the Company's processes to identify and manage business and financial risk;
- Appointing, approving the compensation of, and reviewing the Company's relationships with, its
 independent registered public accounting firm and/or other auditors and assessing the impact such
 relationships may have on the auditors' objectivity and independence;
- Taking other appropriate action to evaluate the independence of the outside auditors;
- Reviewing and considering the matters identified in Public Company Accounting Oversight Board ("PCAOB") professional auditing standards with the outside auditors and management;
- Reviewing and discussing the Company's financial statements and report on internal control with the outside auditors;
- Reviewing the financial reporting process and discussing with management and our independent registered public accounting firm the interim and annual financial statements that we file with the SEC; and
- Reporting to the Board on all such matters. In performing its oversight function, the Audit Committee
 relies upon advice and information received in its discussions with the Company's management and
 independent registered public accounting firm.

The Audit Committee pre-approves all audit or non-audit services performed by our independent registered public accounting firm in accordance with Audit Committee policy and applicable law.

The Audit Committee has a written charter, a copy of which is available on our website at www.advancedemissionssolutions.com under the "Leadership & Governance" section of "ADES Investors." Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

Compensation Committee

Our Board has appointed a Compensation Committee currently consisting of Ms. Eicher and Messrs. Li and Wells. Mr. Wells currently serves as the Chair of the Compensation Committee. The responsibilities of the Compensation Committee, as set forth in the Compensation Committee Charter, include reviewing our executive compensation programs to analyze their alignment with attracting, retaining and motivating our executive officers to achieve our business objectives; establishing annual and long-term performance goals for our executive officers and evaluating their performance in light of such goals; reviewing, approving and, when appropriate, making recommendations concerning our long-term incentive plans; reviewing and making recommendations regarding stockholder proposals related to compensation; and administering our equity-based and employee benefit plans.

Each year, the Compensation Committee reviews, modifies (if necessary), and approves the goals and objectives relevant to the compensation of the Chief Executive Officer and the other Named Executive Officers, as well as the executive compensation program as a whole, including performance goals for the annual cash incentive program, if applicable, and long-term equity awards. In addition, the Compensation Committee is responsible for reviewing the performance of the Chief Executive Officer within the framework of our executive compensation goals and objectives. Based on this evaluation, the Compensation Committee sets the compensation of the Chief Executive Officer. See "Executive Compensation" below for additional information.

The Compensation Committee has a written charter, a copy of which is available on our website at www.advancedemissionssolutions.com under the "Leadership & Governance" section of "ADES Investors." Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

Nominating and Governance Committee

Our Board has appointed a Nominating and Governance Committee currently consisting of Ms. Eicher and Messrs. Li and Simonton. Ms. Eicher currently serves as the Chair of the Nominating and Governance Committee. Mr. Simonton has resigned from the Board and will no longer be a member of the Nominating and Governance Committee, effective as of the Effective Time. Ms. Bergman has been appointed to fill his vacancy on the Board and as a member of the Nominating and Governance Committee effective as of the Effective Time.

The responsibilities of the Nominating and Governance Committee include:

- Reviewing and recommending to the Board the size and composition of the Board;
- Identifying and recommending director nominees for election to the Board;
- Reviewing non-management director compensation;
- Submitting the same to the entire Board for approval;
- Overseeing the annual self-evaluation of the Board;
- Recommending the structure and composition of Board committees to the entire Board for approval;
- Monitoring in conjunction with the Audit Committee compliance with our Code of Ethics and Business Conduct:
- Approving any waivers thereto with respect to directors and executive officers;
- Recommending individuals to serve as Chair of the Board and periodic review of the Chief Executive Officer; and
- Reviewing the Chief Executive Officer's recommendations for individuals to serve as executive officers and analyzing and recommending such persons to the Board.

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

We do not have a formal policy with respect to the consideration of diversity in the identification of director nominees, but the Nominating and Governance Committee strives to select candidates for nomination to the Board with a variety of backgrounds and complementary skills so that, as a group, the Board possesses the appropriate talent, skills, perspectives and expertise to oversee the Company's businesses. The Board assesses its effectiveness in this regard as part of the annual board and director evaluation process.

Under the Nominating and Governance Committee Charter, the Nominating and Governance Committee will consider nominees submitted by our stockholders. Recommendations of individuals that meet the criteria set forth in the Nominating and Governance Committee Charter for election at our 2024 annual meeting of stockholders may be submitted to the Nominating and Governance Committee in care of Clay Smith, General Counsel and Secretary, at 8051 E. Maplewood Ave., Ste. 210, Greenwood Village, Colorado 80111 no later than December 31, 2023. The Nominating and Governance Committee evaluates nominees recommended by stockholders using substantially the same criteria it uses to evaluate all other candidates.

The Nominating and Governance Committee has a written charter, a copy of which is available on our website at www.advancedemissionssolutions.com under the "Leadership & Governance" section of "ADES Investors." Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

RELATED PERSON TRANSACTIONS

The charter of our Audit Committee requires all related person transactions to be reviewed and approved by the Audit Committee. A related person transaction is, defined as any transaction, arrangement, or relationship (including any indebtedness or guarantee of indebtedness), or any series of similar transactions, arrangements, or relationships, in which (a) the aggregate amount involved will or may be expected to exceed \$120,000, (b) the Company is a participant, and (c) any Related Person has or will have a direct or indirect material interest (other than solely as a result of being a director or trustee (or any similar position) or a less than 10 percent beneficial owner of another entity). A "Related Person" is any (a) person who is an executive officer, director, or nominee for election as a director of the Company, (b) greater than five percent beneficial owner of our outstanding common stock, or (c) Immediate Family Member of any of the foregoing. An "Immediate Family Member" is any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and any person (other than a tenant or employee) sharing the household of a person. We do not have written policies or procedures for related person transactions but rely on the Audit Committee's exercise of business judgment, consistent with Delaware law, in reviewing such transactions.

Other than transactions described below, there have not been any "related person" transactions that require disclosure under Item 404 of Regulations S-K.

In connection with the acquisition of Arq Limited's subsidiaries ("Arq Acquisition"), the Company appointed three new directors to the Board (the "New Directors"), each of whom was a director of Arq Limited and is considered a related person as of the Acquisition Date. New Directors included Jeremy Blank, Richard Campbell-Breeden and Julian McIntyre.

Also, on February 1, 2023, the Company entered into Subscription Agreements (the "Subscription Agreements") with certain persons (the "Subscribers") pursuant to which the Subscribers subscribed for and purchased shares of Common Stock for an aggregate purchase price of approximately \$15.4 million and at a price per share of \$4.00 (the "PIPE Price Per Share" and such transaction, the "PIPE Investment"). The securities issued to the Subscribers under the Subscription Agreements were issued pursuant to an exemption from registration under Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), Rule 506 of Regulation D, which is promulgated thereunder, and Regulations S of the Securities Act. Messrs. Blank, Campbell-Breeden and McIntyre, either individually or through their affiliated entities were Subscribers in the PIPE Investment in the amount of \$2.5 million, \$0.2 million, and \$4.8 million, respectively.

On August 19, 2022, the Company and CF Global Credit, LP ("CF Global") executed a commitment letter pursuant to which CF Global offered to provide a \$10.0 million term loan (the "Term Loan") to the Company, of which \$8.5 million was the net proceeds. The proceeds of the Term Loan are intended to be utilized for the general corporate purposes of the Company and its subsidiaries.

As a requirement of the Purchase Agreement, and on February 1, 2023, the Company, as borrower, certain of its subsidiaries, as guarantors, and CF Global, as administrative agent and lender, entered into the Term Loan upon execution of a Term Loan and Security Agreement. CF Global is an affiliate of one of the Company's directors, Jeremy Blank, who is Chief Investment Officer of Community Fund. Mr. Blank was appointed on February 1, 2023 in conjunction with the Arq Acquisition and is considered a related person effective February 1, 2023. Mr. Blank is entitled to a portion of interest and fees given his ownership position in CF Global, which amount has not exceeded \$120,000 since the beginning of the last completed fiscal year but is expected to exceed this amount on a go-forward basis.

DIRECTOR COMPENSATION

Our Nominating and Governance Committee has responsibility for reviewing the compensation plan for our non-management directors annually and making recommendations to the entire Board for approval. The Nominating and Governance Committee has not delegated authority to any other person to determine director compensation. Our management has made recommendations to the Nominating and Governance Committee regarding their views as to the appropriate amount and form of compensation (i.e., cash or stock) and tax and accounting ramifications of such compensation.

Based on its review of director compensation practices of the 2020 Peer Group (as discussed in more detail on page 30) and other market information, the Compensation Committee did not adjust director compensation for 2022. For the Annual Retainer, directors continue to be paid at least 50% in the form of restricted Common Stock that vest in four quarterly installments, as described below.

Compensation Component	January 1, December 3	
Annual Retainer	\$147,850, with at least 50% paid in restricted stock	
Chair of the Board Retainer	\$	32,500
Chair of the Audit Committee Retainer	\$	20,000
Chair of the Compensation Committee Retainer	\$	12,500
Chair of the Nominating and Governance Committee Retainer	\$	10,000
Compensation Committee Member Service Retainer	\$	10,000
Audit Committee Member Service Retainer	\$	7,500
Nominating and Governance Member Service Retainer	\$	5,000
Board of Managers of Tinuum Group, LLC Service Retainer	\$	20,000

^{*}Amounts shown are on an annual basis. Unless specified otherwise, all amounts are payable in cash.

All directors also receive reimbursement for reasonable out-of-pocket expenses incurred in connection with meetings of our Board. In addition to the compensation provided under our director compensation program for 2022, each of Ms. Eicher and Messrs. Simonton and Wells earned an additional cash fee of \$100,000 in consideration for their enhanced services provided in connection with the Arq Acquisition.

The following table provides information regarding the compensation of our non-employee directors for the fiscal year ended December 31, 2022:

Name	Fees earned or paid in cash (\$) (1)	Stock awards (\$) (2)(3)	Total (\$)
Carol Eicher	201,425	70,489	271,914
Gilbert Li	88,922	70,489	159,411
J. Taylor Simonton (4)	198,925	70,489	269,414
L. Spencer Wells	246,425	70,489	316,914

(1) The cash amounts earned by each director are made up of the following amounts:

Name	Annual Retainer (\$)	Annual Committee Chair Retainer (\$)	Annual Committee Retainer (\$)	Other Cash Compensation	Total (\$)
Carol Eicher	73,925	10,000	17,500	100,000	201,425
Gilbert Li	73,925	_	14,997	_	88,922
J. Taylor Simonton (4)	73,925	20,000	5,000	100,000	198,925
L. Spencer Wells	73,925	45,000	27,500	100,000	246,425

(2) The grant date fair value of the restricted shares granted to non-employee directors in fiscal 2022 is set forth in the following table and is computed in accordance with FASB ASC Topic 718, based on the closing price per share on the date of grant.

Grantees	Shares (per director)	 it Date Fair (per director)	Grant Date
Eicher, Li, Simonton and Wells	15,159	\$ 70,489	7/1/2022

⁽³⁾ As of December 31, 2022, our non-employee directors held the following number of shares of unvested restricted stock, which were granted in 2022: Ms. Eicher—7,580, Mr. Li—7,580, Mr. Simonton—7,580 and Mr. Wells—7,580.

⁽⁴⁾ Mr. Simonton has chosen not to stand for re-election at the Annual Meeting and ceased being a director as of the Effective Time.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Common Stock

The following table provides information with respect to the beneficial ownership of our Common Stock by: (1) each current director of the Company or director nominee, (2) each named executive officer currently serving the Company, (3) all directors and executive officers as a group, and (4) each person beneficially owning more than 5% of our outstanding Common Stock. We base the share amounts shown on each person's beneficial ownership as of March 31, 2023, including options exercisable, or shares issuable upon settlement of restricted stock units, within 60 days thereof, unless we indicate some other basis for the share amounts. Percentage ownership is calculated based on 32,599,417 shares outstanding as of March 31, 2023, including securities deemed outstanding pursuant to Rule 13d-3(d)(1) under the Exchange Act. For persons beneficially owning more than 5% of our outstanding Common Stock, we have used the most recent ownership filings related to the below table. Except as noted below, each of the persons named below has sole voting and investment power for the respective shares.

Named Executive Officers, Directors and Director Nominees (1)	Current Shares Beneficially Owned (1)	Percent of Shares Beneficially Owned
Laurie Bergman		*
Jeremy Blank (2)	1,898,658	5.82 %
Richard Campbell-Breeden ⁽³⁾	149,940	*
Carol Eicher	44,808	*
Morgan Fields	65,920	*
Gilbert Li (4)	2,006,972	6.16 %
Greg P. Marken	186,416	*
Julian McIntyre (5)	2,656,933	8.15 %
J. Taylor Simonton	65,821	*
L. Spencer Wells	65,777	*
Joe M. Wong	81,913	*
All Directors and Executive Officers as a Group (11 persons)	7,223,158	22.16 %
5% Shareholders:		
Alta Fundamental Advisers LLC ⁽⁵⁾	2,006,972	6.16 %
Allard Services Limited ⁽⁶⁾	2,636,370	8.09 %
YGF 100 LP ⁽²⁾	1,855,388	5.69 %

^{*} Less than 1%

- (1) Except as otherwise noted and for shares held by a spouse and other members of the person's immediate family who share a household with the named person, the named persons have sole voting and investment power over the indicated shares. This column also includes shares held in trust that are beneficially owned. Beneficial ownership of some or all of the shares listed may be disclaimed. The address of each of our executive officers and directors is 8051 E. Maplewood Ave., Ste. 210, Greenwood Village, CO 80111.
- (2) Mr. Blank reported being the beneficial owner of 1,898,658 shares, of which 1,855,388 shares are held by YGF 100 LP ("YGF") and 43,270 shares are held by Community SPV GP LP. Mr. Blank is the ultimate control person of YGF and is an investor in YGF; therefore he is an indirect beneficial owner of a portion of these shares. Further, Mr. Blank is the ultimate control person of Community SPV GP LP. Mr. Blank is an investor in Community SPV GP LP and therefore is an indirect beneficial owner of a portion of these shares. Mr. Blank disclaims beneficial ownership of these shares except to the extent of his pecuniary interest therein. Included in the amount beneficially owned was 760,823 shares of common stock issuable upon conversion of the preferred stock, which is convertible upon shareholder approval and is being voted on at the Annual Meeting. Also included in the amount beneficial owned are 9,839 shares representing those shares issued pursuant to the dividend declaration that occurred on March 31, 2023 with a record date of April 14, 2023.

- (3) Mr. Campbell-Breeden reporting being the beneficial owner of 149,940 shares, of which 142,542 shares are held by Omeshorn Holdings Ltd. Mr. Campbell-Breeden is a director of Omeshorn Holdings Ltd. and therefore is an indirect beneficial owner of the securities reported herein. Included in the amount beneficially owned was 52,038 shares of common stock issuable upon conversion of the preferred stock, which is convertible upon shareholder approval and is being voted on at the Annual Meeting. Also included in the amount beneficial owned are 673 shares representing those shares issued pursuant to the dividend declaration that occurred on March 31, 2023 with a record date of April 14, 2023.
- (4) Alta Fundamental Advisers LLC ("Alta") and Alta Fundamental Advisers SP LLC report being the beneficial owner of 2,006,972 shares that are directly held by their clients, funds, and affiliates (the "Accounts") that are managed by Alta. Mr. Li, a director of the Company, is a Managing Partner of Alta. In addition, Mr. Li is an investor in one or more of these Accounts and therefore is an indirect beneficial owner of a portion of these shares. Alta and Mr. Li disclaim beneficial ownership of these shares except to the extent of their pecuniary interest therein. Alta's address is 1500 Broadway, Suite 704, New York, NY 10036.
- (5) Mr. McIntyre reported being the beneficial owner of 2,656,933 shares, of which 2,636,370 shares are held by Allard Services Limited and 20,563 shares are held by Stannard Limited. Mr. McIntyre controls Allard Services Limited and therefore is an indirect beneficial owner of the securities reported herein. Further, Mr. McIntyre's spouse controls Stannard Limited and therefore Mr. McIntyre may be deemed to be an indirect beneficial owner of the securities reported herein. Included in the amount beneficially owned was 778,061 shares of common stock issuable upon conversion of the preferred stock, which is convertible upon shareholder approval and is being voted on at the Annual Meeting. Also included in the amount beneficial owned are 10,062 shares representing those shares issued pursuant to the dividend declaration that occurred on March 31, 2023 with a record date of April 14, 2023.

PROPOSAL TWO

APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION PAID TO COMPANY'S NAMED EXECUTIVE OFFICERS

Pursuant to Section 14A of the Exchange Act, we are seeking a non-binding advisory vote to approve the compensation of named executive officers as disclosed in the section of this Proxy Statement titled "Executive Compensation." Although this vote is advisory and is not binding on the Company, the Compensation Committee of the Board will take into account the outcome of the vote when considering future executive compensation decisions. We believe that our compensation philosophy and practices are consistent with market practices, designed to retain key executives and reward company performance, and aligned with long-term stockholder interests. This proposal will be deemed approved, on a non-binding advisory basis, if the votes cast in favor of the proposal exceed the votes cast opposing the proposal.

The Board proposes the following resolution for approval by the stockholders:

RESOLVED, that the stockholders approve the compensation of the Company's named executive officers as disclosed in this Proxy Statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which includes the compensation tables and related narrative discussion).

The Board currently has a policy of holding advisory votes to approve executive compensation every year and currently expects the next advisory vote to approve executive compensation following the 2023 annual meeting to be held at the 2024 annual meeting.

Board Recommendation

Our Board recommends a vote "FOR" the proposal to approve, on an advisory basis, the Company's compensation paid to named executive officers.

Executive Officers of the Company

The following table sets forth certain information about our executive officers as of the date of this Proxy Statement:

Name	Age	Position
Greg P. Marken	41	President, Chief Executive Officer and Treasurer
Morgan Fields	42	Chief Accounting Officer
Joe M. Wong	62	Chief Technology Officer

All officers hold office until their successors are appointed, or until their earlier death, resignation or removal. The specific experience, qualifications and background of each current executive officer are as follows:

Greg P. Marken



President, Chief Executive Officer and Treasurer Business Experience:

Greg P. Marken has been the President, Chief Executive Officer and Treasurer of ADES since July 2020. Prior to his appointment as President and Chief Executive Officer, Mr. Marken served as the Chief Financial Officer, Treasurer and Secretary from March 2018 through June 2020. He also has previously served as the Company's Chief Accounting Officer and various other roles with the Company. Mr. Marken also serves as a Manager and Officer of ADES subsidiaries. Mr. Marken has over 15 years of experience related to leadership of various teams.

Prior to joining ADES, Mr. Marken was a Senior Manager in the assurance practice at Ernst & Young, LLP in both Dallas and Denver, where he served a variety of public and private clients.

Education:

Mr. Marken holds a Bachelor's degree in Accounting and Master's degree in Finance from Texas A&M University. Mr. Marken has a CPA license in Texas and Colorado and is a member of the AICPA and the Colorado Society of CPAs.

Morgan Fields



Chief Accounting Officer

Business Experience:

Ms. Fields served as VP of Accounting of ADES from March 1, 2021 to August 12, 2021, when the Board appointed Ms. Fields as Chief Accounting Officer. Ms. Fields has consulted with the Company on various projects since 2019, including assisting with system implementations and oversight of internal control over financial reporting framework. Prior to working with the Company, Ms. Fields' career included being the Director of Accounting for Cerapedics, Inc., a biotechnology company, from 2018 to 2019 and the Chief Accounting Officer for Rezolute, Inc. (RZLT), a biopharmaceutical company, from 2014 to 2018. Before that, she held various other accounting and finance roles, including Assurance Director, with RSM US LLP. Ms. Fields has over 15 years of accounting and consulting experience serving a variety of companies and industries.

Education:

Ms. Fields holds a Bachelors and Masters of Accounting from the University of Northern Iowa.



Chief Technology Officer

Business Experience:

Mr. Wong has over 35 years of industrial leadership experience in research & development, product development and business growth in specialty materials. Prior to joining ADES as Chief Technology Officer in 2018, Mr. Wong served as the Chief Technology Officer for ADA Carbon Solutions, a subsidiary of ADES, from 2012 to 2018 and VP of Technology from 2011 to 2012. Before ADA Carbon Solutions, Mr. Wong worked for three years in private consulting, preceded by 21 years with MeadWestvaco Corporation in senior leadership positions for the Specialty Chemicals and Research & Development sectors.

Education:

Mr. Wong holds a PhD in Chemical Engineering from the University of Texas.

EXECUTIVE COMPENSATION

In this section, we provide an analysis and explanation of our compensation program and the compensation earned by our named executive officers for the fiscal year ended December 31, 2022. We are a "smaller reporting company" and the following compensation disclosures are intended to comply with the scaled disclosure requirements applicable to smaller reporting companies. Although the rules allow us to provide less detail about our executive compensation program, our Compensation Committee is committed to providing the information necessary to help stockholders understand our executive compensation-related decisions. Accordingly, this section includes supplemental narratives that describe the 2022 executive compensation program for our named executive officers.

The Company's named executive officers ("NEOs") for 2022 were:

Name	Age	Positions
Greg P. Marken	41	President, Chief Executive Officer and Treasurer
Morgan Fields	42	Chief Accounting Officer
Joe M. Wong	62	Chief Technology Officer

Summary Compensation Table

The following table presents information regarding compensation earned by or awards to our NEOs during fiscal years 2022 and 2021:

Name and Principal Position	Year	Salary (\$)	Bonus (\$) (1)	Stock Awards (\$) (2)	Non-Equity Incentive Plan Compensation (\$) (3)	All Other Compensation (\$) (4)	Total (\$)
			= v== (v) (s)	(-)	(4) (5)	(4) (1)	
Greg P. Marken	2022	470,085	184,000	463,461	545,100	12,428	1,675,074
President, Chief Executive Officer and Treasurer	2021	457,308	_	361,987	170,000	11,978	1,001,273
Morgan Fields	2022	279,019	101,600	237,794	181,545	9,150	809,108
Chief Accounting Officer	2021	193,962	_	176,722	_	5,189	375,873
Joe M. Wong	2022	312,710	61,200	267,193	241,803	18,222	901,128
Chief Technology Officer	2021	304,386	_	208,692	91,500	17,772	622,350

- (1) Because the Short-Term Incentive Plan (the "STIP") has mandatory performance measures that must be achieved before there is any payout to NEOs, amounts paid under the STIP are shown in the Non-Equity Incentive Plan Compensation column of the table, rather than the Bonus column. Amounts earned in 2022 represent retention awards paid to the NEOs, as described in more detail under "Narrative Disclosure to Summary Compensation Table Retention Agreements" below.
- (2) The amounts in this column represent the aggregate grant date fair values of restricted stock awards ("RSAs") and performance share units ("PSUs") computed in accordance with FASB ASC Topic 718. These grant date fair values have been determined based on the assumptions and methodologies discussed in Note 12 of the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022. PSU awards are subject to market-based performance conditions relating to the relative placement of the Company's total stockholder return ("TSR") for the three-year performance period as compared to the respective TSRs of a specified group of peer companies. The table below presents the PSU awards granted for the fiscal year ended December 31, 2022 based on an earned percentage of 100% (grant date fair value disclosed above) and an earned percentage of 200%, which is the highest level of performance conditions that can be achieved. The difference between the "Stock Award" amounts in the table above and the "PSU-if earned, target (\$)" amounts in the table below represents the grant date fair values attributable to the RSAs.

Name	PSU - if earned, target (\$)	PSU - if earned, maximum (\$)
Greg P. Marken	277,957	555,914
Morgan Fields	142,613	285,226
Joe M. Wong	160,249	320,498

- (3) The amounts in this column represent the bonuses earned for the applicable year under the STIP.
- (4) The All Other Compensation amounts for each NEO for 2022 are made up of the amounts in the table below:

Name	Matching contributions to 401(k) (\$)	Other (\$) (5)	Total (\$)
Greg P. Marken	9,150	3,278	12,428
Morgan Fields	9,150	_	9,150
Joe M. Wong	9,150	9,072	18,222

(5) The amounts in this column represent premiums paid by the Company for individual disability insurance policies maintained for Messrs. Marken and Wong for up to \$102,000 per year.

Narrative Disclosure to Summary Compensation Table

Overview of Executive Compensation Program

Our Compensation Committee is charged with establishing the Company's philosophy for executive compensation and the approval, oversight, implementation and administration of executive compensation and benefits. Generally, the President and Chief Executive Officer of the Company makes recommendations to the Compensation Committee regarding executive compensation other than for himself; however, authority to approve compensation, performance goals and objectives for all NEOs is vested in the Compensation Committee.

Our philosophy for executive compensation is set forth in a document entitled "Executive Compensation Philosophy and Objectives" (the "EC Philosophy") reviewed annually by the Compensation Committee to ensure the EC Philosophy remains appropriate. The EC Philosophy is designed to support achievement of our strategies and goals, thereby creating long-term value for our stockholders and customers and ensuring our ability to recruit and retain highly qualified executive employees. Our EC Philosophy:

- Supports the Company's vision, mission, strategy, and values to generate profitability and sustained growth
 in the long-term best interests of our stockholders;
- Aligns executive compensation with measures of performance tied to the strategic and operational performance of the business and stockholder returns;
- Rewards executives on the basis of merit for individually and collectively achieving a leadership culture, innovation and excellence within the Company, and delivering sustained high performance to the Company, taking into consideration each executive's qualifications, level of responsibility and contribution to the Company's long-term performance;
- Encourages competency-building by linking career development, performance management and compensation rewards;
- Attracts and retains the best executive talent and a highly qualified diverse workforce within a nondiscriminatory, merit-based compensation program; and
- Uses external compensation data to benchmark comparable positions in similar industries and companies
 within our geographical region as one key factor in establishing the competitiveness of our executive
 salaries, incentives and benefits.

We believe that our compensation policies and practices do not motivate excessive or imprudent risk-taking. We note the following key aspects of our compensation policies and practices in making this determination:

- The Company's EC Philosophy is based on balanced performance metrics that promote disciplined progress towards long-term Company goals in addition to the short-term health of the organization;
- We do not offer significant short-term incentives that might drive high-risk investments at the expense of long-term Company value; and
- The Company's compensation programs are weighted towards long-term incentives.

Because of these factors, we believe that our compensation policies and practices, both for our employees and our executive officers, do not create risks that are reasonably likely to have a material adverse effect on the Company.

Say-on-Pay

The Company provides its stockholders with the opportunity to cast an advisory vote on annual executive compensation (a "say-on-pay proposal"). At the Company's annual meeting of stockholders in 2022, approximately 82% of the votes cast for or against the say-on-pay proposal were in favor of the proposal, which the Compensation Committee reviewed in assessing executive compensation for the fiscal year ending December 31, 2022. Proposal 2 included in the Proxy Statement is a say-on-pay advisory vote regarding the executive compensation for the fiscal year ending December 31, 2022 as described in this Proxy Statement. The Compensation Committee will continue to consider the results of the Company's say-on-pay votes when making future compensation decisions for the Company's executive officers, including the named executive officers.

Independent Compensation Consultant and Peer Group

The Compensation Committee did not retain a compensation consultant in connection with its decisions regarding 2022 compensation; however, in making decisions with respect to 2022 compensation, the Compensation Committee utilized the peer group established as a result of the market analysis undertaken by Lyons, Benenson & Company ("LB & Co.") in connection with their engagement as the Compensation Committee's independent compensation consultant in 2020. In 2020, LB & Co. compared the compensation practices of the Company to 17 peer group companies, see table below, from a number of similar industries, including Commodity Chemicals, Environmental and Facility Services, Fertilizers and Agricultural Chemicals, Industrial Machinery, Oil and Gas Equipment and Services, Oil and Gas Refining and Marketing, and Specialty Chemicals. The Compensation Committee reviewed these peer companies and approved their use for compensation benchmarking purposes (the "2020 Peer Group").

2020 Peer Group:

2020 I CCI Group.	
Aemetis, Inc.	Graham Corporation
American Vanguard Corporation	Hawkins, Inc.
CECO Environmental Corp.	Marrone Bio Innovation, Inc.
Clean Energy Fuels Corp.	Nuverra Environmental Solutions, Inc.
Energy Recovery, Inc.	Perma-Fix Environmental Services, Inc.
Flotek Industries, Inc.	Profire Energy, Inc.
Fuel Tech, Inc.	Trecora Resources
FutureFuel Corp.	Vertex Energy, Inc.
Gevo, Inc.	

Base Salary

Base salary is defined as ongoing, cash compensation paid bi-weekly based on such factors as job responsibilities, external competitiveness, and the individual's experience and performance. Pay ranges have been set based on the market where the Company competes for similar positions, with consideration given for employees serving similar functions in comparable companies. Base salary is typically increased annually based on performance and cost of labor/living increases. With the use of market data, the Compensation Committee considers the size of and whether to grant merit increases based on data from comparable companies, as well as review of an officer's annual performance and meeting of objectives. The Company attempts to ensure middle market pay for solid performers and to consider higher levels of pay for outstanding performers. The Company does not intend to be a market leader in base compensation.

On February 22, 2022, the Compensation Committee approved the following increased base salaries, effective April 1, 2022, based on general market data: (i) \$473,800 for Mr. Marken, (ii) \$280,500 for Ms. Fields and (iii) \$315,180 for Mr. Wong.

Short-Term Incentive Plan

The STIP is designed to motivate executives to achieve critical short-term goals, typically within a twelve-month period, that are expected to contribute to the long-term health and value of the Company. Incentives may be paid in cash or equity as determined by the Compensation Committee. The Compensation Committee adopted the Executive Short-Term Incentive Plan ("ESTIP") in September 2015 to further establish terms and conditions for cash awards made under the STIP. The Compensation Committee made STIP awards under the ESTIP and the 2017 Omnibus Incentive Plan (the "2017 Plan") through June of 2022, while STIP awards granted for 2023 were made under the 2022 Omnibus Incentive Plan ("the 2022 Plan").

For 2022, the Compensation Committee established cash bonus targets equal to 75% of base salary for Mr. Marken and 50% of base salary for each of Ms. Fields and Mr. Wong. The Compensation Committee approved the following performance goals applicable to the 2022 STIP awards: Budgeted Revenue, Adjusted EBITDA and individual performance goals. Upon review of the Company's performance for 2022, the Compensation Committee determined that the Company's Budgeted Revenue and Adjusted EBITDA exceeded target.

In early 2023, based on the Company and individual performance, the Compensation Committee approved 2022 STIP awards for Messrs. Marken and Wong and Ms. Fields at 152% of target.

Long-Term Incentive Compensation

The Long-Term Incentive Plan ("LTIP") is designed to align executives' interests with those of the Company's stockholders and to support the Compensation Committee's approach to performance-based pay. Equity awards are the primary long-term incentive instrument and have historically been granted in the form of RSAs and PSUs. Equity awards vest over time based on continuous service, or over time based on achievement of certain performance measures set by the Compensation Committee at the time of the grant, considering accounting and regulatory restrictions and the financial condition of the Company. Awards under the LTIP for 2022 were made 50% as RSAs and 50% as PSUs. PSUs are vested upon achievement, as certified by the Compensation Committee, of one or more performance measures measured over one to three years. LTIP awards were made under the 2017 Plan through June 2022 and have been made under 2022 Plan since June 2022.

On February 22, 2022, the Compensation Committee approved grants of RSAs ("2022 RSAs") and PSUs ("2022 PSUs") to the NEOs as set forth in the table below, effective March 23, 2022. The 2022 RSAs vest annually at a rate of one-third each year over a three-year vesting period subject to each NEO's continuous service to the Company. The 2022 PSUs vest after three years based on the placement of the Company's TSR for the three-year performance period ending December 31, 2024 relative to the TSR performance of a specified group of peer companies.

Named Executive Officer	Percentage of Base Salary	Number of Restricted Shares	Target Number of Performance Stock Units
Greg P. Marken	75%	28,985	28,984
Morgan Fields	65%	14,872	14,871
Joe M. Wong	65%	16,710	16,710

The Compensation Committee, in consultation with LB & Co, established the group of peer companies for purposes of benchmarking the Company's stock price performance for the 2022 PSUs. The 2022 PSUs include provisions to accommodate changes in the peer group such as, for example, if one peer company merges with another. TSR is calculated for the Company and peer companies. The threshold, target and maximum payout amounts for the 2022 PSUs are 50%, 100% and 200%, respectively. In order to achieve threshold, target and maximum payouts, the company's TSR percentile rank must be 30%, 50% or 90% and above, respectively.

The 2020 PSUs vested on March 10, 2023. The PSUs were subject to a three-year performance period ending December 31, 2022, which the TSR performance of the 2020 PSUs was below the threshold. This resulted in these awards being unearned and forfeited.

For the 2022 PSUs, the group of peer companies included:

Aemetis, Inc.	Graham Corporation
American Vanguard Corporation	Hawkins, Inc.
CECO Environmental Corp.	Marrone Bio Innovation, Inc.
Clean Energy Fuels Corp.	Perma-Fix Environmental Services, Inc.
Energy Recovery, Inc.	Profire Energy, Inc.
FutureFuel Corp.	Trecora Resources
Flotek Industries, Inc.	Vertex Energy, Inc.
О	

Gevo, Inc.

Retention Agreements

In May 2021, the Company entered into an agreement with each NEO to promote retention of the NEOs during the Company's consideration and execution of various strategic initiatives, which agreements were subsequently amended on May 4, 2022 (the "Retention Agreements"). The Retention Agreements provided for "Retention Pay" equal to \$460,000 for Mr. Marken, \$254,000 for Ms. Fields and \$153,001 for Mr. Wong, as well as the opportunity for "Additional Retention Pay" of \$59,800 for Mr. Marken, \$50,800 for Ms. Fields and \$52,020 for Mr. Wong. The Retention Pay and Additional Retention Pay becomes payable as follows, in each case, subject to the NEO's continued employment:

- 40% of the Retention Pay was paid on August 31, 2022;
- 60% of the Retention Pay was payable on the first to occur of: (i) a termination of employment without "cause" or for "good reason", (ii) 90 days after the signing of definitive documents related to a sale or change of control of the significant assets of the Company, or (iii) January 18, 2023; and
- the Additional Retention Pay was payable on the first to occur of: (i) a termination of employment without "cause" or for "good reason", (ii) 90 days after the signing of definitive documents related to a sale or change of control of the significant assets of the Company, or (iii) January 18, 2023.

Under the Retention Agreements, each NEO received a payment of 40% of the Retention Pay on August 31, 2022 and the remainder of the Retention Pay and Additional Retention Pay in January 2023.

Employment Agreements

Greg P. Marken

We are party to an employment agreement with Mr. Marken, effective January 12, 2015, which was amended on June 12, 2016, May 9, 2018 and November 3, 2022 (the "Marken Agreement"). The Marken Agreement contains provisions related to Mr. Marken's position, duties, authority, obligations, compensation and benefits, including his eligibility to receive incentive awards under the ESTIP and the LTIP. The Marken Agreement also contains certain covenants addressing non-competition, non-solicitation and non-divergence and provides for separation payments and benefits in the event of certain terminations of employment, as described under "Additional Narrative Disclosure —Employment Agreements" below.

Morgan Fields

We are a party to an employment agreement with Ms. Fields, effective March 1, 2021, which was amended on August 18, 2021 (the "Fields Agreement"). The Fields Agreement contains provisions related to Ms. Fields' position, duties, authority, obligations, compensation and benefits, including her eligibility to receive incentive awards under the ESTIP and the LTIP. The Fields Agreement also contains certain covenants addressing non-competition, non-solicitation and non-divergence and provides for separation payments and benefits in the event of certain terminations of employment, as described under "Additional Narrative Disclosure—Employment Agreements" below.

Joe M. Wong

We are a party to an employment agreement with Mr. Wong, effective February 14, 2011, which was amended on August 18, 2021 (the "Wong Agreement"). The Wong Agreement contains provisions related to his position, duties, authority, obligations, compensation and benefits, including his eligibility to receive incentive awards under the ESTIP and the LTIP. The Wong Agreement also contains certain covenants addressing non-competition, non-solicitation and non-divergence and provides for separation payments and benefits in the event of certain terminations of employment, as described under "Additional Narrative Disclosure—Employment Agreements" below.

Outstanding Equity Awards at Fiscal Year End

The following table provides information regarding outstanding RSA and PSU equity awards held by our NEOs as of December 31, 2022.

	Stock awards									
Name	Number of shares that have not vested (#)		Market value of shares that have not vested (\$) (1)	Equity incentive plan awards: number of unearned units that have not vested (#)		Equity incentive plan awards: market or payout value of unearned units that have not vested (\$) (1)				
Greg P. Marken	3,044	(2)	7,397	_		_				
	19,525	(3)	47,446	14,644	(6)	35,585				
	28,985	(4)	70,434	28,984	(7)	70,431				
Morgan Fields	9,734	(3)	23,654	_		_				
	9,188	(5)	22,327	_		_				
	14,872	(4)	36,139	14,871	(7)	36,137				
Joe M. Wong	2,955	(2)	7,181	_		_				
	11,257	(3)	27,355	8,442	(6)	20,514				
	16,710	(4)	40,605	16,710	(7)	40,605				

- (1) The market value of RSAs and PSUs that have not vested is calculated using the closing price of \$2.43 of our Common Stock on December 30, 2022, the last trading day of 2022. The market value of PSUs is calculated based upon an earned amount as of December 31, 2022.
- (2) These RSAs vested in full on March 23, 2023.
- (3) These RSAs vest ratably on March 23, 2023 and March 23, 2024.
- (4) These RSAs vest ratably on March 23, 2023, March 23, 2024 and March 23, 2025.
- (5) These RSAs vest ratably on August 17, 2023 and August 17, 2024.
- (6) These PSUs vest on March 10, 2024. The PSUs are subject to a three-year performance period ending December 31, 2023. The award is reported at an earned percentage of 50%, representing threshold performance.
- (7) These PSUs vest on March 10, 2025. The PSUs are subject to a three-year performance period ending December 31, 2024. The award is reported at an earned percentage of 100%, representing target performance.

Additional Narrative Disclosure

Retirement Benefits

The Company's Profit Sharing Retirement Plan ("401(k) Plan") is available to all eligible employees, including NEOs. Pursuant to the 401(k) Plan, we currently make contributions to each eligible employee's account in an amount equal to three percent of eligible compensation. Additionally, at the discretion of the Board, the Company may make contributions based on the profitability of the Company to those accounts. In 2022, we made our contributions to the Plan in cash. No discretionary contributions were made to the 401(k) Plan in 2022 other than as discussed above. Employee and Company contributions to the 401(k) Plan are 100% vested.

The Company does not currently have any pension or retirement benefits (other than the 401(k) Plan) or nonqualified deferred compensation plans that apply to the NEOs, nor are any such plans contemplated at this time.

Employment Agreements

Under the Marken Agreement, upon a termination without "Cause" or a resignation for "Good Reason," Mr. Marken is eligible to receive severance of 12 months of base salary; however, if such termination occurs within 12 months following a "Change in Control," Mr. Marken is also eligible to receive (i) the short-term incentive cash bonus for the year of termination based on actual performance, (ii) accelerated vesting of all unvested restricted stock awards, (iii) accelerated vesting of all unvested performance share units based on actual performance as of the date of such termination, and (iv) coverage of COBRA continuation premiums for 12 months (or until the NEO is eligible for medical insurance benefits from another employer).

Under the Fields Agreement and the Wong Agreement, upon a termination without Cause or a resignation for Good Reason, the NEO is eligible to receive severance of (i) 12 months of base salary, (ii) the short-term incentive cash bonus for the year of termination based on actual performance, (iii) accelerated vesting of all unvested restricted stock awards, (iv) accelerated vesting of all unvested performance share units based on actual performance as of the date of such termination, and (v) coverage of COBRA continuation premiums for 12 months (or until the NEO is eligible for medical insurance benefits from another employer).

Under the Marken Agreement, the Fields Agreement and the Wong Agreement, upon a termination as a result of the NEO's death or disability, the NEO (or the NEO's beneficiary, as applicable) is eligible to receive (A) the short-term incentive cash bonus for the year of termination assuming target performance (or 50% thereof if such termination occurs within the first six months of the year), (B) accelerated vesting of all unvested restricted stock awards, and (C) accelerated vesting of all unvested performance share units based on actual performance as of the date of such termination.

Under the Marken Agreement:

- "Cause" means one or more of the following, where such conduct has had or is reasonably likely to have a material detrimental effect on the Company or a related person: (i) dishonesty, willful misconduct, or material breach of the Company's Code of Conduct; (ii) felony conviction of a crime involving dishonestly, breach of trust or physical harm to any person; or (iii) a breach of any fiduciary duty.
- "Good Reason" means a material reduction in the executive's compensation, a material diminution in authority, duties or responsibilities, or a relocation of more than 50 miles, subject to our right to cure.
- "Change in Control" means a change in our ownership or control effected by a direct or indirect acquisition of more than 50% of our total combined voting power, replacement of our directors by directors whose appointment or election is not endorsed by our directors serving immediately prior to such replacement, or a change in the ownership of a substantial portion of our assets.

Under the Fields Agreement and the Wong Agreement:

- "Cause" means (i) the failure by an executive to substantially perform the essential functions of executive's duties or obligations in a satisfactory manner or material breach of any written agreement with us or an affiliate; (ii) dishonesty, willful misconduct, or material breach of our Code of Ethics and Business Conduct, knowing violation of any federal or state securities or tax laws, or any misconduct that is, or is reasonably likely to be, materially injurious to us or an affiliate; (iii) conviction of or plea of guilty or no contest to a crime involving dishonesty, breach of trust or physical harm to any person; or (iv) a breach of any fiduciary duty and such conduct has had or is reasonably likely to have a material detrimental effect on us or a related person.
- "Good Reason" generally has the meaning described above under the Marken Agreement.

Company Policies Relating to Executive Compensation

Insider Trading Policy

Our Insider Trading Policy, which applies to our employees, officers and directors, prohibits hedging of our securities and engaging in any other transactions involving ADES-based derivative securities, regardless of whether the covered person is in possession of material, non-public information (except with regard to the vesting of securities acquired pursuant to our incentive plans), or other transactions involving purchases and sales of company securities between a covered person and us. The Insider Trading Policy also prohibits all employees, officers and directors from entering into any transaction relating to hedging ADES securities, including zero-cost collars or forward-sale transactions.

Equity Ownership Guidelines

The Company maintains Executive Stock Ownership Guidelines under the EC Philosophy (the "Guidelines"). Under the EC Philosophy, so long as the Guidelines are met, executives may sell unrestricted stock. It is preferred that executives own shares of Common Stock for a period greater than 12 months before selling such shares. All executive transactions in Common Stock must be made in compliance with our insider trading policy.

The Guidelines encourage executives to own Common Stock with a value equal to at least one times their annual base salary. Ownership is calculated considering holdings of restricted stock, whether or not such holdings have vested, private holdings, shares held in retirement accounts and other shares attributed to the executive in accordance with Section 16 of the Exchange Act.

As of December 31, 2022, Messrs. Marken and Wong and Ms. Fields did not have sufficient holdings to meet the Guidelines as a result of stock price fluctuations; however, the Guidelines provide executives with a reasonable period of time in the event of significant decreases in stock price to meet the Guidelines again.

Clawback Policy

In the event of a restatement of income, any overpayments of incentive pay made to executives based on such restatement of income may be reclaimed at the discretion of the Compensation Committee. We intend to adopt a clawback policy or amend our clawback policy consistent with the requirements of the final Nasdaq listing standards implementing Exchange Act Rule 10D-1.

PAY VERSUS PERFORMANCE

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(v) of Regulation S-K, the following disclosure (the "Pay Versus Performance Disclosure") describes the relationship between executive compensation and the Company's performance with respect to select financial measures. For a complete description regarding the Company's compensation program, please see "Executive Compensation."

Year		Summary Compensation Table Total for PEO ⁽¹⁾			ompensation tually Paid to PEO ⁽²⁾	Compensation Compen Table Total for Actually		Average Compensation ctually Paid to n-PEO NEOs (2)	To	otal Shareholder Return ⁽³⁾	Net Income (Loss) thousands) (4)	
	2022	\$	1,675,074	\$	951,708	\$	855,118	\$	513,560	\$	44.18	\$ (8,917)
	2021	\$	1,001,273	\$	1,155,131	\$	499,112	\$	553,351	\$	120.36	\$ 60,401

- (1) Compensation for the Company's Principal Executive Officer (the "PEO"), Greg Marken, reflects the amount reported in the "Summary Compensation Table" for the respective years. Average compensation for non-PEO NEOs is based on the compensation for Morgan Fields and Joe Wong (collectively, the "non-PEO NEOs") reported in the "Summary Compensation Table" for the respective years.
- (2) SEC rules require that certain adjustments be made to the total compensation set forth in the "Summary Compensation Table" in order to determine "compensation actually paid" for purposes of this Pay Versus Performance Disclosure.

 "Compensation actually paid" does not represent cash and/or equity value transferred to the applicable NEO, but rather is a value calculated under applicable SEC rules. The below table reflects the required adjustments to reconcile total compensation as set forth in the Summary Compensation Table to "compensation actually paid" for purposes of the Pay Versus Performance Disclosure.

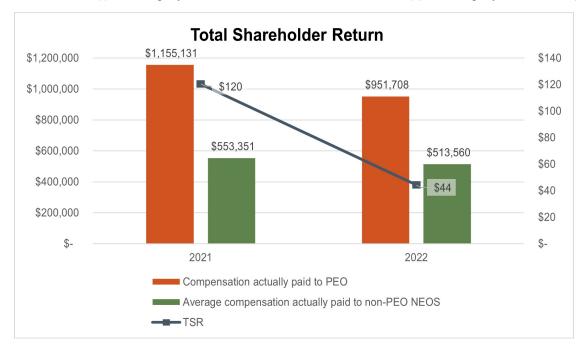
	PEO 2022	PEO 2021	Non-PEO NEOs 2022	Non-PEO NEOs 2021
Summary Compensation Table Total	\$1,675,074	\$1,001,273	\$ 855,118	\$ 499,112
Less stock award value reported in Summary Compensation Table for the covered year	(463,461)	(361,987)	(252,494)	(192,707)
Plus the year-end fair value of outstanding unvested awards granted in covered year	121,735	496,415	66,321	237,040
Plus (less) change in year-end fair value of outstanding and unvested awards granted in prior years	(367,519)	22,536	(147,284)	10,755
Plus (less) change in fair value of awards granted in prior years that vested in the covered year	(3,897)	(3,106)	(3,138)	(849)
Less the prior year-end fair value of awards forfeited during the covered year	(10,224)		(4,963)	
Compensation Actually Paid	\$ 951,708	\$ 1,155,131	\$ 513,560	\$ 553,351

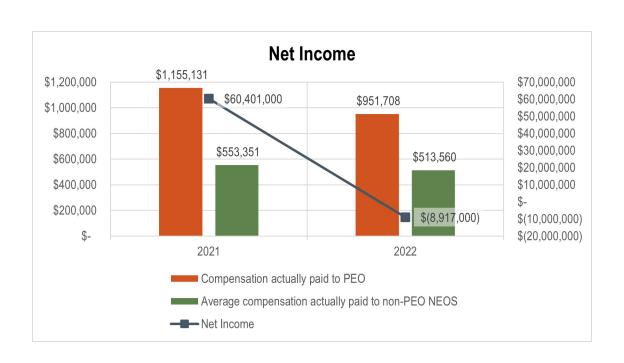
Fair values of equity awards set forth in the table above are computed in accordance with FASB ASC Topic 718 as of the end of the respective fiscal year, other than fair values of equity awards that vest in the covered year, which are valued as of the applicable vesting date. The valuation methodologies applied do not materially differ from the valuation methodologies applied at the time of grant.

- (3) TSR is calculated based on the value of an initial fixed \$100 investment in the Company. Further, the TSR is cumulative for the measurement periods beginning on December 31, 2020 and ending on December 31 of each of 2021 and 2022, respectively, calculated in accordance with Item 201(e) of Regulation S-K.
- (4) Reflects "Net Income (Loss)" as reported in the Company's Consolidated Statements of Operations included in the Company's Annual Reports on Form 10-K for each of the years ended December 31, 2022 and 2021.

Relationships Between Executive Compensation Actually Paid and Select Financial Performance Measures

The charts below are based on the information provided in the above table to illustrate the relationships between the Company's compensation actually paid to the PEO and the average compensation actually paid to the Company's non-PEO NEOs, and (i) the Company's cumulative total shareholder return and (ii) the Company's net income (loss).





PROPOSAL THREE

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has appointed Moss Adams LLP ("Moss Adams") to be the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023. Moss Adams has served as the Company's independent registered public accounting firm since 2017, including the fiscal year ended December 31, 2017.

Stockholder ratification of the Audit Committee's selection of Moss Adams as our independent registered public accounting firm as requested in Proposal 3 is not required by our bylaws or otherwise. The Board is submitting this proposal to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain this firm. This proposal will be deemed approved if the votes cast in favor of the proposal exceed the votes cast opposing the proposal.

We anticipate that a representative of Moss Adams will be available at the Annual Meeting to respond to stockholder questions and will have the opportunity to make a statement at that time if the representative desires to do so.

Additional information about Audit Fees and Audit Committee Approval of Services can be found under the Independent Registered Public Accounting Firm section of this Proxy Statement.

Board Recommendation

Our Board recommends a vote "FOR" the ratification of the Audit Committee's appointment of Moss Adams LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee's role and functions are described under the "Corporate Governance" section of this Proxy Statement.

The Audit Committee held eight meetings in 2022. The Audit Committee has (i) reviewed and discussed the Company's consolidated audited financial statements for the year ended December 31, 2022 with the Company's management; (ii) discussed with the Company's current independent registered public accounting firm, Moss Adams, the matters required to be discussed by Public Company Accounting Oversight Board ("PCAOB") and the SEC; (iii) received the written disclosures and the letter from Moss Adams required by applicable requirements of the PCAOB regarding Moss Adams's communications with the Audit Committee concerning independence and has discussed with Moss Adams the independence of Moss Adams; and (iv) discussed and reviewed with the Company's management and Moss Adams other SEC filings occurring during the year ended December 31, 2022.

Based on the review and discussions with management and Moss Adams, the Audit Committee recommended to the Board that the audited consolidated financial statements for the fiscal years ended December 31, 2022 and 2021 be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

On April 11, 2023, the Audit Committee approved the engagement of Moss Adams to serve as the Company's independent registered public accounting firm to audit the Company's financial statements for the fiscal year ending December 31, 2023. This appointment for 2023 was based on the Audit Committee's and management's completion of a written evaluation of Moss Adams' performance which included, among other criteria, quality of services provided; sufficiency of the firm's resources; communications and interaction; and independence, objectivity and professional skepticism.

Respectfully submitted,

The Audit Committee: J. Taylor Simonton, Chair

Carol Eicher L. Spencer Wells

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The following table summarizes the fees of Moss Adams, our independent registered public accounting firm, for the fiscal years ended December 31, 2022 and 2021, respectively.

(in thousands)	20	22	2021		
Audit fees (1)	\$	854	\$	496	
Audit-related fees (2)		14		12	
Tax fees (3)		_		_	
All other fees (4)				_	
	\$	868	\$	508	

- (1) This category includes fees related to the audit of our annual consolidated financial statements; audit of our internal control over financial reporting for the year ended December 31, 2022; the review of our quarterly consolidated financial statements; consents and assistance with and review of documents filed with the SEC; and financial reporting consultation and research work billed as audit fees or necessary to comply with the standards of the PCAOB.
- (2) This category consists of fees for audit-related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. Audit-related fees include fees related to audits of employee benefit plans.
- (3) This category consists of fees for tax compliance, tax advice and tax planning services. We did not pay our independent registered public accounting firm tax fees for services during the years ended December 31, 2022 and 2021.
- (4) This category consists of fees for services that are not included in the above categories. We did not pay our independent registered public accounting firm any other fees for services during the years ended December 31, 2022 and 2021.

There were no disagreements on matters of accounting principles or practices, financial statement disclosures or audit scope or procedures between the Company and Moss Adams during the most recent fiscal year or any subsequent year.

AUDIT COMMITTEE APPROVAL OF SERVICES

The Audit Committee pre-approves all audit or non-audit services performed by our independent registered public accounting firm in accordance with Audit Committee policy and applicable law. The Audit Committee generally provides pre-approval of audit services and services associated with SEC registration statements, other SEC filings and responses to SEC comment letters (audit fees) and services related to internal control reviews, internal control reporting requirements and consultations with our management as to accounting or disclosure treatment of transactions or events and the impact of rules, standards or interpretations by the SEC and other regulatory or standard-setting bodies (audit-related fees) for each 12 month period within a range of approved fees. To avoid certain potential conflicts of interest, the law prohibits the Company from obtaining certain non-audit services from its independent registered public accounting firm. The Audit Committee has delegated authority to approve permissible services to its Chair. The Chair reports such pre-approvals to the full Audit Committee at its next scheduled meeting. The Audit Committee Chair pre-approved 100% of the services provided by the independent registered public accounting firm in 2022. None of the services of the independent registered public accounting firm in Rule 2-01(c)(7)(i)(C) of Regulation S-X.

PROPOSAL FOUR APPROVAL OF PREFERRED STOCK CONVERSION PROPOSAL

The Board is asking stockholders to approve the issuance of shares of the Company's common stock in exchange for the outstanding shares of the Company's Series A Preferred Stock as described below, which we refer to as the Preferred Stock Conversion Proposal. This proposal will be deemed approved if the votes cast in favor of the proposal exceed the votes cast opposing the proposal.

Background

Acquisition of Arq

On February 1, 2023, ADES entered into a Securities Purchase Agreement (the "Purchase Agreement") with Arq Limited, a company incorporated under the laws of Jersey ("Arq"), pursuant to which ADES acquired all of the direct and indirect equity interests of Arq's subsidiaries (collectively, the "Purchased Interests") in exchange for consideration consisting of (i) 3,814,864 shares of common stock, par value \$0.001 per share, of ADES (the "Common Stock"), representing 19.9% of the outstanding shares of Common Stock prior to the completion of the transactions contemplated by the Purchase Agreement, and (ii) 5,294,462 shares of Series A Convertible Preferred Stock, par value \$0.001 per share, of ADES (the "Series A Preferred Stock" and the acquisition by ADES of the Purchased Interests, the "Transaction"). In connection with the issuance of the Series A Preferred Stock pursuant to the Purchase Agreement, ADES filed the Certificate of Designations of Preferred Stock for the Series A Preferred Stock (the "Certificate of Designations") with the Secretary of State of the State of Delaware. The Transaction closed concurrently with execution of the Purchase Agreement. The rights of the Series A Preferred Stock are set forth in a Certificate of Designations. Please see "Description of the Series A Preferred Stock" below for a complete description of the rights of the Series A Preferred Stock.

Description of Series A Preferred Stock

Each share of Series A Preferred Stock will be automatically converted into a share of Common Stock upon approval by the holders of the percentage of Common Stock required to approve such conversion under the applicable rules of The Nasdaq Stock Market ("Nasdaq"), without the need for any action on the part of the holders of the Series A Preferred Stock (the "Conversion Approval"). Each share of Series A Preferred Stock is deemed to have an original issue price of \$4.00 per share (the "Original Issue Amount"). The number of shares of Common Stock issued upon conversion of each share of Series A Preferred Stock shall be equal to the product of (i) the sum of (A) the Original Issue Amount plus (B) an amount equal to the cumulative amount of the accrued and unpaid dividends on such share at such time (regardless of whether or not declared or funds for their payment are lawfully available) divided by (ii) the Original Issue Amount, subject to adjustment as provided in the Certificate of Designations.

Holders of the Series A Preferred Stock are entitled to receive cumulative dividends which accrue quarterly on the last day of each applicable quarter (whether or not declared or funds for their payment are lawfully available) and are payable quarterly, in arrears, on the earlier to occur of (a) the date any dividend is paid to holders of Common Stock with respect to such quarter and (ii) 30 days after the end of each quarter (the "Series A Quarterly Dividend") at the rate per share of Series A Preferred Stock equal to the greater of (i) if the Company declares a cash dividend on the Common Stock with respect to such quarter, the amount of the cash dividend that would be received by a holder of Common Stock in which such share of Series A Preferred Stock would be convertible on the record date for such cash dividend and (ii) an annual rate (the "Rate") of 8.0% of the Original Issue Amount per annum compounded quarterly (the "Coupon Dividend") with respect to such quarter. The Rate will increase by 2.0% on October 1, 2024 and on each subsequent anniversary of such date.

The Series A Quarterly Dividend is payable in cash or in additional shares of Series A Preferred Stock (the "Series A PIK Shares"), at the option of the Company. The number of Series A PIK Shares to be issued shall be determined by dividing (i) the Series A Quarterly Dividend payable with respect to all shares of Series A Preferred Stock held by a holder thereof by (ii) the aggregate Original Issue Amount of all shares of Series A Preferred Stock held by a holder thereof, and each fractional Series A PIK Share will be rounded to the nearest whole Series A PIK Share (with 0.5 of a share being rounded down to 0.0).

In the event of the Company's liquidation, dissolution or winding up, after payment or provision for payment of the Company's debt and other liabilities, a holder of Series A Preferred Stock will receive a liquidating distribution equal to the amount of the cumulative accrued but unpaid dividends on each share of Series A Preferred Stock held by such holder. After the payment to the holders of Series A Preferred Stock of such liquidation preference, the holders of outstanding shares of Series A Preferred Stock will participate pari passu with the holders of Common Stock on an as-converted basis in any remaining distributions out of the Company's assets available for distribution to stockholders.

Holders of shares of Series A Preferred Stock will generally have no voting rights. However, the Company is restricted from taking certain actions without the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, including, but not limited to, consummating a merger of the Company with or into another party or a sale of substantially of the Company's assets, issuing Common Stock or instruments convertible into Common Stock representing more than 20% of the outstanding share capital of the Company to the extent the applicable issuance requires approval of holders of Common Stock pursuant to applicable law or the rules of the applicable stock exchange on which the Common Stock is listed, or authorizing, creating or issuing any Senior Stock or Parity Stock (each as defined in the Certificate of Designations) of the Company (or amending the provisions of any existing class of securities to make such class of securities Senior Stock or Parity Stock). In addition, the Company is restricted from amending the Company's Certificate of Incorporation or Bylaws in a manner that adversely affects the rights of the Series A Preferred Stock without the written consent or affirmative vote of the holders of at least 75% of the then outstanding shares of Series A Preferred Stock.

If the Conversion Approval has not been obtained, each outstanding share of Series A Preferred Stock will be redeemed by the Company on February 1, 2028 for cash, at a redemption price equal to the sum of (i) the product of (x) 140% and (y) the Original Issue Amount, plus (ii) an amount equal to the cumulative amount of accrued and unpaid dividends on such share of Series A Preferred Stock (the "Redemption Amount").

Conversion of Series A Preferred Stock

Subject to stockholder approval of this Proposal Number 4, each share of Series A Preferred Stock will automatically be converted into one share of Common Stock. On March 31, 2023, we declared a dividend of 68,465 Series A PIK Shares with respect to the accrued dividends on the Series A Preferred Stock for the first quarter of 2023 (the "First Quarter PIK Dividend"). Following the payment of such dividend, there are 5,362,927 Series A Preferred Shares outstanding, and there are currently no accrued and unpaid dividends on the Series A Preferred Shares. A total of 5,362,927 shares of Common Stock are issuable upon conversion of the Series A Preferred Stock, assuming the approval of this Proposal Number 4. This Proposal Number 4 would provide the necessary approval to permit such conversion.

Shares Issuable Upon Conversion

The Series A Preferred Stock is intended to have rights that are generally equivalent to common stock, provided that the Series A Preferred Stock is entitled to receive the Series A Quarterly Dividend, shares of Series A Preferred Stock are entitled to be redeemed at the Redemption Amount if the Conversion Approval has not been obtained by February 1, 2028, and the Series A Preferred Stock does not have the right to vote on most matters (including the election of directors). Set forth below is a table summarizing the number of issued and outstanding shares of Series A Preferred Stock, as well as the number of shares of Common Stock that would be issued upon the Conversion Approval (assuming the Conversion Approval is approved at the Annual Meeting). The sale into the public market of the underlying common stock could materially and adversely affect the market price of our Common Stock. See "Certain Risks Associated with the Series A Preferred Stock" below.

	Series A Preferred Stock Issued and Outstanding	Common Stock Issuable Upon Conversion of Series A Preferred Stock (Assuming the Conversion Approval is Obtained at the Annual Meeting)
Total, which includes shares of Series A Preferred		
Stock issued in the Transaction and in the First Quarter PIK Dividend	5,362,927	5,362,927

Reasons for Stockholder Approval

Our Common Stock is listed on the Nasdaq Global Market, and, as such, we are subject to the applicable rules of the Nasdaq Stock Market LLC, including Nasdaq Listing Rule 5635(a), which requires stockholder approval in connection with the acquisition of another company if the Nasdaq-listed company will issue a number of shares of common stock that is equal to or greater than 20% of the number of shares of its then-outstanding common stock. Thus, in order to permit the issuance of Common Stock upon conversion of the Series A Preferred Stock, we must first obtain stockholder approval of this issuance.

Certain Risks Associated with the Series A Preferred Stock

In connection with the Transaction, we issued the Series A Preferred Stock to Arq. We are obligated under the Purchase Agreement to seek shareholder approval for the conversion of the Series A Preferred Stock into Common Stock, If we fail to obtain the Conversion Approval, we will be required to utilize the Company's cash to pay the Series A Quarterly Dividend each quarter or, if we elect to satisfy the Series A Quarterly Dividends through the payment in kind with Series A PIK Shares, the issuance of such Series A PIK Shares will further dilute the equity interests of the holders of our Common Stock. In addition, if we fail to obtain the Conversion Approval, the coupon rate payable on the Series A Preferred Stock will increase by 2.0% on October 1, 2024 and on each subsequent anniversary thereof, which will further increase the amount of cash we would be required to pay each quarter on the Series A Preferred Stock (or increase the number of Series A PIK Shares that would be required to be issued in satisfaction of the Series A Quarterly Dividend). Further, if the Conversion Approval is not been obtained by February 1, 2028, each outstanding share of Series A Preferred Stock will be required to be redeemed by the Company on February 1, 2028 for cash, at a redemption price equal to the sum of (i) the product of (x) 140% and (y) the Original Issue Amount, plus (ii) an amount equal to the cumulative amount of accrued and unpaid dividends on such share of Series A Preferred Stock. If we are forced to redeem the Series A Preferred Stock, it could, among other matters, materially affect our cash flows and cash usage forecasts, require us to raise additional capital, impact our ability to raise additional capital or negatively impact our liquidity.

The conversion of the Series A Preferred Stock to Common Stock would dilute the ownership interest of existing holders of our Common Stock, and any sales in the public market of the Common Stock issuable upon conversion of the Series A Preferred Stock would increase the number of shares of our Common Stock available for public trading, and could adversely affect prevailing market prices of our Common Stock.

Interests of Certain Parties

As a result of the Transaction, Arq currently holds all of the shares of Series A Preferred Stock. Jeremy Blank, Richard Campbell-Breeden and Julian McIntyre, each of whom is a member of our Board of Directors, each owns equity interests in Arq. If the Conversion Approval is obtained and Arq elects to distribute the Common Stock it receives upon conversion of the Series A Preferred Stock to its shareholders, Mr. Blank or investment vehicles controlled or managed by Mr. Blank would be entitled to receive 770,662 shares of Common Stock, Mr. Campbell-Breeden or investment vehicles controlled or managed by Mr. Campbell-Breeden would be entitled to receive 52,711 shares of Common Stock, and Mr. McIntyre or investment vehicles controlled or managed by Mr. McIntyre would be entitled to receive 788,122 shares of Common Stock.

Board Recommendation

The Board recommends that you vote "FOR" the approval of the Preferred Stock Conversion Proposal. Stockholder approval of this proposal requires a "For" vote from the holders of a majority of votes properly cast at the Annual Meeting (subject to the separate tabulation of votes described in "General Matters—Voting Rights and Vote Required" set forth above).

PROPOSAL FIVE

APPROVAL OF THE SIXTH AMENDMENT TO THE COMPANY'S TAX ASSET PROTECTION PLAN

The Board is asking stockholders to approve the Tax Asset Protection Plan, as amended on April 6, 2018, April 5, 2019, April 8, 2020, April 9, 2021 March 15, 2022 and April 13, 2023 (the "TAPP"). If our stockholders do not approve the TAPP at the 2023 Annual Meeting, the TAPP will expire on December 31, 2023.

Background

We believe that we have valuable tax attributes which are significant assets of the Company. As of December 31, 2022, we had several domestic tax attributes, which includes general business credit carry-overs of approximately \$86.1 million (the "Tax Assets"). Under the Internal Revenue Code and regulations promulgated by the U.S. Treasury Department, the Company may carry forward or otherwise utilize these Tax Assets in certain circumstances to offset any current and future taxable income or reduce the Company's federal income tax liability, subject to certain requirements and restrictions. To the extent that the Tax Assets do not otherwise become limited, the Company believes that it will have available a significant amount of Tax Assets in future years, and therefore these Tax Assets could be a substantial asset to the Company.

Our ability to use the Tax Assets could be substantially limited or delayed, however, if we experience an "ownership change," as defined in Section 382 of the Internal Revenue Code. In general, an ownership change occurs if there is a cumulative change in the ownership of the Company by "5-percent shareholders" (as defined for purposes of Section 382 of the Internal Revenue Code) that exceeds 50 percentage points over an applicable testing period (which is generally a rolling three-year period). Accordingly, on May 5, 2017, after consultation with the Company's legal and tax advisors, the Board adopted the TAPP in order to protect the Company's ability to utilize its Tax Assets and on April 6, 2018, April 5, 2019, April 8, 2020, April 9, 2021 and March 15, 2022 the Board amended the TAPP to extend the expiration thereof, and on April 11, 2023 the Board again amended the TAPP to further extend the expiration thereof.

Calculating whether an "ownership change" has occurred is subject to uncertainty. This uncertainty arises from the complexity and ambiguity inherent in Section 382 of the Internal Revenue Code, as well as limitations on the knowledge that any publicly traded company can have about the ownership of and transactions in its securities. We have analyzed the information available, along with various scenarios of possible future changes in ownership. In light of this analysis, we believe that, in the absence of the TAPP, it is possible that we could undergo a subsequent "ownership change" under Section 382 of the Internal Revenue Code, which would substantially reduce our ability to utilize the Tax Assets. We believe the continuation of the TAPP will serve the interests of all stockholders given the size of the Tax Assets and the potential loss of value should changes in our stock ownership occur that are sufficient to cause a 50 percentage point or greater "ownership change."

The TAPP is intended to act as a deterrent to any person acquiring beneficial ownership of 4.99% or more of the Company's outstanding stock without the approval of the Board. Stockholders who beneficially owned 4.99% or more of the Company's outstanding stock upon execution of the TAPP will not trigger the TAPP so long as they do not acquire beneficial ownership of additional shares of stock. The Board may, in its sole discretion, also exempt any person from triggering the TAPP.

If the stockholders do not approve the TAPP, the TAPP will expire on December 31, 2023. If the stockholders approve the TAPP, it will expire on the earlier of (a) December 31, 2024, (b) the time at which the Rights (described below) are redeemed pursuant to the TAPP, (c) the time at which the Rights are exchanged in full pursuant to the TAPP, (d) the effective date of the repeal of both Section 382 and Section 383 of the Internal Revenue Code, or any successor provisions or replacement provisions, if the Board determines that the TAPP is no longer necessary for the preservation of tax benefits or (e) the beginning of a taxable year of the Company for which the Board determines that the Company has or will have no Tax Assets.

Summary of Terms of the TAPP

The following description of the terms of the TAPP does not purport to be complete and is qualified in its entirety by reference to the TAPP, which is attached as Annex A and is incorporated herein by reference. We urge you to read carefully the TAPP in its entirety, as the discussion below is only a summary.

The Rights. On May 5, 2017, the Board declared a dividend of one preferred share purchase right (each, a "Right") for each outstanding share of Common Stock to stockholders of record as of the close of business on May 22, 2017. One Right is also issued together with each share of Common Stock issued after May 22, 2017 but before the Distribution Date (as defined below) and, in certain circumstances, after the Distribution Date. Subject to the terms, provisions and conditions of the TAPP, if the Rights become exercisable, each Right would initially represent the right to purchase from the Company one ten-thousandth of a share of the Company's Series B Junior Participating Preferred Stock, par value \$0.001 per share (the "Series B Preferred Stock") for a purchase price of \$50.00 (the "Purchase Price"). If issued, each fractional share of Series B Preferred Stock would give the stockholder approximately the same dividend, voting and liquidation rights as does one share of Common Stock. However, prior to exercise, a Right does not give its holder any rights as a stockholder of the Company, including, without limitation, any dividend, voting or liquidation rights.

Initial Exercisability. The Rights will not be exercisable until the earlier of (i) ten business days after a public announcement that a person has become an "Acquiring Person" by acquiring beneficial ownership of 4.99% or more of the Company's outstanding Common Stock, or, in the case of a person that had beneficial ownership of 4.99% or more of the Company's outstanding Common Stock upon execution of the TAPP, by obtaining beneficial ownership of additional shares of Common Stock or (ii) ten business days (or such later date as may be specified by the Board prior to such time as any person becomes an Acquiring Person) after the commencement of a tender or exchange offer by or on behalf of a person that, if completed, would result in such person becoming an Acquiring Person.

The date that the Rights become exercisable is referred to as the "Distribution Date." Until the Distribution Date, Common Stock certificates or the ownership statements issued with respect to uncertificated shares of Common Stock will evidence the Rights. Any transfer of shares of Common Stock prior to the Distribution Date will also constitute a transfer of the associated Rights. After the Distribution Date, separate rights certificates will be issued and the Rights may be transferred other than in connection with the transfer of the underlying shares of Common Stock unless and until the Board has determined to effect an exchange pursuant to the TAPP (as described below).

Flip-In Event. In the event that a person becomes an Acquiring Person, each holder of a Right, other than Rights that are or, under certain circumstances, were beneficially owned by the Acquiring Person (which will thereupon become null and void), will thereafter have the right to receive upon exercise of a Right and payment of the Purchase Price, a number of shares of Common Stock having a market value of two times the Purchase Price.

Redemption. At any time until a person becomes an "Acquiring Person", the Board may redeem the Rights in whole, but not in part, at a price of \$0.00001 per Right (the "Redemption Price"). The redemption of the Rights may be made effective at such time, on such basis and with such conditions as the Board in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

Exchange. At any time after a person becomes an Acquiring Person, the Board may exchange the Rights (other than Rights that have become null and void), in whole or in part, at an exchange ratio of one share of Common Stock, or a fractional share of Series B Preferred Stock (or of a share of a similar class or series of the Company's preferred stock having similar rights, preferences and privileges) of equivalent value, per Right (subject to adjustment). Immediately upon an exchange of any Rights, the right to exercise such Rights will terminate and the only right of the holders of Rights will be to receive the number of shares of Common Stock (or fractional share of Series B Preferred Stock or of a share of a similar class or series of the Company's preferred stock having similar rights, preferences and privileges) equal to the number of such Rights held by such holder multiplied by the exchange ratio. The Board shall not be empowered to effect such exchange at any time after an Acquiring Person becomes the beneficial owner of 50% or more of the Company's outstanding Common Stock.

Expiration. The Rights and the TAPP will expire on the earlier of (i) the close of business on the earlier of (a) December 31, 2024, or (b) December 31, 2023 if stockholder approval has not been obtained prior to such date, (ii) the time at which the Rights are redeemed pursuant to the TAPP, (iii) the time at which the Rights are exchanged in full pursuant to the TAPP, (iv) the effective date of the repeal of both Section 382 and Section 383 of the Internal Revenue Code, or any successor provisions or replacement provisions, if the Board determines that the TAPP is no longer necessary for the preservation of tax benefits or (v) the beginning of a taxable year of the Company for which the Board determines that the Company has or will have no tax benefits.

Anti-Dilution Provisions. The Board may adjust the Purchase Price, the number of shares of Series B Preferred Stock or other securities or assets issuable and the number of outstanding Rights to prevent dilution that may occur as a result of certain events, including among others, a stock dividend, a stock split or a reclassification of the Series B Preferred Stock or Common Stock. With certain exceptions, no adjustments to the Purchase Price will be required until cumulative adjustments amount to at least 1% of the Purchase Price.

Amendments. For so long as the Rights are redeemable, the Board may supplement or amend any provision of the TAPP in any respect without the approval of the holders of the Rights. From and after the time the Rights are no longer redeemable, the Board may supplement or amend the TAPP only to cure an ambiguity, to alter time period provisions, to correct inconsistent provisions, or to make any additional changes to the TAPP which the Company may deem necessary or desirable, but only to the extent that those changes do not impair or adversely affect any Rights holder (other than an Acquiring Person or any Affiliate or Associate of an Acquiring Person or certain of their transferees) and do not result in the Rights again becoming redeemable or the TAPP again becoming amendable other than in accordance with this sentence.

Certain Considerations Related to the TAPP

Our Board believes that protecting the Tax Assets is in the Company's and our stockholders' best interests. Nonetheless, we cannot eliminate the possibility that changes in our stock ownership will occur sufficient to cause an "ownership change" even if the TAPP is approved. You should consider the factors below when making your decision.

Future Use and Amount of the Tax Assets is Uncertain. Our use of the Tax Assets depends on our ability to generate taxable income in the future. We cannot assure you whether we will have taxable income in any applicable period or, if we do, whether such income or tax liability will exceed any potential Section 382 or Section 383 limitation and therefore we cannot assure you that we will realize the full value of the Tax Assets.

Potential Challenge to the Tax Assets. The amount of the Tax Assets has not been audited or otherwise validated by the Internal Revenue Service (the "IRS"). The IRS could challenge the amount of the Tax Assets, which could result in an increase in our liability for income taxes. In addition, determining whether an "ownership change" has occurred is subject to uncertainty, both because of the complexity and ambiguity of the Section 382 provisions and because of limitations on the knowledge that any publicly traded company can have about the ownership of, and transactions in, its securities on a timely basis. Therefore, we cannot assure you that the IRS or other taxing authority will not claim that we experienced an "ownership change" and attempt to reduce the benefit of the Tax Assets even if the TAPP is in place.

Continued Risk of Ownership Change. Although the TAPP is intended to diminish the likelihood of an "ownership change" under Section 382 of the Internal Revenue Code, we cannot assure you that it will be effective. The amount by which our ownership may change in the future could, for example, be affected by purchases and sales of stock by stockholders and new issuances or repurchases of stock by us, should we choose to do so.

Potential Effects on Liquidity. The TAPP is intended to deter persons or groups of persons from acquiring beneficial ownership of shares of our stock in excess of the specified limitation. A stockholder's ability to dispose of our stock may be limited if the TAPP reduces the number of persons willing to acquire our stock or the amount they are willing to acquire.

Potential Impact on Value. The TAPP could negatively impact the value of our stock by deterring persons or groups of persons from acquiring shares of our stock, including in acquisitions for which some stockholders might receive a premium above market value.

Anti-Takeover Effect. Our Board adopted the TAPP to diminish the risk that our ability to use the Tax Assets to reduce potential federal income tax obligations becomes limited. Nonetheless, the TAPP may have an "anti-takeover effect" because it will deter a person or group of persons from acquiring beneficial ownership of 4.99% or more of our stock or, in the case of persons or persons that already own 4.99% or more of our stock, from acquiring any additional shares of our stock. The TAPP could discourage a merger, tender offer or accumulations of substantial blocks of shares of our stock.

Board Recommendation

The Board recommends that you vote "<u>FOR</u>" the approval of the Company's Sixth Amendment of the Tax Attributes Protection Plan.

OTHER MATTERS

The Board knows of no other business to be presented at the Annual Meeting. If other matters properly come before the Annual Meeting, to the extent permitted by law, the persons named in the accompanying form of proxy intend to vote on such other matters in accordance with their best judgment.

PROPOSALS OF STOCKHOLDERS FOR PRESENTATION AT THE NEXT ANNUAL MEETING OF STOCKHOLDERS

We anticipate that the next annual meeting of stockholders for the Company will be held in June 2024.

Any stockholder of record who desires to submit a proper proposal for inclusion in the proxy material related to the 2024 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act or the Company's bylaws must do so in writing in care of Clay Smith, General Counsel and Secretary, at 8051 E. Maplewood Ave., Ste. 210. Greenwood Village, Colorado 80111 no later than December 29, 2023. In addition, our bylaws provide notice procedures for stockholders to nominate a person as a director and to propose business to be considered by stockholders at a meeting (but not for inclusion in the proxy statement). To be timely, a stockholder who intends to present nominations or a proposal at the 2024 annual meeting of stockholders other than pursuant to the Rule 14a-8 of the Exchange Act must provide notice in writing in care of Clay Smith, General Counsel and Secretary, at 8051 E. Maplewood Ave., Ste. 210, Greenwood Village, Colorado 80111 no later than February 14, 2024, provided, however, that the Company's bylaws provide that if the date of the annual meeting has been changed by more than thirty (30) days from the date on which the previous year's annual meeting was held, notice by the stockholder to be timely must be so received not later than the close of business on the later of one hundred twenty (120) calendar days in advance of such annual meeting or ten (10) calendar days following the date of public disclosure of the date of such meeting. If a stockholder intends to submit a proposal at the 2024 Annual Meeting of Stockholders that is not included in our corresponding proxy statement, and the stockholder fails to timely notify us of such proposal, then to the extent permitted by law, the proxies appointed by our management would be allowed to use their discretionary voting authority when the proposal is raised at the next annual meeting, without any discussion of the matter in the Proxy Statement. The stockholder must disclose, among other items, certain information related to the business to be proposed at the meeting, its beneficial ownership in the Company and whether it is acting in concert with other stockholders or interested parties. For a complete list of information that stockholders must provide, see Section 2.03 of the Company's bylaws. In addition to satisfying the deadlines in the advance notice provisions of our bylaws, a stockholder who intends to solicit proxies in support of nominees submitted under these advance notice provisions must provide the notice required under Rule 14a-19 in care of Clay Smith, General Counsel and Secretary, no later than April 15, 2024.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements, annual reports, or notices of internet availability of proxy materials with respect to two or more stockholders sharing the same address by delivering a single proxy statement, annual report, or notice of internet availability of proxy materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

Brokers with account holders who are Company stockholders may be "householding" our proxy materials. A single proxy statement, annual report, or notice of internet availability of proxy materials may be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that it will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you notify your broker or the Company that you no longer wish to participate in "householding."

If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate proxy statement, annual report, or notice of internet availability of proxy materials, you may (1) notify your broker, (2) direct your written request to: Advanced Emissions Solutions, Inc., Attn: Corporate Secretary, 8051 E. Maplewood Ave., Ste. 210, Greenwood Village, Colorado 80111, Telephone: 888-822-8617 or (3) contact our Investor Relations department by telephone at 312-445-2870. Stockholders who currently receive multiple copies of the proxy statement, annual report, or notice of internet availability of proxy materials at their address and would like to

request "householding" of their communications should contact their broker. In addition, the Company will deliver, upon written or oral request to the address or telephone number above, a separate copy of the proxy statement, annual report, or notice of internet availability of proxy materials promptly to any stockholder at a shared address to which a single copy of the documents was delivered.

ADDITIONAL INFORMATION

We filed our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "2022 Form 10-K") with the SEC on March 8, 2023. The 2022 Form 10-K is being made available to our stockholders concurrently with this Proxy Statement and does not form part of the proxy solicitation material. It is available free of charge at the Company's website at www.advancedemissionssolutions.com or the SEC's web site at www.sec.gov. Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

Upon written request by a stockholder, we will mail, without charge, a copy of the 2022 Form 10-K, including the financial statements and financial statement schedules, but excluding exhibits to the 2022 Form 10-K. Exhibits to the 2022 Form 10-K are available upon payment of a reasonable fee, which is limited to our expenses in furnishing the requested exhibit. Such requests may be made by writing to our Corporate Secretary at the following address or telephone number:

Advanced Emissions Solutions, Inc. Attn: Corporate Secretary 8051 E. Maplewood Ave., Ste. 210 Greenwood Village, Colorado 80111 Telephone: 888-822-8617

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

Alpha IR Group Chris Hodges or Ryan Coleman 312-445-2870 ades@alpha-ir.com

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any of the information on file with the SEC at the SEC's public reference room, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available on the SEC's web site located at *www.sec.gov*, and certain filings are available on the Company's web site at <u>www.advancedemissionssolutions.com</u>. Please note that the information on our website is not part of this Proxy Statement and is not incorporated by reference herein.

If you would like to request documents from us, please do so by May 30, 2023 to receive them before the Annual Meeting. We will send requested documents by first-class mail within one business day after receiving the request.

You should rely only on the information contained in this Proxy Statement to vote on the Annual Meeting proposals. No one has been authorized to provide you with information that is different from what is contained in this Proxy Statement.

This Proxy Statement is dated April 27, 2023. You should not assume the information contained in this Proxy Statement is accurate as of any date other than this date, and the mailing of this Proxy Statement to stockholders shall not imply information is accurate as of any other date.

BY ORDER OF THE BOARD OF DIRECTORS

By: /s/ Greg P. Marken

Greg P. Marken
Chief Executive Officer and Treasurer

Dated: April 27, 2023

APPENDIX A

SIXTH AMENDMENT TO TAX ASSET PROTECTION PLAN

This SIXTH AMENDMENT TO TAX ASSET PROTECTION PLAN (this "Amendment") is entered into as of April 13, 2023, by and between Advanced Emissions Solutions, Inc., a Delaware corporation (the "Company"), and Computershare Trust Company, N.A., a federally chartered trust company (the "Rights Agent"). All capitalized terms used herein and not otherwise defined herein shall have the meaning(s) ascribed to them in that certain Tax Asset Protection Plan dated as of May 5, 2017, by and between the Company and the Rights Agent, as amended by the First Amendment to Tax Asset Protection Plan, dated as of April 6, 2018, the Second Amendment to Tax Asset Protection Plan, dated as of April 8, 2020, the Fourth Amendment to Tax Asset Protection Plan, dated as of April 9, 2021, and the Fifth Amendment to Tax Asset Protection Plan, dated as of March 15, 2022 (collectively, the "TAPP").

RECITALS

WHEREAS, the Company and the Rights Agent are parties to the TAPP; and

WHEREAS, pursuant to Section 26 of the TAPP, the Company and the Rights Agent desire to amend the TAPP as set forth in this Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the promises and the mutual agreements herein set forth, the parties hereto hereby agree as follows:

- 1. <u>Amendment of Section 1(w)</u>. The definition of "Final Expiration Date" set forth in Section 1(w) of the TAPP is hereby amended and restated to read in its entirety as follows:
- "w) "Final Expiration Date" shall mean the Close of Business on the earlier of (i) December 31, 2024 or (ii) December 31, 2023 if Stockholder Approval has not been obtained prior to such date."
- 2. <u>Amendment of Exhibit B (Form of Rights Certificate)</u>. The introductory paragraph of Exhibit B to the TAPP is hereby deleted and replaced with the following:
 - "NOT EXERCISABLE AFTER THE EARLIER OF (I) DECEMBER 31, 2024 OR (II) DECEMBER 31, 2023 if Stockholder Approval has not been obtained prior to such date, OR SUCH EARLIER DATE AS PROVIDED BY THE TAX ASSET PROTECTION PLAN. THE RIGHTS ARE SUBJECT TO REDEMPTION AND EXCHANGE AT THE OPTION OF THE COMPANY, ON THE TERMS SET FORTH IN THE TAX ASSET PROTECTION PLAN. UNDER CERTAIN CIRCUMSTANCES AS SET FORTH IN THE TAX ASSET PROTECTION PLAN, RIGHTS THAT ARE OR WERE BENEFICIALLY OWNED BY AN ACQUIRING PERSON OR ANY AFFILIATE OR ASSOCIATE OF AN ACQUIRING PERSON (AS SUCH TERMS ARE DEFINED IN THE TAX ASSET PROTECTION PLAN) MAY BECOME NULL AND VOID."
- 3. <u>Amendment of Exhibit C (Summary of Rights)</u>. Exhibit C to the TAPP is hereby amended in that the section titled "Expiration" is deleted and replaced with the following:
 - "Expiration. The Rights and the Plan will expire on the earlier of (i) the Close of Business on the earlier of (a) December 31, 2024 or (b) December 31, 2023 if Stockholder Approval has not been obtained prior to such date, (ii) the time at which the Rights are redeemed pursuant to the Plan, (iii) the time at which the Rights are exchanged in full pursuant to the Plan, (iv) the effective date of the repeal of both Section 382 and Section 383 of the Internal Revenue Code, or any successor provisions or replacement provisions, if the Board determines that the Plan is no longer necessary for the preservation of Tax Benefits or (v) the beginning of a taxable year of the Company for which the Board determines that the Company has or will have no Tax Benefits."
- 4. <u>Agreement as Amended</u>. The term "Agreement" as used in the TAPP shall be deemed to refer to the TAPP as amended. Except as set forth herein, the TAPP shall remain in full force and effect and otherwise shall

be unaffected hereby, and each of the Company and the Rights Agent shall continue to be subject to its terms and conditions.

- 5. <u>Severability</u>. If any term, provision, covenant or restriction of this Amendment is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Amendment shall remain in full force and effect and shall in no way be affected, impaired or invalidated; <u>provided</u>, <u>however</u>, that if such excluded terms, provisions, covenants or restrictions shall adversely affect the rights, immunities, liabilities, duties, responsibilities or obligations of the Rights Agent, the Rights Agent shall be entitled to resign immediately.
- 6. <u>Governing Law.</u> This Amendment shall be deemed to be a contract made under the laws of the State of Delaware and for all purposes shall be governed by and construed in accordance with the laws of such State applicable to contracts made and to be performed entirely within such State.
- 7. <u>Counterparts</u>. This Amendment may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument. A facsimile or .pdf signature executed and/or transmitted electronically shall constitute an original signature for all purposes.
- 8. <u>Descriptive Headings</u>. Descriptive headings of the several Sections of this Amendment are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties hereto has caused this Amendment to be duly executed as of the date first above written.

ADVANCED EMISSIONS SOLUTIONS, INC.

By: /s/ Greg Marken

Name: Greg Marken

Title: Chief Executive Officer

COMPUTERSHARE TRUST COMPANY, N.A.

By: /s/ Kathy Heagerty

Name: Kathy Heagerty

Title: Manager, Client Management

SCAN TO VIEW MATERIALS & VOTE ADVANCED EMESSONS SOLUTIONS, N.C. 8651 E. MARLEWOOD AVE., SUITE 210 GREENWOOD VILLAGE, COLONADO 80111

VOTE BY INTERNET
Sefore The Meeting - Go to <u>www.proxynote.com</u> or scan the QR Barcode above

Use the internet to transmit your voting instructions and for electronic delivery of information. Yote by 11:59 P.M. Eastern Time on June 12, 2023. Have your proxy card in hand when you acters the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/ADES2023

You may attend the meeting via the internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903
Use any touch-sone telephone to transmit your voting instructions. Vote by 11:59 RM. Estatem Time June 12, 2023. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we
have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way,
Edgewood, NY 11717.

			03		-			V13238-P91990	KEEP THIS P			
	THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.									RETURN	THIS POR	RIION O
DVAN	ICED E	MISSIONS SOLUTIONS, IN	VC.	1617111600111111161616		Withhold		To withhold authority to vote for any ind nominee(s), mark "For All Except" and wr number(s) of the nominee(s) on the line belo	ividual		A12	
The of t	Boan he fol	d of Directors recommen lowing:	ds yo	u vote FOR ALL	All	All	Except	number(s) of the nominee(s) on the line belo	w.			
 Election of seven directors, each set to serve for a term of one year to expire at the later of the next Annual Meeting of Stockholders or May 31, 2024: 		0	0	0	9							
	Non	ninees:										
	01) 02) 03) 04)		05) 06) 07)	Gilbert LI Julian McIntyre L. Spencer Wells								
The	Board	d of Directors recommend	ls you	vote FOR the foll	wing	proposal	5:			For A	Against	Abstain
2.	 To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed pursuant to item 402 of Regulation 5-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion as set forth under the Executive Compensation section of the proxy statement for the 2023 Annual Meeting of Stockholders; 							0	0	0		
3.	ka						0	0	0			
4.	To approve the issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series A Preferred Stock issued on February 1, 2023; and							ferred Stock Issued	0	0	0	
5.	To a	pprove the 5bth Amendmer	it to t	he Company's Tax A	sset Pro	otection Pl	an.			0	0	0
NO law, any	re: The upon adjour	undersigned stockholder(s) such other matters (none k nment or postponement.	autho	rize(s) the individual by the Company at	s design the tir	nated to vo me of solid	ote the proportion of t	y to vote, in their discretion, to the extent pen this proxy) as may properly come before the	nitted by applicable Annual Meeting or			
Plea	se sigr iers sh	exactly as your name(s) ap ould each sign personally. All	pear(s) holde) hereon. When sign is must sign. If a corp	ing as a	attomey, e n or partne	executor, ac ership, plea	dministrator, or other fiduciary, please give ful se sign in full corporate or partnership name by	title as such. Joint authorized officer.			
Sign	ature	DI EASE SIGN WITHIN BOX		Date				Signature (Joint Owners)	Date			

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Notice and Proxy Statement, Annual Report and Supplement are available at www.proxyvote.com.

V13239-P91990

ADVANCED EMISSIONS SOLUTIONS, INC.

PROXY FOR ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 13, 2023

The holder(s) of common shares of Advanced Emissions Solutions, Inc. (the "Company") identified on this proxy card hereby appoint(s) L. Spencer Wells or, failing him, Greg Marken, the proxies of the stockholder(s), with full power of substitution in each, to attend, vote and act for and in the name of such stockholder(s) at the Annual Meeting of Stockholders of the Company (the "Annual Meeting") to be held via live webcast on the Internet, which can be accessed by visiting www.virtualshareholdermeeting.com/ADES2023, on Tuesday, June 13, 2023, at 9:00 a.m. Mountain Time, and any adjournment or postponement thereof.

Where a choice is indicated, the common shares represented by this proxy card, when properly executed and returned, will be voted or not voted as specified. If no choice is indicated, the common shares represented by this proxy card when properly executed and returned will be voted in accordance with the recommendations of the Board of Directors. If any other matters are properly brought before the Annual Meeting or any adjournment or postponement thereof, or if a nominee for election as a director named in the Proxy Statement who would have otherwise received the required number of votes is unable to serve or for good cause will not serve, the common shares represented by this proxy card will be voted in the discretion of the individuals designated to vote this proxy card, to the extent permitted by applicable law, on such matters or for such substitute nominee(s) as the directors of the Company may recommend.

To be valid, this Proxy form, duly signed and dated, must arrive at the office of Broadridge Financial Solutions, 51 Mercedes Way, Edgewood, NY 11717 the day before the day of the Annual Meeting or any postponement or adjournment thereof.

The stockholder(s) hereby acknowledge(s) receipt of the Notice of Annual Meeting of Stockholders and the related Proxy Statement for the June 13, 2023 Annual Meeting, as well as the Company's 2022 Annual Report. Any proxy heretofore given to vote the common shares which the stockholder(s) is/are entitled to vote at the Annual Meeting is hereby revoked.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF THE COMPANY.

(This proxy card continues and must be signed and dated on the reverse side.)