UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SPECIALIZED DISCLOSURE REPORT

Advanced Energy Industries, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

000-26966

(Commission File Number)

84-0846841

(IRS Employer Identification No.)

1625 Sharp Point Drive, Fort Collins, Colorado

(Address of principal executive offices)

80525

(Zip Code)

Thomas O. McGimpsey (970) 221-4670

(Name and telephone number, including area code, of the person to contact in connection with this report.)

Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

X Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1 to December 31, 2018.

Section 1 - Conflict Minerals Disclosure

Item 1.01 Conflict Minerals Disclosure and Report

Advanced Energy Industries, Inc. (the "Company") manufactures or contracts to manufacture products that may contain "conflict minerals" as defined in paragraph (d)(3) of Item 1.01 of the Specialized Disclosure Report on Form SD. As these conflict minerals are necessary to the functionality or production of the Company's products, the Company has conducted a reasonable country of origin inquiry regarding its conflict minerals that was designed to determine whether any of its conflict minerals originated in the Democratic Republic of the Congo or an adjoining country (as defined in paragraph (d)(1) of Item 1.01).

The Company's reasonable country of origin inquiry and due diligence processes are described in the Conflict Minerals Report for the reporting period January 1, 2018 to December 31, 2018 attached hereto as Exhibit 1.01.

Conflict Minerals Disclosure

A copy of the Company's Conflict Minerals Report is filed as Exhibit 1.01 hereto and is publicly available at https://www.advancedenergy.com/globalassets/non-resource-library-assets/sds-documents/conflict-minerals-report.pdf.

Item 1.02 Exhibits

The Company's Conflict Minerals Report is filed as Exhibit 1.01 hereto.

Section 2 - Exhibits

Item 2.01 Exhibits

Exhibit 1.01 - Conflict Minerals Report as required by Items 1.01 and 1.02 of this Specialized Disclosure Report on Form SD for the year ended December 31, 2018.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Advanced Energy Industries, Inc.

/s/ Thomas O. McGimpsey

Thomas O. McGimpsey

Date: May 31, 2019

Executive Vice President, General Counsel & Corporate Secretary

Conflict Minerals Report of Advanced Energy Industries, Inc.

Introduction

This Conflict Minerals Report of Advanced Energy Industries, Inc. (together with its consolidated subsidiaries, the "Company," "we," "our" and "us") for the reporting year January 1, 2018 to December 31, 2018 was prepared in accordance with Rule 13p-1 under the Securities Exchange Act of 1934, as amended ("Rule 13p-1").

The Company provides highly-engineered, mission-critical, precision power conversion, measurement and control solutions to our global customers. We design, manufacture, sell and support precision power products that transform, refine, and modify the raw electrical power from the utility and convert it into various types of highly-controllable usable power that is predictable, repeatable and customizable. Our power solutions enable innovation in complex semiconductor and thin film plasma processes such as dry etch, strip, chemical and physical deposition, high and low voltage applications such as process control, analytical instrumentation and medical equipment, and in temperature-critical thermal applications such as material and chemical processing. We also supply related instrumentation products for advanced temperature measurement and control, electrostatic instrumentation products for test and measurement applications, and gas sensing and monitoring solutions for multiple industrial markets. Our network of global service support centers provides local repair and field service capability in key regions as well as provide upgrades and refurbishment services, and sales of used equipment to businesses that use our products.

Conflict Minerals Policy

The Company's Conflict Minerals Policy (the "Policy") states our intent to avoid knowingly procuring materials that contain conflict minerals, within the meaning of Rule 13p-1, that originate in the Democratic Republic of the Congo or the adjoining countries (the "Covered Countries") and that are not certified as conflict-free. Our Policy communicates the expectation that our suppliers adhere to this practice as well. The Policy also encourages our suppliers to establish and follow appropriate due diligence programs and provide us with information regarding the source of conflict minerals in the material they sell to us. Our Policy is available on our website at https://www.advancedenergy.com/globalassets/non-resource-library-assets/sds-documents/conflict-minerals-policy.pdf.

Reasonable Country of Origin Inquiry

Conflict minerals in the form of gold, tantalum, tin and tungsten ("3TG") were necessary to the functionality or production of the Company's products that were manufactured or contracted to be manufactured during 2018. In addition to the Company's power conversion products and thermal instrumentation products, these products include those manufactured by Trek, Inc. ("Trek") and LumaSense Technologies, Inc. ("LumaSense"), companies that AE acquired in 2018 (collectively, "AE Products"). Trek manufactures high-voltage amplifiers, power supplies and generators, and electrostatic measurement and sensor equipment. LumaSense manufactures temperature and gas sensing devices.

As a downstream supplier of the AE Products, the Company is far down the supply chain from the actual mining or refining of conflict minerals. By engaging with its direct suppliers, the Company conducted a reasonable country of origin inquiry ("RCOI") to determine whether any of the conflict minerals in our products originated in the Covered Countries. The Company has determined that with respect the AE Products manufactured or contracted to be manufactured in 2018 that contained necessary conflict minerals, we have reason to believe that some of these minerals may have originated in the Covered Countries and may not have come from recycled or scrap resources. The Company conducted good-faith due diligence on the source and chain of custody of the necessary conflict minerals as summarized in this Conflict Minerals Report.

Summary of Due Diligence Measures

Our due diligence process was based on the Organisation for Economic Co-operation and Development's Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Third Edition, and the related supplements for 3TG ("OECD Framework"). The OECD Framework is an internationally recognized due diligence protocol.

To implement the RCOI, the Company surveyed its direct suppliers to collect information regarding the presence and sourcing of 3TG used in the products and materials supplied to the Company. Our survey used the Conflict Minerals Reporting Template ("CMRT") developed by the Responsible Minerals Initiative ("RMI"). RMI is an initiative of the Responsible Business Alliance and Global e-Sustainability Initiative. Only CMRT templates in version 4.0 or higher were accepted. The CMRT template is a standardized reporting template developed by RMI to facilitate the transfer of information through the supply chain regarding the country of origin for minerals, and the smelters and refiners that process, the 3TG in a company's supply chain. Information was collected and stored using an online platform provided by a third party vendor. Suppliers were asked to provide information regarding the sourcing of their materials with the ultimate goal of identifying the smelters, refiners, recyclers or scrap processors of 3TG ("Facilities") and associated countries of origin where the 3TG was originally mined.

We identified and contacted a total of 760 in-scope suppliers for our RCOI for reporting year 2018. For reporting year 2017, we identified 342 suppliers as in-scope for our RCOI. This increase in the number of suppliers contacted is due in large part to the expanding supply chain resulting from our acquisitions of Trek and LumaSense, as described above. In coordination with our vendor, we deployed the following actions to maximize supplier engagement:

- An introduction email from the Company was sent to direct suppliers describing the Company's conflict minerals compliance program and associated requirements and identifying the Company's vendor as a partner in the due diligence process;
- A follow up email was sent to these suppliers by the third party vendor with a registration and survey request link for the
 online data collection platform; this email also provided a link to the Company's third party vendor's conflict minerals
 supplier resource center containing a list of frequently asked questions and other supplier resources with information
 concerning the conflict minerals regulations;
- Following the initial introduction to the program and information request, up to five reminder emails were sent by the Company's vendor to each non-responsive supplier requesting survey completion;
- If, after these efforts, a given supplier still did not register with the system or provide the information requested, an escalation process was initiated. The escalation process consisted of direct outreach by the Company by email requesting their participation in the program. The

Company's vendor then sent at least one final request for participation by email. The deadline for suppliers to provide information for the 2018 reporting year was May 23, 2019.

Supplier responses were evaluated for plausibility, consistency, and gaps. Additional supplier contacts were conducted to attempt to resolve the following quality control flags:

- One or more smelter or refiners were listed for an unused metal;
- Facility information was not provided for a used metal, or facility information provided was not a verified metal processor;
- Supplier answered yes to sourcing from the Covered Countries, but none of the facilities listed are known to source from the region;
- Supplier indicated that they have not received conflict minerals data for each metal from all relevant suppliers;
- Supplier indicated they have not identified all of the facilities used for the products included in the declaration scope;
- Supplier indicated they have not provided all applicable facility information received; and
- Supplier indicated 100% of the 3TG for products covered by the declaration originates from scrap/recycled sources, but one or more facilities listed are not known to be exclusive recyclers.

Results

A total of 40% of our suppliers responded to the information requests. This compares to a response rate of 50% for reporting year 2017, 57% for reporting year 2016 and a response rate of 23% for our first reporting year, 2013. A total of 75% of the suppliers that responded to the survey indicated that one or more of the 3TG metals are necessary to the functionality or production of the products they supply to the Company. The Company and its vendor performed additional research and supplier outreach to verify: (1) that the Facilities identified by the suppliers are in fact smelters or refiners, (2) the types of metals these Facilities process, (3) the mine countries of origin, (4) the conflict-free certification of the Facilities, and (5) the due diligence measures used for those Facilities that are not conflict-free certified.

The responding suppliers identified a total of 320 Facilities considered to be smelters or refiners. Based on the data provided in the CMRTs and the additional due diligence of the 320 smelters or refiners identified by suppliers, there is an indication that 53 of these may source from the Covered Countries. In order to evaluate the sourcing and chain of custody practices of these 53 smelters or refiners, the Company and its vendor relied on the following internationally accepted audit standards to determine which smelters and refiners may be considered DRC conflict free: the Responsible Minerals Assurance Process ("RMAP"), the London Bullion Market Association Good Delivery program ("LBMA") and the Responsible Jewelry Council Chain-of-Custody Certification ("RJC"). The results of the screening confirm that all 53 of the identified smelters or refiners received a "conflict free" certification under one or more of the RMAP, LBMA, or RJC programs.

Future Mitigation

The Company will undertake the following steps during the calendar year 2019 to improve the due diligence process and mitigate the risk that conflict minerals in our products might benefit armed groups in the Covered Countries, including:

• Attempt to increase the response rate for the RCOI process through further supplier engagement and contract requirements and other appropriate means;

- Continue education efforts internally and with our suppliers about conflict minerals reporting requirements;
- Continue to compare RCOI results to information collected via independent conflict free smelter validation programs such as those referenced in this report; and
- Contact smelters identified as a result of the RCOI process and requesting their participation in obtaining a "conflict free" designation from an industry program such as those referenced in this report.