U.S. Department of Energy Office of Manufacturing and Energy Supply Chains
Guidance on Implementing Section 1005 of the Energy Act of 2020
May 2025

General Announcement

This guidance document supersedes the issuances of December 2022, September 2023, and May 2024.

In accordance with Section 1005 of the Energy Act of 2020 (42 U.S.C. 6317 note; Pub. L. 116-260, div. Z) and Section 40555 of the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58), Department of Energy (DOE) issued implementation guidance to establish a rebate program for extended product systems in December 2022. The guidance was modified in September 2023 and May 2024. This document provides updated guidance as it pertains to application processes. The guidance update also reflects the removal of Executive Order 14008 content. DOE published draft implementation guidance on April 27, 2022, for stakeholder input and feedback (87 FR 25006). DOE has updated the implementation guidance in accordance with the feedback received and program developments.

I. Purpose and Scope

(a) This guidance describes the application process and the information necessary for the Secretary of Energy (Secretary) to make determinations regarding rebate payments to qualified entities pursuant to Section 1005 of the Energy Act of 2020, Pub. L. No. 116-260, div. Z, as amended (Section 1005).

(b) The Secretary may make rebate payments to qualified entities for extended product systems purchased and installed or redesigned and incorporated during the eligibility windows. Rebate payments may only be made upon receipt by the Secretary of a rebate application that demonstrates that the applicant is eligible to receive such rebate payment and satisfies the other requirements as deemed necessary.

(c) This guidance may be revised in a future document.

II. Authority

Section 1005 directs the Secretary to establish an "Extended Product System Rebate Program" to provide rebates for expenditures made by qualified entities for the purchase or installation of a qualified extended product system. Amongst other things, Section 1005 also sets forth certain definitions, eligibility requirements, and the authorized amounts of rebates. DOE may determine the extent to which appropriated funds are available to be obligated under this program.

III. Definitions

Actual volume flow rate means the volume flow rate of air, compressed and delivered at the standard discharge point, referred to conditions of total temperature, total pressure and composition prevailing at the standard inlet point, and as determined in accordance with the test procedures prescribed in Appendix A to Subpart T of Part 431 of the Code of Federal Regulations.

Air compressor means a compressor designed to compress air that has an inlet open to the atmosphere or other source of air and is made up of a compression element (bare compressor), driver(s), mechanical equipment to drive the compressor element, and any ancillary equipment.

Air-cooled compressor means a compressor that utilizes air to cool both the compressed air and, if present, any auxiliary substance used to facilitate compression, and that is not a liquid-cooled compressor.

Axial inline fan means a fan with an axial impeller and a cylindrical housing with or without turning vanes.

Axial panel fan means an axial fan, without cylindrical housing, that is mounted in a panel, an orifice plate or ring.

Best Efficiency Point (BEP) means the pump hydraulic power operating point (consisting of both flow and head conditions) that results in the maximum efficiency.

Calendar year means a period beginning on January 1 and ending on December 31.

Centrifugal housed fan means a fan with a centrifugal or mixed flow impeller in which airflow exits into a housing that is generally scroll-shaped to direct the air through a single fan outlet. A centrifugal housed fan does not include a radial impeller.

Centrifugal inline fan means a fan with a centrifugal or mixed flow impeller in which airflow enters axially at the fan inlet and the housing redirects radial airflow from the impeller to exit the fan in an axial direction.

Centrifugal unhoused fan means a fan with a centrifugal or mixed flow impeller in which airflow enters through a panel and discharges into free space. Inlets and outlets are not ducted. This fan type also includes fans designed for use in fan arrays that have partition walls separating the fan from other fans in the array.

DOE means the U.S. Department of Energy.

Electronic Control means:

- a power converter; or
- a combination of a power circuit and control circuit included on 1 chassis.

Electric Motor means a machine that converts electrical power into rotational mechanical power.

End suction close-coupled (ESCC) pump means a close-coupled, dry rotor, end suction pump that has a shaft input power greater than or equal to 1 hp and less than or equal to 200 hp at BEP and full impeller diameter and that is not a dedicated-purpose pool pump. Examples include, but are not limited to, pumps within the specified horsepower range that comply with ANSI/HI nomenclature OH7, as described in ANSI/HI 1.1-1.2-2014.

End suction frame mounted/own bearings (ESFM) pump means a mechanically coupled, dry rotor, end suction pump that has a shaft input power greater than or equal to 1 hp and less than or equal to 200 hp at BEP and full impeller diameter and that is not a dedicated-purpose pool pump. Examples include, but are not limited to, pumps within the specified horsepower range that comply with ANSI/HI nomenclature OH0 and OH1, as described in ANSI/HI 1.1-1.2-2014, "American National Standard for Rotodynamic Centrifugal Pumps for Nomenclature and Definitions," approved October 30, 2014.

Fan or *Blower* means a rotary bladed machine used to convert electrical or mechanical power to air power, with an energy output limited to 25 kilojoules/kilogram (kJ/kg) of air. It consists of an impeller, a shaft and bearings and/or driver to support the impeller, as well as a structure or housing. A fan or blower may include a transmission, driver, and/or motor controller.

Fiscal Year means the period beginning October 1 and ending on September 30.

In-line (IL) pump means a pump that is either a twin-head pump or a single-stage, single-axis flow, dry rotor, rotodynamic pump that has a shaft input power greater than or equal to 1 hp and less than or equal to 200 hp at BEP and full impeller diameter, in which liquid is discharged through a volute in a plane perpendicular to the shaft. Such pumps do not include pumps that are mechanically coupled or close-coupled, have a pump power output that is less than or equal to 5 hp at BEP at full impeller diameter, and are distributed in commerce with a horizontal motor. Examples of in-line pumps include, but are not limited to, pumps within the specified horsepower range that comply with ANSI/HI nomenclature OH3, OH4, or OH5, as described in ANSI/HI 1.1-1.2-2014.

Liquid-cooled compressor means a compressor that utilizes liquid coolant provided by an external system to cool both the compressed air and, if present, any auxiliary substance used to facilitate compression.

Lubricated compressor means a compressor that introduces an auxiliary substance into the compression chamber during compression.

Manufacturer means the owner of the commercial or industrial machinery or equipment who incorporated the extended product system into that machinery or equipment.

Power roof/wall ventilator (PRV) means a fan with an internal driver and a housing to prevent precipitation from entering the building. It has a base designed to fit over a roof or wall opening, usually by means of a roof curb.

Pumps means equipment designed to move liquids (which may include entrained gases, free solids, and totally dissolved solids) by physical or mechanical action and includes a bare pump and, if included by the manufacturer at the time of sale, mechanical equipment, driver, and controls.

Pump Energy Rating (ER) means the pump energy rating as specified on the pump energy label or certificate as provided by the Hydraulic Institute.

Radial-housed fan means a fan with a radial impeller in which airflow exits into a housing that is generally scroll-shaped to direct the air through a single fan outlet. Inlets and outlets can optionally be ducted.

Rebate Payment means the payment which a qualified entity may receive upon successfully proving eligibility and is based on the nameplate rated horsepower of the electric motor and electronic control included in the qualified extended product system and the statutory rate. Rebate payment will not exceed the statutory limit established in Subsection (d)(2) of Section 1005 per qualified entity per calendar year.

Rebate Payment Application means an application for a rebate payment for an extended product system that is submitted during the application period.

Radially split, multi-stage, vertical, in-line diffuser casing (RSV) pump means a vertically suspended, multi-stage, single axis flow, dry rotor, rotodynamic pump:

- that has a shaft input power greater than or equal to 1 hp and less than or equal to 200 hp at BEP and full impeller diameter and at the number of stages required for testing;
- in which liquid is discharged in a place perpendicular to the impeller shaft;
- for which each stage (or bowl) consists of an impeller and diffuser;
- for which no external part of such a pump is designed to be submerged in the pumped liquid; and
- examples include, but are not limited to, pumps complying with ANSI/HI nomenclature VS8, as described in ANSI/HI 2.1-2.2-2014, “American National Standard for Rotodynamic Vertical Pumps of Radial, Mixed, and Axial Flow Types for Nomenclature and Definitions,” approved April 8, 2014.

Rotary compressor means a positive displacement compressor in which gas admission and diminution of its successive volumes or its forced discharge are performed cyclically by rotation of one or several rotors in a compressor casing.

Secretary means the Secretary of the U.S. Department of Energy or such officers or employees of the U.S. Department of Energy as designated by the Secretary of the U.S. Department of Energy.

Submersible turbine (ST) pump means a single-stage or multi-stage, dry rotor, rotodynamic pump that is designed to be operated with the motor and stage(s) fully submerged in the pumped liquid; that has a shaft input power greater than or equal to 1 hp and less than or equal to 200 hp at BEP and full impeller diameter and at the number of stages required for testing; and in which each stage of this pump consists of an impeller and diffuser, and liquid enters and exits each stage of the bare pump in a direction parallel to the impeller shaft. Examples include, but are not limited to, pumps within the specified horsepower range that comply with ANSI/HI nomenclature VS0, as described in ANSI/HI 2.1-2.2-2014.

Variable-speed compressor means an air compressor that is capable of adjusting the speed of the driver continuously over the driver operating speed range in response to incremental changes in the required compressor actual volume flow rate.

IV. Who May Apply?

(a) **Qualified Entities**

Section 1005 defines two classes of qualified entities who may apply, either:

(1) an entity that purchased a qualified extended product system and completed its installation in the United States or its territories during fiscal years 2022 and 2023 (“Class 1”); and

(2) the manufacturer of commercial or industrial machinery or equipment that did not previously include an extended product system that was upgraded to incorporate a qualified extended product system and re-entered service in the United States or its territories during calendar years 2021 or 2022 (“Class 2”).

(b) **Preferences**

The Buy American requirements of Section 1605 of the American Recovery and Reinvestment Act do not apply to this program.

V. What is a Qualified Extended Product System?

V.G General Requirements

(a) **Requirements for all Extended Product Systems**

(1) The extended product system must contain an electric motor and an electronic control that:

(i) offers variable speed or multispeed operation;

(ii) offers partial load control that reduces input energy requirements;

(iii) has a rating greater than 1 horsepower (hp); and

(iv) uses controls that automatically adjust the electric motor speed by differential pressure, flow, temperature, or other control variable.

(2) The extended product system must reduce the input energy (as measured in kilowatt-hours) by at least five percent compared to identified base levels set by the Secretary. A qualified entity must demonstrate compliance with this criterion by using the equipment-specific criteria in subsections V.P, V.C, or V.F if the qualified extended product system is used in a pump, air compressor, or fan, respectively. The requirements in V.P(a), V.C(a), and V.F(a) ensure that sufficient energy savings will be achieved with the extended product installation.

(3) If the extended product system for a Class 1 application is not an air compressor, fan, or pump, or if the efficiency rating of the air compressor, fan or pump is not available, the following information may be used to meet the extended product system requirement:
   (i) confirmation that a variable speed drive adjusts the output to the motor in response to a specific control variable; and
   (ii) when compared to a fixed speed drive, the new product with a variable speed drive operates at least 5 percent more efficiently.

(4) If the extended product components are embedded within a larger packaged system (e.g., a compressor in a heat pump, a fan in an HVAC system, or the like) it may be deemed eligible in a Class 1 application provided the motor is controlled by a variable speed drive and a minimum of at least a 5 percent efficiency gain over like equipment without variable speed operation is demonstrated.

(b) **Class 2-Specific Requirements**

In addition to the requirements of paragraph (a), a class 2 qualified extended product system must have been incorporated in commercial or industrial machinery or equipment that did not previously make use of an extended product system prior to being re-designed.

V.P Pumps

(a) Qualified extended product systems used to drive pumps must meet the following criteria in addition to the criteria specified in subsection V.G.

(b) The pump must operate at least:
   (1) 75 percent of the time at or below 75 percent of the maximum design flow; and
   (2) 2,000 hours per year (hr/yr).

(c) **Class 1-Specific Requirements**

The installed pump system must have:
   (1) a variable load pump energy index (PEI_{VL}) that is less than or equal to the values specified in Table 1, as determined in accordance with the test procedure in 10 C.F.R. 431, Appendix A to Subpart Y; or
   (2) a pump energy rating (ER) that is greater than or equal to the values specified in Table 1.

(d) **Class 2-Specific Requirements**

The qualified entity must remove or disable existing throttling or bypass devices.

Table 1: Pump Qualifying Criteria

Equipment Class	Maximum PEI_{VL}	Minimum ER
ESCC.1800.VL	0.48	52
ESFM.3600.VL	0.46	54
ESFM.1800.VL	0.46	54
ESFM.3600.VL	0.48	52
IL.1800.VL	0.46	54
IL.3600.VL	0.45	55
RSV.1800.VL	0.46	54
RSV.3600.VL	0.43	57
ST.1800.VL	0.53	47
ST.3600.VL	0.53	47

Note: Equipment class designations consist of a combination, in sequential order separated by periods, of an equipment family (end suction close-coupled [ESCC]; end suction frame mounted/own bearing [ESFM]; in-line [IL]; radially split, multistage, vertical, in-line diffuser casing [RSV]; submersible turbine [ST], as defined in Section III), nominal speed of rotation in revolutions per minute, and variable load [VL]. The cited variable load pump energy index (PEI_{VL}) values are the maximum that qualify. The cited energy rating (ER) values are the minimum that qualify. ER is defined as $ER = (1 - PEI_{VL}) \cdot 100$.

V.C Air Compressors

(a) Qualified extended product systems used to drive air compressors must meet the following criteria in addition to the criteria specified in subsection V.G.

(b) The air compressor must operate at least:
   (1) 75 percent of the time at or below 70 percent of the full-load actual volume flow rate; and
   (2) 2,000 hr/yr.

(c) **Class 1-Specific Requirements**
   The installed air compressor system must have an isentropic efficiency that is greater than or equal to the values specified in Table 2, as determined in accordance with the test procedure in 10 C.F.R. 431, Appendix A to Subpart T.

(d) **Class 2-Specific Requirements**
   The qualified entity must remove or disable existing mechanical controls (e.g., inlet valve modulation).

Table 2: Air Compressor Qualifying Criteria

Equipment Class	Minimum Package Isentropic Efficiency
Rotary, lubricated, air-cooled, variable-speed compressor	$\frac{20}{19}\left[\eta_{Regr} - \frac{(1-\eta_{Regr})}{10}\right]$
Rotary, lubricated, liquid-cooled, variable-speed compressor	$\frac{20}{19}\left[0.02349 + \eta_{Regr} - (1-\eta_{Regr})\left(\frac{3}{20}\right)\right]$

Note: The minimum package isentropic efficiency required for each qualified form of compressor is calculated using the expression in that column. The package isentropic efficiency reference curve (η_{Regr}) is defined as: $\eta_{Regr} = -0.01549 \cdot ln^2(0.4719 \cdot V_1) + 0.21573 \cdot ln(0.4719 \cdot V_1) + 0.00905$, where V_1 is the full-load actual volume flow rate in cubic feet per minute (cfm).

V.F Fans

(a) Qualified extended product systems used to drive fans must meet the following criteria in addition to the criteria specified in subsection V.G.

(b) The fan must operate at least:
   (1) 75 percent of the time at or below 75 percent of the maximum design flow; and
   (2) 2,000 hr/yr.

(c) **Class 1-Specific Requirements**
   The installed fan system must have a fan energy index (FEI) that is greater than or equal to the values specified in Table 3 at the maximum design flow, as determined in accordance with ANSI/AMCA Standard 214-21, "Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers."

(d) **Class 2-Specific Requirements**
   The qualified entity must remove or disable existing throttling or bypass devices (e.g., inlet vanes, bypass dampers, three-way valves, and throttling valves).

Table 3: Fan Qualifying Criteria

Fan Equipment Family	Minimum FEI
Axial inline fan	1.20
Centrifugal housed fan	1.15
Centrifugal unhoused fan	1.25
Centrifugal inline fan	1.10
Axial panel fan	1.25
PRV	1.10
Radial housed fan	1.15

Note: The cited fan energy index (FEI) for each type of fan is the minimum required to qualify.

VI. Eligibility Window

(a) **Installation Window**
   The eligibility window for each class of qualified entity is for:
   (1) **Class 1**
      installations that concluded in fiscal years 2022 and 2023, which includes dates ranging from October 1, 2021, to September 30, 2023.
   (2) **Class 2**
      upgrades that concluded in calendar years 2021 and 2022, which includes dates ranging from January 1, 2021, to December 31, 2022.

(b) **Application Deadline**
   Applications will be accepted until funds are expended.

VII. Application Requirements

(a) **General Provisions**

Documentation will be reviewed in accordance with the eligibility requirements specific for each type of machinery to ensure eligibility and minimize fraud, waste, and abuse. Additional documentation may be outlined in the online submission portal or must be available upon request to clarify eligibility. DOE may release data contained in the application to third parties to inform the analysis.

(b) **Required Documentation**

Entities must submit the documentation in paragraphs (1–5) of this subsection as part of their application.

(1) **Entity Information**

Applicants must provide:

(i) the name and physical address of the entity applying for the rebate payment;

(ii) whether the entity making application is a third-party representative of the applicant;

(iii) the account number and routing number for the bank account to which a rebate would be deposited;

(iv) the name, mailing address, telephone number, and email address of a point of contact to respond to questions, requests for additional information, and receive notification of eligibility determination; and

(v) a description of the type of entity (e.g., utility).

(2) **General System Information**

For all qualified entities, demonstrated evidence that the qualified extended product system meets the requirements of Sections V and VI, including:

(i) the purchase date of the extended product system and a copy of the invoice or proof of payment for the purchased extended product system;

(ii) the installation date of the extended product system and a copy of the proof of installation (e.g., receipt/invoice/contract);

(iii) the zip code where the qualified extended production system is installed;

(iv) the serial number, manufacturer, model number (basic model number and individual model number for covered equipment subject to DOE's certification requirements), and horsepower on the nameplate of the electric motor and electronic control included in the extended product system;

(v) if accessible, a copy or image of the nameplate of the electric motor and electronic control included in the extended product system; and

(vi) a certification of the operating requirements specified in V.P(a), V.C(a), and V.F(a).

(3) **Class 1-Specific System Documentation**

Qualified entities in class 1 must submit the following additional evidence that the qualified extended product system meets the requirements of Section V.

(i) The serial number, manufacturer, model number, and energy efficiency rating (expressed in

PEI_{VL}, isentropic efficiency, or FEI) on the nameplate of the extended product system and a copy of the manufacturer specification sheets.

(ii) A copy or image of the nameplate of the extended product system.

(iii) A copy of pump energy rating label or certificate for pumps relying on the pump energy rating qualifying criteria.

(iv) Documentation supporting the qualified FEI was calculated according to AMCA 214-21 and verified by a third party for fans.

(4) **Class 2-Specific System Documentation**

Qualified entities in class 2 must submit:

(i) a description of prior controls for redesigned commercial or industrial machinery or equipment (e.g., outlet control valve, bypass valve, discharge damper, inlet guide vanes) and a statement confirming that these controls have been removed or disabled.

(ii) A statement signed by an authorized officer certifying that the information contained in the application is accurate.

VIII. Calculation of Rebate Payments and Maximum Rebate Payments

(a) **Rebate Payments Calculation**

(1) Rebate payments may be calculated as the product obtained by multiplying:

(i) the sum of the nameplate rated horsepower of

(A) the electric motor to which the extended product system is attached;

(B) the electronic control; and

(ii) $25.

(2) If the rated horsepower is provided as a range of values, the maximum rated value will be used in the calculation.

(3) If the horsepower rating of the electronic control is not specified in the product documentation, the horsepower rating of the electric motor will be used as the estimate for that value.

(b) **Maximum Rebate Payments**

A qualified entity will not be entitled to aggregate rebates under this section in excess of $25,000 per calendar year.

IX. Procedures for Processing Applications

(a) **Processing Applications**

(1) Applications and notifications to the Department must be submitted to the Rebate Programs mailbox at extendedproductsystemrebatesprogram@hq.doe.gov

(2) Following submission of an application, DOE will review and consider the completeness of the application data and may request supplementary information relating to the application. When DOE is satisfied that sufficient information has been reported, the application will be reviewed for eligibility consistent with section 1005 and this guidance.

(3) Questions about the program should be sent to extendedproductsystemrebatesprogram@hq.doe.gov

(b) **Notice of Decision**
   (1) DOE or a designated third-party will issue a written notice of the determination to each applicant:
      (i) disapproving or approving the application as eligible for rebate payment, in whole or in part; and
      (ii) setting forth the applicant's amount of rebate payment.
   (2) If the application is denied in whole or in part, the written notice will include an explanation of the basis for denial.
   (3) Rebate recipients will receive a Form 1099.

X. Administrative Appeals

(a) In order to exhaust administrative remedies, an applicant who receives a notice denying an application in whole or in part, must file an appeal within 30 calendar days of the date on the notice denying an application with the DOE Office of Hearings and Appeals, 1000 Independence Avenue, S.W., Washington, D.C. 20585, in accordance with the procedures set forth below and in accordance with the procedural regulations codified at 10 C.F.R. Part 1003.

(b) If an applicant does not file an appeal in accordance with these requirements, the determination of DOE shall become final. If an applicant files an appeal on a timely basis in accordance with these requirements, the decision and order of the Office of Hearings and Appeals shall be final. If the Office of Hearings and Appeals orders a rebate, the Director of the Office of Hearings and Appeals shall send a copy of such order to the DOE Finance Office with a directive to make the required payment.

(c) The appeal shall contain:
   (1) a concise statement of the ground(s) upon which the applicant contests the written notice of DOE;
   (2) a copy of the DOE notice;
   (3) contact information (i.e., name, telephone number, mailing and e-mail addresses) for a representative able to respond to questions and provide information relevant to the appeal; and
   (4) any data, documentation, or other relevant information supporting a showing by the appellant that the denial of eligibility or disallowance of payment, either in whole or in part, is arbitrary and capricious.

(d) The appeal, including attachments, should be electronically filed with the Office of Hearings and Appeals (OHA), U.S. Department of Energy, at: oha.filings@hq.doe.gov. Upon filing, OHA will confirm receipt of the appeal and assign the appeal a case number.

(e) The following matters are not subject to appeal:
   (1) the denial of an application on the basis of untimeliness; and
   (2) a proportional award of a rebate payment based upon DOE's determination that insufficient appropriated funds are available to make rebate payments on all eligible production to all qualified applicants.

(f) The appeal process shall proceed as follows:
   (1) An appeal under these procedures must be filed within thirty (30) days of an applicant receiving the determination by DOE denying eligibility or a claim for rebate payment, in whole or in part.
   (2) In evaluating an appeal, OHA may require the submission of additional information by the

appellant regarding any statement, data, documentation, or other information included in an appeal. OHA may also solicit and accept submissions of relevant information from other sources, including DOE, provided that the appellant is afforded an opportunity to respond to all such submissions. OHA may, on its own initiative, convene a conference or hearing if, in its discretion, it considers that such conference or hearing will advance its evaluation of the appeal. OHA will determine the scope and format of any conference or hearing convened under these procedures, as well as the parties allowed to participate.

(3) OHA may issue an order summarily dismissing an appeal if:
   (i) the appeal is not filed in a timely manner, unless good cause is shown;
   (ii) the appeal is defective on its face;
   (iii) the appellant fails to provide additional information requested by OHA within the time specified by OHA; or
   (iv) for any other reason that the appeal would be subject to dismissal under the OHA procedural regulations codified at 10 C.F.R. Part 1003.

(4) OHA will provide DOE with the opportunity to submit a written response to an appeal within a period of time specified by OHA. OHA will provide the appellant with a copy of DOE's response and allow the appellant to submit a reply within a period of time specified by OHA.

(5) Within thirty (30) days of receiving all required information, including additional information requested by OHA subsequent to the submission of the appeal, OHA shall issue a written decision granting or denying the appeal, in whole or in part. The decision shall include a written statement setting forth the relevant facts and basis for the determination. The date of the application filing for those submissions that have gone through the appeal process shall be the date OHA issues a written decision. Upon issuance, OHA shall serve an electronic version of the decision upon the appellant and the DOE Office of Energy Efficiency and Renewable Energy. The decision will also be published on the OHA website: http://www.energy.gov/oha. The decision of OHA shall constitute the final agency action and the appellant's final right of administrative review.

(6) All expenses incurred by the appellant in pursuing any appeal before OHA shall be borne exclusively by the appellant.