

APPLIED ENERGETICS, INC.
Form S-1/A
October 31, 2017

SEC File No. 333-217513

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 4 to

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT

Applied Energetics, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation
or organization)

3812

(Primary Standard Industrial Classification
Code Number)

77-0262908

(I.R.S. Employer Identification
Number)

2480 W Ruthrauff Road, Suite 140Q

Tucson, AZ 85705

P 520. 628-7415

(Address, including zip code, and telephone number,

including area code, of registrant's principal executive offices)

George P. Farley

Chief Executive Officer

2480 W Ruthrauff Road, Suite 140Q

Tucson, AZ 85705

C 201 563-2263

(Name, address, and telephone of agent for service)

Copies to:

Mary P. O'Hara

Masur Griffiths + Co. LLP

65 Reade Street

New York, NY 1007

(212) 209-5483

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

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

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

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

| | |
|---|---------------------------|
| Large accelerated filer | Accelerated filer |
| Non-accelerated filer | Smaller reporting company |
| (Do not check if a smaller reporting company) | Emerging growth company |

Calculation of Registration Fee

| Title of each class to be registered | Amount to be registered (1) | Proposed Maximum Offering price per share (2) | Proposed maximum offering price (2) | Amount of registration fee |
|--------------------------------------|-----------------------------|---|-------------------------------------|----------------------------|
| Common stock, \$.001 par value | 99,053,068 (3) | \$ 0.10 | \$9,905,307 | \$ 1,148.03 |

(1) Pursuant to rule 416 under the Securities Act the shares of common stock being registered hereunder include such indeterminable number of shares as may be issuable as a result of stock split, stock dividends, or similar transactions,

(2) Estimated solely for the purpose of determining the registration fee pursuant to Rule 457(c) under the Securities Act.

(3) The Company is registering the following shares of common stock (i) 50,000,000 shares to be sold by the Company, (ii) 5,553,068 shares originally issued to a founder of the Company and (iii) 43,500,000 shares issued in private placement financings for cash and services provided to the Company.

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

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION DATED OCTOBER 31, 2017

Applied Energetics, Inc.

99,053,068 Shares of Common Stock

Applied Energetics, Inc., or the “Company” and “Selling Stockholders” named in this prospectus are offering to sell up to an aggregate of 99,053,068 shares of the Company’s common stock as follows:

- (i) 50,000,000 shares to be sold by the Company,
- (ii) 5,553,068 shares originally issued to a founder of the Company and
- (iii) 43,500,000 shares issued in private placement financings for cash and services provided to the Company.

The Company is offering its shares directly to the public at a price of \$___ per share and has no prior arrangement with any underwriter. The Company will receive all of the proceeds from its portion of this offering some of which will be used to pay expenses of this offering as set forth elsewhere in this Prospectus.

Selling stockholders owning 60,553,068 shares of our common stock have agreed not to sell any shares during the 180 day period following the effectiveness of the registration statement.

The founder and Selling Stockholders are also offering their shares at a price of \$___ per share. We will not receive any proceeds from the sale of securities by the founder or the Selling Stockholders. Information on the Selling

Stockholders and the times and manner in which they may offer and sell shares of our common stock under this prospectus is provided under “Selling Stockholders” and “Plan of Distribution.”

Shares of our common stock trade on the OTCQB Market under the symbol “AERG”. On October 16, 2017 the closing price of our common stock was \$0.03 per share.

See “Risk Factors” beginning on Page ___ for the factors you should consider before buying shares of our common stock.

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

Information on the Selling Stockholders and the times and manner in which they may offer and sell shares of our common stock under this Prospectus is provided under “Selling Stockholders” and “Plan of Distribution.”

The Date of this Prospectus is October , 2017

TABLE OF CONTENTS

| | |
|--|-----|
| <u>USE OF MARKET AND INDUSTRY DATA</u> | 4 |
| <u>CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION</u> | 4 |
| <u>CERTAIN TERMS USED IN THIS PROSPECTUS</u> | 4 |
| <u>PROSPECTUS SUMMARY</u> | 5 |
| <u>THE OFFERING</u> | 11 |
| <u>SELECTED CONSOLIDATED FINANCIAL INFORMATION</u> | 12 |
| <u>RISK FACTORS</u> | 13 |
| <u>UNRESOLVED STAFF COMMENTS</u> | 17 |
| <u>PROPERTIES</u> | 17 |
| <u>LEGAL PROCEEDINGS</u> | 18 |
| <u>USE OF PROCEEDS</u> | 18 |
| <u>DETERMINATION OF OFFERING PRICE</u> | 18 |
| <u>CAPITALIZATION</u> | 18 |
| <u>DILUTION</u> | 20 |
| <u>DIVIDEND POLICY</u> | 20 |
| <u>MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER</u> | 21 |
| <u>PURCHASE OF EQUITY SECURITIES</u> | |
| <u>MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF</u> | 22 |
| <u>OPERATIONS</u> | |
| <u>QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK</u> | 28 |
| <u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u> | 28 |
| <u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL</u> | 28 |
| <u>DISCLOSURE</u> | |
| <u>CONTROLS AND PROCEDURES</u> | 28 |
| <u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u> | 29 |
| <u>EXECUTIVE COMPENSATION</u> | 31 |
| <u>COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION:</u> | 31 |
| <u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED</u> | 31 |
| <u>STOCKHOLDER MATTERS:</u> | |
| <u>SELLING STOCKHOLDERS</u> | 33 |
| <u>PLAN OF DISTRIBUTION</u> | 34 |
| <u>DESCRIPTION OF SECURITIES</u> | 35 |
| <u>LEGAL MATTERS</u> | 36 |
| <u>EXPERTS</u> | 36 |
| <u>REPORTS TO SECURITY HOLDERS</u> | 36 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 37 |
| <u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE</u> | 38 |
| <u>PRINCIPAL ACCOUNTANT FEES AND SERVICES:</u> | 39 |
| <u>FINANCIAL STATEMENTS</u> | F-1 |
| <u>OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION</u> | 40 |

| | |
|--|----|
| <u>INDEMNIFICATION OF DIRECTORS AND OFFICERS</u> | 40 |
| <u>Recent Sales of Unregistered Securities:</u> | 41 |
| <u>Exhibits and Financial Statement Schedules:</u> | 42 |

Please read this prospectus carefully. It describes our business, our financial condition and our results of operations. We have prepared this prospectus so that you will have the information necessary to make an informed investment decision.

You may rely only on the information contained in this prospectus. We have not authorized anyone to provide information or to make representations not contained in this prospectus. This prospectus is neither an offer to sell, nor a solicitation of an offer to buy, these securities in any jurisdiction where an offer or solicitation would be unlawful. Neither the delivery of this prospectus, nor any sale made under this prospectus, means that the information contained in this prospectus is correct as of any time after the date of this prospectus. This prospectus may be used only where it is legal to offer and sell these securities.

For investors outside the United States: We have done nothing that would permit this offering or possession or distribution of this prospectus or any free writing prospectus we may provide to you in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus and any such free writing prospectus outside of the United States.

USE OF MARKET AND INDUSTRY DATA

This prospectus includes market and industry data that has been obtained from third party sources, including industry publications, as well as industry data prepared by our management on the basis of its knowledge of and experience in the industries in which we operate (including our management's estimates and assumptions relating to such industries based on that knowledge). Management's knowledge of such industries has been developed through its experience and participation in these industries. While our management believes the third-party sources referred to in this prospectus are reliable, neither we nor our management have independently verified any of the data from such sources referred to in this prospectus or ascertained the underlying economic assumptions relied upon by such sources. Internally prepared and third party market forecasts, in particular, are estimates only and may be inaccurate, especially over long periods of time. In addition, we have not independently verified any of the industry data prepared by management or ascertained the underlying estimates and assumptions relied upon by management. Furthermore, references in this prospectus to any publications, reports, surveys or articles prepared by third parties should not be construed as depicting the complete findings of the entire publication, report, survey or article. The information in any such publication, report, survey or article is not incorporated by reference in this prospectus.

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

This prospectus contains certain statements relating to our future results that are considered “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those expressed or implied as a result of certain risks and uncertainties, including, but not limited to, changes in political and economic conditions; interest rate fluctuation; competitive pricing pressures within our market; equity and fixed income market fluctuation; technological change; changes in law; changes in fiscal, monetary regulatory and tax policies; monetary fluctuations as well as other risks and uncertainties detailed elsewhere in this prospectus or from time-to-time in our filings with the Securities and Exchange Commission. Such forward-looking statements speak only as of the date on which such statements are made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

CERTAIN TERMS USED IN THIS PROSPECTUS

When this prospectus uses the words “we,” “us,” “our,” “AERG,” and the “Company,” they refer to Applied Energetics, Inc. and its subsidiary. “SEC” refers to the Securities and Exchange Commission.

PROSPECTUS SUMMARY

This summary highlights information contained throughout this prospectus and is qualified in its entirety by reference to the more detailed information and financial statements in this prospectus and related notes included elsewhere herein. This prospectus contains forward-looking statements, which involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under “Cautionary Note Regarding Forward-Looking Statements” and under “Risk Factors” and elsewhere in this prospectus. Since this is only a summary, it does not contain all of the information that may be important to you in making your investment decision. You should carefully read the more detailed information contained in this prospectus, including our financial statements in this prospectus and related notes. Our business involves significant risks. You should carefully consider the information under the heading “Risk Factors” beginning on page 9 of this prospectus.

As used in this prospectus, unless context otherwise requires, the words “we,” “us,” “our,” the “Company” and “AERG” refer to Applied Energetics, Inc. and its subsidiary. Also, any reference to “common stock” refers to our common stock, par value \$0.001 per share.

General

Applied Energetics, Inc. is a corporation organized and existing under the laws of the State of Delaware. Our executive office is located at 2480 W Ruthrauff Road, Suite 140 Q, Tucson, Arizona, 85705 and our telephone number is (520) 628-7415.

Starting in the fourth quarter of 2014 and through the first quarter of 2017, the Company reported as a “shell company” as such term is defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended due to the suspension of its previous business activities in October, 2014. The Company has developed a comprehensive research and development program and commenced R&D Activities in April, 2017. Accordingly, the Company is no longer a “shell company” and is reporting as a “smaller reporting company”.

AERG has reactivated its previous business activities pursuant to Teaming and Consulting Agreements with (i) Applied Optical Sciences, Inc. (“AOS”), (ii) Stephen W. McCahon, Ph.D., one of the Company’s founders, a significant stockholder of the Company and owner of AOS, who was primarily responsible for development of the Company’s existing Intellectual Property portfolio, and (iii) each of the members of the Scientific Advisory Board.

The members of the Scientific Advisory Board (“SAB”) have agreed to assist in our Strategic Roadmap Development, expected R&D activities, and provide a sound technical basis for future teaming, investment, and market analysis. These members have been chosen based upon their areas of subject matter expertise and senior experience levels that span both the Department of Defense (“DOD”) and commercial sectors.

AERG owns intellectual property that is integral and necessary for the development of Ultra-Short Pulse (“USP”) Lasers, Laser Guided Energy (“LGE”) and Direct Discharge Electrical products for military and commercial applications. AERG owns 40 patents of which 10 are classified by the DoD. The classified patents have no expiration date until such time as they are no longer classified after that they will have the normal 17-year patent protection.

We are in discussions with and expect to team with a major Defense Contractor for co-development and manufacture of military products. We will also anticipate teaming with a leading commercial laser technology manufacturer for co-development of commercial products resulting from our research and development efforts.

Applied Optical Sciences

AOS and Dr. McCahon have the facilities and together with the SAB, the technical knowhow to utilize the Company's intellectual property in the development of a next generation of Ultra-Short Pulse Lasers ("Advanced Ultra-Short Pulse Lasers" or "AUSP Lasers"). The parties have agreed to cooperate in the Company's research and development activities and in the proposal and fulfillment of research and development contracts for branches of the Department of Defense, agencies of the federal government and other defense contractors and in other research and development activities relating to lasers. The Company and AOS have a research and development program for the next stage of LGE development that involves the development of AUSP Laser Technologies. These lasers technologies are designed to eventually allow for LGE weapon systems to be mounted on mobile platforms for multiple anti-terrorist missions including counter measures against Improvised Explosive Devices ("IED"), vehicle stopping, and many others. Importantly, the AUSP laser technologies required for successful LGE deployment leads to many new and unique emerging market opportunities in the commercial, medical, and other military applications.

AOS was founded in April 2010 to focus on the long-term research and development of advanced optical materials, photonic devices, Ultra-Short Pulse (USP) lasers and their applications. AOS is self-funded by Dr. McCahon. AOS has made significant investments to establish an approximately 3500 sq. ft. R&D facility that is divided into the three primary areas, Photonic devices, Ultra-Short Pulse (USP) laser development, Optical Thin Films and Material Science. AOS funded R&D activities have resulted in numerous proprietary advanced concepts and technical knowhow. Recently AOS executed advanced USP laser hardware development under DoD funding using existing AOS proprietary concepts. Additionally, AOS has prepared laboratory space, hardware, and is re-configuring existing developmental testbeds in order to apply its proprietary technical knowledge to High Energy and Average Power USP lasers that will support the continued development of Company's Laser Guided Energy technologies. This will allow for an immediate start on the Company's R&D plan without significant capital investment or staffing.

Scientific Advisory Board

The members of the Scientific Advisory Board are:

Dr. Gregory Quarles

Chief Scientific Officer for The Optical Society (OSA) in Washington, DC.

Ph.D. M.S., Physics, University of Oklahoma, 1987.

30 years' experience Optical Physics, Executive and Management Positions and Major Scientific Advisory Boards.

100 Publications, 5 Patents issued.

Dr. L. A. Schlie

Ph.D. EE , 1970, MSEE, 1966, BSEE, University of Illinois, 1965.

40 years' experience In Optical Physics, Sr. Gov't Scientist for Directed Energy Weapons.

70 journal papers, 2 book chapters and 21 patents.

Member of Various Steering Committees for DoD, DOE, DARPA, NSF and DHS.

Advisor for DoD, DOE, NASA and NSF on laser technology, applications and effects.

Dr. Charles Hale

Director of Research and Development, Daylight Solutions.

Ph.D. Engineering, Purdue University, 1999, MBA, University of Arizona. 2006.

21 years' experience in engineering and program management in commercial and DoD environments.

14 publications, 1 patent issued.

Dr. James Harrison

Senior Independent Consultant.

Ph.D., M.S., B.S. Electrical Engineering, M.I.T., 1986.

30 years' experience in Lasers, Optical Physics, Electronic materials, Program and Executive Management.

60 scientific publications; 10 patents issued or pending,

Path Forward

Our goal is to increase the energy and power while decreasing the size, weight, and cost of USP lasers. We expect to develop very high energy and power scaled USP lasers that have a very broad range of applicability for Department of Defense, commercial, and medical applications. Although the historical market for AERG's LGE technology is the U.S. Government, the AUSP technologies will provide numerous platforms for commercial and medical, markets creating a substantially larger product market.

Military Applications

Directed Energy Weapons

Directed Energy ("DE") weapon system means military action involving the use of directed energy to incapacitate, damage, or destroy enemy equipment, facilities, or personnel. Previous to LGE, the only two viable DE weapon systems were High Energy Laser (HEL), which uses heat to burn targets and High Power Radio Frequency (HP-RF), weapons that use electromagnetic energy at specific electro-magnetic frequencies to disable electronic systems.

HEL and HP-RF DE technologies have been under development for decades with numerous DoD and other government contractors participating. The unique attributes of Directed Energy (DE) weapon systems—the ability to create precise effects against multiple targets near-instantaneously and at a very low cost per shot—have great potential to help the DoD in addressing future warfare requirements. The DoD invests research and development dollars into directed energy solutions to fill gaps identified by warfighters. For example, in future conflicts with capable enemies possessing large inventories of guided missiles, it may be operationally risky and cost-prohibitive for the U.S. military to continue to rely exclusively on a limited number of kinetic missile interceptors. Such a "missile competition" could allow an adversary to impose costs on U.S. forces by compelling them to intercept each incoming missile with far more expensive kinetic munitions. The DoD as made significant leaps in both performance and maturity as a result of

many years of research. Recent developments in solid-state lasers have allowed the Navy to field in 2016 the first operational tactical laser system to offer weapon grade power in a compact system.

Laser Guided Energy

AERG's Patented LGE weapon technology works like "man-made lightning", via wireless electrical energy transmission through the atmosphere, to disable vehicles and other threats to our security. AERG has developed the underlying technologies that allow a user to precisely control where the man-made lightning goes in both direction, range, and magnitude. AERG's LGE technologies are combined to create "laser filaments" as the laser passes through the atmosphere. The filaments in turn create Laser Induced Plasma Channels ("LIPC") which enable the transmission of electrical energy.

The Company's development of LGE has thus led to a third DE technology creating a generational opportunity for a completely new weapon system development. The Company uniquely owns the critical intellectual property for LGE and therefore singularly owns the new third type of DE. The unique properties and demonstrated target effects of LGE allow for mission areas and applications that are not accessible to either HEL or RF DE. Therefore, LGE fills numerous requirements in the urban and asymmetric warfare environment. There is a very broad range of targets and effects that LGE addresses that are uniquely different from HEL and RF DE and therefore we do not compete directly within those application spaces

Commercial Applications

Our A USP laser technology has potential applications in the rapidly developing advanced manufacturing processes and market spaces, such as 3D additive and subtractive processes. Examples of currently existing advanced 3D manufacturing includes the melting of plastic feed materials using high temperature extruders, photo-polymer cross-linking using UV lasers or patterned light sources, and melting or sintering of metals from powders using high power lasers. These processes generally produce individual parts with a single or simply mated second material or coarsely alloyed combination of like materials (e.g., metals). Additionally, many of these processes are designed to rapidly produce large volumes using relatively coarse starting materials and deposition resolutions resulting in rough finished surfaces and poor tolerances compared to traditional manufacturing methods. To accommodate for these drawbacks, post-processing using traditional Computer Numerical Control (“CNC”) machines are required for final fit and finish thus resulting in hybrid processes. It is expected that these hybrid processes will be refined over time and form an extremely important set of core capabilities for smart factory environments going forward many years.

In contrast, our existing underlying protected IP, knowledge, and technology base will allow for combining a very broad range of dissimilar basic materials such as metals, dielectrics, organic and inorganic molecules, and even live biological elements using a common set of deposition and processing technologies. Furthermore, the same basic underlying technologies and processes allow for in-situ and hybrid post-processing such as surface nano-structuring, ultra-precise 3D photo-polymerization and athermal machining at the micrometer spatial dimension. These capabilities will allow Applied Energetics to create novel new fabrication processes and systems that will be required for very fine 3D additive and subtractive manufacturing processes at the atomic/nano material level and micrometer physical dimensions.

We will apply our knowledge base and IP to further advance the areas of lasers, electrical energy transport, material vaporization, plasma generation and control, and optical physics to the next generation of advanced manufacturing. This includes novel processes for fundamental material combinatorial control to the atomic level, electric and magnetic field controlled mass transport, deposition and surface structuring, on-demand combinatorial alloying of thin films, and hybrid in-situ and post-processing of the resultant materials for final shaping and functionality. Under separate AOS investment and contracts, AOS is currently re-configuring a significant amount of equipment and laboratory capability to develop and demonstrate several advanced laser and manufacturing technologies and processes. It is expected that these technologies and processes will be directly applicable to the AERG’s future market spaces.

The aforementioned technologies and fundamental processes can be applied to advanced manufacturing areas including mixed material 3D fabrication, nanoparticle generation and deposition, on-demand mixed and gradient alloys, precision fabrication including athermal material removal, dielectric modification including sub-surface refractive index change and welding, and advanced optical sensing for process and quality control.

The aforementioned capabilities will be applied to the currently emerging Technologies 4.0, and inherently Manufacturing 4.0, which are multi-generational growth opportunities that will include highly advanced 3D fabrication capabilities, adaptation of exotic new materials and devices, and on-demand flexible and efficient manufacturing processes. Examples of expected product areas accessible by AE include mixed Photonic/RF/biological functions on a single chip for medical and environmental sensing that are directly linkable at the Cyber-Physical level and Internet of Things. These and similar products and applications will encompass large emerging market areas and greatly impact nearly all aspects of society for many generations to come.

History

AERG was formed in 2002 as a response to the Secretary of Defense call to use innovation to combat terror. The founders privately funded the Company with the strategy to bring viable “new” products to market that did not rely on previous “programs of record” and that were highly unique. AERG developed and has patents for its LGE technology as a reliable and humane alternative to conventional weapons used for defense against many types of terror attacks. AERG’s Joint Improvised Explosive Device Neutralizer (JIN) units, which are used to detect, diffuse and/or explode hidden bombs, are an outgrowth of certain technologies used in the LGE technology and were AERG’s first product deployed to the battlefield. Working with the US Marine Corps (“USMC”), AERG developed and delivered a system (“Banshee”) that demonstrated significant capability in over 200 missions in Afghanistan countering IEDs, a major threat to military operations throughout the world. The Department of Defense has not issued any contracts for JIN or similar products since 2008 due to the wind down of the war in Iraq and Afghanistan. AERG is not aware of any current DOD proposals or interest for JIN type of Counter Improvised Explosive Devices. Between 2005 and 2010, AERG billed and collected \$38,550,698 pursuant to contracts with U.S. Navy and U.S. Marine Corp.

In 2004, AERG developed laboratory versions of its LGE weapons and was then contracted by the U.S. government for demonstrations and testing of the technologies against a very broad range of threats and within a broad range of operating environments. AERG has met with and demonstrated its LGE technology to all branches of the U.S. Military, as well as, other government organizations involved in various defense, anti-terrorism, and offensive military type operations. From these demonstrations, AERG received government support with increased security guidelines. Between 2003 and 2009, AERG billed and collected \$48,078,031 for LGE applications and demonstrations pursuant to contracts from various branches of the U.S. Armed Forces and other branches of the Federal Government.

AERG developed potential applications for its LGE devices for numerous aspects of defense, whether it is sea, land, or air applications. Some possible sea applications are: Opposed boarding of a ship, warship protection against suicide craft, and high value terrorist target protection such as oil tankers. Land opportunities include use in the battlefield to disable vehicles and improvised explosive devices, base and perimeter defense against car bombs and terrorist attacks, Security and Sentry Operations such as check points and crowd control, and protection within nuclear facilities, embassies, and other critical protection areas.

Planned Research and Development Activities

AERG has created a 3 year plan to develop and demonstrate various unique critical underlying laser technologies that if successful will allow for USP laser energy scaling toward the 1 J / pulse level and power scaling to the kW regime average power level. While the focus is directed towards LGE mobile DoD platform integration, requiring reduced volume, weight, and military level ruggedization, the commercial market space for such advanced USP lasers is a rapidly growing market segment. A primary driver for the commercial USP market spaces is high average power output allowing for an increase in manufacturing throughput. It is expected that AERG will adapt the advanced USP

laser technology developed under the R&D plan to the commercial markets and specifically to the emerging Technology 4.0 manufacturing environment. To fully develop the commercial potential for expected AERG USP laser performance, AERG expects to team with existing major laser manufacturers and other companies that possess critically related advanced fabrication technologies to allow for shared system development costs and rapid market penetration.

Our proprietary and confidential Research and Development plan will initially focus on development of a laser with 10-watt average power followed by development of lasers with 100-watt average power and 1-kilowatt average power. The lasers with higher power scaling are intended to be used for LGE and other military applications. We estimate that we will expend a minimum of \$3.75 million over three years. We have acquired the materials and commenced work on the development of the 10 Watt average power laser.

Any funds derived from this offering will be primarily used for our planned research and development activities. We are also actively seeking funding for our defense related research and development activities from the U. S. Navy and other branches of the Department of Defense. We are also seeking funding through strategic alliances for our industrial and medical laser applications. Any funds received from the Department of Defense or strategic partners will reduce the Company's cost of its planned research and development activities.

Competition

AERG's proprietary LIPC based LGE technology is a unique directed energy weapon, with products that can be integrated onto platforms being developed for use by the U.S. Government. In the fiscal year 2013, five major defense contractors, Boeing, United Defense, Northrop/Grumman, L-3 Communications Holdings, Inc. and Lockheed Martin, received about \$80 billion for weapons manufacturing and development. These contractors specialize in different DE weapon system platforms and have had discussions with AERG to utilize LGE technology. Although AERG competes against other weapon systems for funding, the uniqueness of the LGE technology should continue to support its development into weapon platform programs. AERG like many other small defense contractors was adversely affected by cut backs in U.S. Government spending after 2011. AERG believes that there is renewed U.S. Government interest in DE and its LGE technology and believes that continued development of its LIPC technology and growing interest from all branches of the U.S. armed forces and other government agencies will lead to increases in government spending on LGE weaponry in the coming years. (See Recent Congressional Activity on Directed Energy Weapons below.)

Furthermore, AERG's only direct LGE competition is foreign governments, China, Russia and the European Community, may be attempting to develop similar technologies. AERG believes that such foreign activity will create additional U.S. Government funding for LGE in order to maintain our country's lead in directed-energy weapons.

AERG's biggest commercial competitors are Trumpf (German), Rofin-Sinar (just purchased by Coherent, US), Coherent (US), and IPG (US), all billion dollar market class companies that have substantially more resources than AERG.

Recent Congressional Activity on Directed Energy Weapons

In December 2016 Congress passed the fiscal year 2017 "National Defense Authorization Act" (NDAA) that includes provisions indicating that Congress has taken a strong interest in efforts to perfect and implement directed energy weapons, a category that encompasses lasers, microwave weapons, and related technologies. The new NDAA requires DoD to establish a new position for a senior official with principal responsibility for directed energy weapons. Supported by DoD's existing High Energy Laser Joint Technology Office, now re-designated the Joint Directed Energy Transition Office, that will develop a strategic plan for moving directed energy weapons through development and prototyping into acquisition, and will otherwise support DOD's efforts in the field. The new official may use funds for basic research, applied research, advanced technology development, prototyping, studies and analyses, and organizational support. The legislation authorized all requested funds for directed energy weapons. (<https://www.aip.org/fyi/2016/congress-passes-national-defense-authorization-act>)

Recent Financing

On September 15, 2017 the Company borrowed \$53,000 under a convertible note maturing June 20, 2018. The Note is convertible into shares of the Company's \$0.001 par value common stock after March 24, 2018 (the "Initial Conversion Date"). The Conversion rate is variable and will be 58% of the Average of the lowest one day trading price during the twenty trading days preceding the holders notice of conversion. The number of shares issuable on conversion is limited to 4.99% of the Company's then issued and outstanding Common Stock. The Company at the request of the Note Holder has reserved 36,369,879 share of its \$0.001 common stock for conversion. The Note is prepayable at the Company's option until the Initial Conversion Date.

The Company issued the Note Holder warrants to purchase 1,320,598 shares of it's \$0.001 par value common stock at an exercise price of \$0.0301, The Warrants are exercisable at any time over a 7 year period commencing on the date of issuance.

On October 18, 2017 the Company borrowed \$33,000 under a convertible note maturing July 20, 2018. The note bears interest of 12% payable at maturity. Any amount of principal or interest on the note which is not paid when due shall bear interest at the rate of twenty two percent (22%) per annum from the due date thereof until the same is paid. The note is convertible into shares of the Company's \$0.001 par value common stock after April 16, 2018 (the "Initial Conversion Date"). The conversion rate is variable and will be 58% of the average of the lowest one day trading price during the twenty trading days preceding the holders notice of conversion. The number of shares issuable on conversion is limited to 4.99% of the Company's then issued and outstanding Common Stock. The Company at the request of the Note Holder has reserved 18,062,397 share of its \$0.001 common stock for conversion. The Note is prepayable at the Company's option until the Initial Conversion Date.

The Offering

| | |
|--|---|
| Common stock offered by the Company | 50,000,000 shares of our common stock |
| Offering Price | \$0.10 per share |
| Common stock offered by selling stockholders | 49,053,068 shares of our common stock of which: (i) 5,553,068 shares by a Founder and former executive of the Company. (ii) 43,500,000 shares issued in private placement financings for cash and services provided to the Company; |
| Use of Proceeds by the Company | The proceeds from the sale of 50,000,000 shares of our common stock estimated to be [\$5,000,000] will be used to fund our planned research development activities and corporate overhead. |

SELECTED CONSOLIDATED FINANCIAL INFORMATION

Consolidated Statements of Operations Data:

| | Years Ended December 31, | |
|--|-----------------------------|-------------|
| | 2016 | 2015 |
| Revenue | \$— | \$— |
| Net loss | \$(492,605) | \$(223,851) |
| Net loss attributable to common stockholders | \$(526,610) | \$(257,856) |
| Basic and diluted net loss per share attributable to common stockholders | \$(0.01) | \$(0.01) |

| | For the three months ended June 30, | | For the six months ended June 30, | |
|--|--|-------------|--------------------------------------|-------------|
| | 2017 | 2016 | 2017 | 2016 |
| Revenue | \$— | \$— | \$— | \$— |
| Net loss | \$(166,417) | \$(100,219) | \$(283,481) | \$(248,400) |
| Net loss attributable to common stockholders | \$(174,918) | \$(108,720) | \$(300,484) | \$(273,904) |
| Basic and diluted net loss per share attributable to common stockholders | \$(0.01) | \$(0.01) | \$(0.01) | |