



Program Guidance for

TITLE 17 CLEAN ENERGY FINANCING PROGRAM

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In addition to this Title 17 Guidance, detailed Part I and Part II Application Instructions are provided under separate cover, available on the [Title 17 Overview](#) page on LPO’s website.



I. Purpose of Guidance

The Title 17 Clean Energy Financing Program is a critical tool for accelerating the deployment of clean energy and decarbonization technologies in the United States—creating good jobs, strengthening supply chains, and enabling an equitable energy transition. This guidance document provides a comprehensive overview of the Title 17 program for potential borrowers seeking flexible, custom debt financing solutions, with a focus on the what, why, and how. The guidance describes eligible project types, application requirements, loan terms and conditions, and evaluation criteria. In addition to the program overview contained here, detailed application instructions are available on LPO’s [Title 17 Overview](#) page.

The materials consolidate and replace previous solicitations for existing Title 17 programs (including Innovative Clean Energy, Advanced Nuclear, and Fossil solicitations), and incorporate new authorities established by the Infrastructure Investment and Jobs Act (IIJA) in 2021 and the Inflation Reduction Act (IRA) in 2022, including the Energy Infrastructure Reinvestment (Section 1706) authority and a new category of financing under Section 1703 for projects supported by a State Energy Financing Institution (SEFI).¹ Projects currently under review in LPO’s Title 17 application process do not need to resubmit in light of this guidance, and prior determinations made with respect to eligibility of those applications do not change.

If you have questions as you navigate, please reach out to LPO for support.

¹ See Attachment A (Loan Authority Limits by Appropriation) for a summary of the specific loan guarantee authority and appropriations reflected in this guidance.

II. Title 17 Overview

Under Title 17, the U.S. Department of Energy (DOE) Loan Programs Office (LPO) may provide loan guarantees for projects that support clean energy deployment and energy infrastructure reinvestment in the United States. LPO administers the Title 17 program under the authority created in Title 17 of the Energy Policy Act of 2005.² Title 17 has been reauthorized, amended, and revised by legislation since that time, including by the IIJA in 2021 and IRA in 2022. DOE has promulgated regulations implementing the Title 17 program, which are set forth in Part 609 of Title 10 of the Code of Federal Regulations (“Title 17 Regulations”).

The Title 17 Clean Energy Financing Program is central to LPO’s mission to serve as a “Bridge to Bankability” for clean energy projects that are critical to achieving the decarbonization of the energy sector and enhancing the domestic clean energy supply chain. Repeat deployments that prove market adoption enable ‘bankability,’ unlocking commercial debt markets. The Title 17 program can support technologies at each deployment milestone—first-of-a-kind deployments that solve applied engineering challenges; follow-on deployments that establish engineering, procurement, and construction excellence and lower total project costs; substantial scaling of deployment and manufacturing capacity to drive advancement along the learning curve; and education of commercial debt markets to enable broadly available debt financing.



² The relevant statutory provisions relating to the Title 17 Clean Energy Financing Program are set forth in 42 U.S.C. §§16511-16517.



The new Energy Infrastructure Reinvestment (Section 1706) authority created under the IRA expands LPO's mission under Title 17 to include retooling, repowering, repurposing, or replacing American energy infrastructure that has ceased operations, and enabling operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants, including anthropogenic greenhouse gas emissions. This is a powerful tool to reinvest in the nation's energy infrastructure, revitalize the economy including in communities with aging infrastructure, and reduce overall emissions.

This section provides an overview of Title 17, including a perspective on why borrowers might seek to work with LPO; project categories covered under Title 17; who is eligible to seek funding under this authority; available terms; and the process for a Title 17 loan guarantee from pre-application through loan maturity.

A. The LPO Value Proposition

LPO enables borrowers to access long-term, senior debt for the construction of clean energy projects that are challenged in obtaining adequate, flexible debt financing on competitive terms from private lenders. To do this, LPO leverages considerable in-house expertise to support large-scale project deployment and serves as a committed partner for the life of the loan. As of May 1, 2023, the Title 17 Clean Energy Financing Program is authorized to guarantee loans for eligible projects up to a total principal amount of more than \$300 billion. (See Attachment A (Loan Authority Limits by Appropriation) for more detail.)

LPO operations are similar to those of commercial lenders or other private capital market lenders – underwriting eligible loans and offering terms with the expectation that those loans will be repaid with interest. LPO's process includes rigorous due diligence that is comparable to what is considered best practice in the private sector, with the additional benefit of an in-house engineering and environmental team that leverages the DOE enterprise to assess and manage technical risk. LPO has in place specific checks and balances for managing risk at all transaction phases, from the due diligence period all the way through conditional commitment, financial close, and loan payoff. Transactions undergo internal LPO validation by the Risk Management Division, interagency review by the Office of Management and Budget and the U.S. Department of Treasury, review by the DOE Credit Review Board, and Energy Secretary approval. Projects that receive a conditional commitment or loan guarantee from LPO will have demonstrated that they are bankable—which in turn creates a strong value signal to potential investors, offtakers, suppliers, and their own workforce.

LPO brings a deep bench of in-house technical, financial, market, environmental, and legal experts with specialized expertise in evaluating energy projects. As needed, LPO can also access the thousands of scientists, engineers, and specialists from across the DOE enterprise to address targeted issues and questions related to an applicant's technology and deployment plans. This is true throughout the life of the loan, not just during application review and due diligence—LPO's [Portfolio Management Division](#) will proactively monitor projects through construction, start-up, and operations and maintenance during the life of the loan.

B. Project Categories Supported by Title 17 Authority

The Title 17 Clean Energy Financing Program offers loan guarantees to support clean energy deployment and energy infrastructure reinvestment. Flexible financing is available for projects qualifying under four categories:



Innovative Energy (Section 1703) projects deploy qualifying New or Significantly Improved Technology that is technically proven but not widely commercialized in the United States.



Innovative Supply Chain (Section 1703) projects employ a New or Significantly Improved Technology in the manufacturing process for a qualifying clean energy technology, or manufacture a qualifying New or Significantly Improved Technology.



State Energy Financing Institution (SEFI; Section 1703) projects support deployment of a qualifying clean energy technology and receive meaningful financial support or credit enhancements from an entity within a State agency or financing authority. SEFI projects are not required to employ innovative technology.



Energy Infrastructure Reinvestment (EIR; Section 1706) projects retool, repower, repurpose, or replace Energy Infrastructure (facilities used for electric generation or transmission, or facilities used for fossil fuel-related production, processing, and delivery) that has ceased operations; or enable operating Energy Infrastructure to avoid, reduce, utilize, or sequester air pollutants or emissions of greenhouse gases. EIR projects are not required to employ innovative technology.

C. Types of Applicants for Title 17 Financing

Title 17 loan financing can be accessed by a wide range of entities in the Project Sponsor role. LPO has experience working with project developers, clean tech manufacturers and service providers, regulated utilities, public power entities, and independent power producers, among others.



D. LPO Lending Terms

LPO can provide flexible, custom financing to meet the specific needs of Project Sponsors. Characteristics of Title 17 loan guarantees include:

- A Title 17 loan guarantee should reduce the all-in interest rates charged by third party lenders. Loans issued by the Federal Financing Bank typically bear a fixed interest rate pegged to U.S. Treasury rates (matched to loan tenor) plus “three-eighths” (0.375%), as well as a Risk-Based Charge.³ The Risk-Based Charge is used to allow LPO to offer loans that more closely mirror private sector lenders, who commonly charge a higher interest rate on their loans as the creditworthiness of a potential deal decreases.
- Tenors are dependent on project needs and expected asset life, with a maximum of up to 30 years from guarantee issuance; however, tenors are usually less than the maximum.
- LPO-guaranteed loans may not be subordinate in payment or lien priority to other financing.
- LPO-guaranteed loans are secured financings. In DOE’s discretion, LPO-guaranteed loans can share a first lien position with other debt on a pari passu basis. A pari passu intercreditor agreement allows multiple creditors to obtain a secured claim with equal ranking on an asset.

³ Title 17 regulations give the Department broad flexibility in setting Risk-Based Charges. 10 CFR § 609.13(c) says, in part: “In order to encourage and supplement private lending activity DOE may collect from Borrowers for deposit in the United States Treasury a non-refundable Risk-Based Charge which, together with the interest rate on the Guaranteed Obligation that LPO determines to be appropriate, will take into account the prevailing rate of interest in the private sector for similar loans and risks.” 10 CFR § 609.2 defines a Risk Based Charge as “a charge that, together with the principal and interest on the Guaranteed Obligation, or at such other times as DOE may determine, is payable on specified dates during the term of a Guaranteed Obligation.”

Title 17 Loan Products

Title 17 can be used to facilitate federal debt and debt from third-party commercial lenders.

Federal Loans

Applicants can work with LPO to receive a direct loan from U.S. Treasury’s Federal Financing Bank (FFB) backed by a 100% “full faith and credit” DOE guarantee (through LPO). LPO handles all coordination with the Federal Financing Bank; no action is required of the applicant beyond the LPO application and approval process.

Commercial Loans

Applicants that have identified a source of debt from eligible private sector lenders can apply for an LPO partial guarantee of that commercial debt. LPO can guarantee up to 90% of loans made by other financial institutions and allow the lenders to separately sell or participate the non-guaranteed portion in the secondary debt market.



- LPO-guaranteed debt must consist of term loans and may not include a revolving credit facility.
- LPO transactions are typically structured as limited recourse project financings; however, LPO can accommodate other structures, including secured corporate lending, securitizations, and transactions involving tax equity.
- LPO does not set a minimum loan size; however, due to some of the fixed costs associated with receiving a loan guarantee from LPO, LPO loan guarantees are typically \$100 million or more.
- LPO can guarantee up to 80% of eligible project costs, although project cashflows and credit risk considerations often lower leverage ratios with many projects ending up in the 50 to 70% range.⁴
- Title 17 borrowers must comply with certain federal and programmatic requirements under the financing, including prevailing-wage requirements and the Cargo-Preference Act.

E. Process for Evaluating, Funding, and Monitoring Loans

LPO's financing process combines elements of traditional commercial underwriting with technical eligibility assessments unique to LPO's authorities and mandate. The timeline from first contact with LPO to conditional commitment can take anywhere from six months to more than a year and is largely dependent on the applicant's preparedness and ability to provide required documents. Interested applicants are invited to request a [pre-application consultation](#) and other pre-application support. Applicants who have been assigned an LPO point of contact should reach out to that person directly.

There are 6 steps to LPO's process:

⁴ LPO loan guarantees of third-party debt are capped at 90% for loans from eligible private lenders, meaning that the maximum amount of eligible project costs LPO can guarantee for non-FFB loans is 72% (90% of the 80% of eligible project costs). LPO may elect to set the cap of a guarantee of third-party debt below 90%. LPO can guarantee 100% of FFB loans, meaning that the maximum amount of eligible project costs LPO can guarantee for FFB loans is 80%.

1

Pre-Application: LPO Outreach and Business Development (OBD) team meets with potential applicants to help them decide if LPO financing is a good fit for their project and, if so, provides step-by-step assistance to navigate the application process.

2

Application and Review: Title 17 employs a multi-step application process:

- a. **In Part I**, LPO reviews the applicant's Part I Application to determine technical eligibility in accordance with the underlying statutes. This provides applicants an early indication of whether their project is eligible for LPO financing, and includes review of:
 - i. Technical innovation (if required),
 - ii. Other Title 17 eligibility criteria (see Section III),
 - iii. The significance of reduction of air pollutants or greenhouse gas emissions, and
 - iv. Confirmation that the proposed project is located in the United States or its territories.
- b. **In Part II**, LPO determines project viability and readiness to proceed into due diligence based on programmatic, technical, environmental and financial evaluation.

3

Due Diligence: If the Part II Application is accepted, LPO and the borrower engage third-party advisors and negotiate transaction structure and term sheet details. This involves significant due diligence, similar to a private lender due diligence process, including detailed papers and presentations, risk and credit reviews, engineering, procurement, and construction schedule and cost, and environmental reviews in accordance with NEPA.

4

Conditional Commitment: Following due diligence, the finalization of a financing term sheet, receipt of required interagency and DOE approvals, and review of creditworthiness and validation that the proposed transaction possesses a Reasonable Prospect of Repayment, DOE will offer a conditional commitment and term sheet to the applicant and proceed to negotiate the terms of definitive financing documents with the applicant.

5

Financial Close: LPO and the applicant execute definitive financing documents, which may be subject to additional conditions precedent to loan advances.

6

Monitoring: LPO maintains active project monitoring and communication to collaborate, surveil, and act as needed in the best interest of the U.S. Government and taxpayers. There are mandatory reporting requirements that the borrower is required to fulfill on an ongoing basis.

This guidance document pertains mainly to Steps 1 and 2 of this process, focusing on project eligibility, loan terms, and application process. Detailed application instructions are available on LPO's [Title 17 Overview](#) page.

III. Project Eligibility

Projects must satisfy certain eligibility criteria in order to receive a Title 17 loan guarantee. Unlike other DOE financial assistance programs, it is not a competition. This means that any potential borrower with a highly qualified and eligible project meeting the administration's national security and economic competitiveness objectives may receive a loan guarantee, subject to the underwriting and evaluation criteria described herein. This section identifies the eligibility criteria that apply to all projects seeking Title 17 financing, as well as eligibility criteria that are specific to each of the four Title 17 project categories (Innovative Energy, Innovative Supply Chain, SEFI, and EIR).

A. Title 17 Eligibility Requirements

To receive a Title 17 loan guarantee, all project applications (regardless of project category) must demonstrate satisfactory fulfillment of the following criteria:

- 1. Located in the United States.** The project must be located in the United States, defined as the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and any other territory or possession of the United States of America.
- 2. Be an energy-related project.** The project must concern the production, consumption, transportation, or storage of energy, or related manufacturing activities; or support industrial decarbonization, critical minerals, and other components or eligible energy-related project categories under section 1703(b) of Title 17 (see Box 1: 1703 Eligible Technologies, on page 15).
- 3. Achieve significant and credible greenhouse gas (GHG) or air pollution avoidance, reduction, utilization, or sequestration.** All Section 1703 projects (Innovative Energy, Innovative Supply Chain, and SEFI) and Section 1706(a)(2)⁵ projects are statutorily required to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases, and any project under Section 1706(a)(1) involving electricity generation through the use of fossil fuels must have controls or technologies to avoid, reduce, utilize, or sequester air pollutants and

⁵ 42 U.S.C. §16517(a)(2).



anthropogenic emissions of greenhouse gases. As a policy factor, LPO encourages all projects eligible under Section 1706(a)(1)⁶ to demonstrate air pollutant or anthropogenic greenhouse gas emission avoidance, reduction, utilization, or sequestration, as discussed further in Section V.D (Application Process – Policy Factors) and Attachment I.A of the Part I Application.

- 4. Have a Reasonable Prospect of Repayment.** There must be a reasonable prospect that the applicant will be able to repay the principal and interest on the guaranteed loan and any other project debt incurred.⁷
- 5. Involve technically viable and commercially ready technology.** Commercially ready technology has been demonstrated at near commercial-scale under expected process conditions with results supporting the expected performance of the proposed deployment. Performance data from testing at pilot and demonstration scales (confirming at least a Technical Readiness Level 6) must have been performed and be available for review in order to confirm commercial readiness. Applications will be denied if the proposed project is for research, development, or demonstration.
- 6. Include an analysis of how the proposed project will engage with and affect associated communities, as part of a Community Benefits Plan.** The application should identify community benefits, including economic, social, environmental, and equity considerations, as well as potential harms that would need to be mitigated over the life of the project. The project should have support from relevant stakeholders. Borrowers are expected to report on elements of this information as part of ongoing reporting requirements.
- 7. Does not benefit from prohibited federal support.** DOE cannot issue loan guarantees to projects that are expected to benefit from certain other forms of federal support (“Federal Support Restriction”), including grants, cooperative agreements, or other loan guarantees from federal agencies or entities. Otherwise allowable federal tax benefits, including energy production and investment tax credits, are excluded from the Federal Support Restriction. See Section VI (Additional Provisions) for detail.

In addition to these baseline qualifying criteria, prospective applicants should review the full text of this guidance including the Additional Provisions section for certain disqualifying factors.

⁶ 42 U.S.C. §16517(a)(1).

⁷ 42 U.S.C. §16512(d)(1)(B).



B. Eligible Project Categories

In addition to the common eligibility requirements above, Title 17 applicants must have a project that meets the eligibility criteria of one of four project categories as outlined in the table below. Three of these categories (Innovative Energy, Innovative Supply Chain, and SEFI) are authorized under section 1703 of Title 17,⁸ while EIR projects fall under Section 1706.⁹ Each project category has specific qualifications that must be met to be considered for a loan guarantee. In addition to the requirements outlined in the table below, applicants should review the category-specific application requirements laid out in the Part I and Part II Applications.¹⁰ In some cases, a project might not fit neatly into a single category; it may, for example, include both manufacturing and deployment or Energy Infrastructure reinvestment and SEFI support. LPO staff will work with applicants to determine the best category and approach for each application.

Title 17 Project Categories and Notable Project Requirements (table continues on next page)	1703			1706
	 Innovative Energy	 Innovative Supply Chain	 SEFI	 EIR
Is located in the United States	✓	✓	✓	✓
Is an energy-related project	✓	✓	✓	✓
Avoids, reduces, utilizes, or sequesters air pollutants or anthropogenic emissions of greenhouse gases ¹¹	✓	✓	✓	✓
Has a Reasonable Prospect of Repayment	✓	✓	✓	✓
Involves technically viable and commercially ready technology	✓	✓	✓	✓
Includes a Community Benefits Plan	✓	✓	✓	✓
Does not benefit from prohibited federal support	✓	✓	✓	✓
Involves one or more of the thirteen 1703 Eligible Technologies	✓	✓	✓	

⁸ 42 U.S.C. §16513.

⁹ 42 U.S.C. §16517.

¹⁰ Available on LPO's [Title 17 Overview](#) page.

¹¹ Certain EIR projects may be exempt from the GHG reduction requirement, as discussed further in Section V. D (Application Process – Policy Factors) and Attachment I.A of the Part I Application.

Title 17 Project Categories and Notable Project Requirements (continued from previous page)

	1703			1706
	 Innovative Energy	 Innovative Supply Chain	 SEFI	 EIR
Deploys a New or Significantly Improved Technology	✓			
Either (1) deploys a New or Significantly Improved Technology in the manufacturing process or (2) manufactures a product that represents a New or Significantly Improved Technology		✓		
Receives meaningful financial support or credit enhancements from a State Energy Financing Institution			✓	
Involves investment relating to existing Energy Infrastructure				✓
Shares financial benefits with customers or associated communities (if electric utility application)				✓

The following sections detail the eligibility criteria that are specific to each of the four Title 17 project categories (Innovative Energy, Innovative Supply Chain, SEFI, and EIR), and provide examples of eligible projects.



i. Innovative Energy Projects

An important element of LPO’s mission is to support deployment of innovative and high-impact clean energy technologies to demonstrate to private debt and equity investors that these technologies are bankable and ready for large-scale deployment to support the transition to a clean energy future. LPO has demonstrated its ability to influence these markets through the deployment of the first utility-scale wind and solar projects in the United States and through its support for the next generation of advanced nuclear reactors and the nation’s first clean hydrogen energy and storage project.

In addition to the common eligibility requirements that apply to all Title 17 projects, Innovative Energy projects must align with one or more of the “1703 Eligible Technologies” as specified in Section 1703 and identified below and must be deemed “innovative” based on the definition provided below.



- 1. Eligible Technologies Requirement:** Section 1703(b) provides 13 statutorily defined technologies (“1703 Eligible Technologies”) as eligible for LPO loan guarantees, as shown in Box 1.¹²

Box 1: 1703 Eligible Technologies (Innovative Energy, Innovative Supply Chain, and SEFI)

- | | |
|---|--|
| <ol style="list-style-type: none">1. Renewable energy systems2. Advanced fossil energy technology3. Hydrogen fuel cell technology4. Advanced nuclear energy5. Carbon capture and sequestration technologies6. Efficient electrical generation, transmission, and distribution7. Efficient end-use energy technologies | <ol style="list-style-type: none">8. Production facilities for the manufacture of fuel-efficient vehicles or parts of those vehicles9. Pollution control equipment10. Oil refineries11. Energy storage technologies12. Industrial decarbonization technologies¹³13. Supply of critical minerals¹⁴ |
|---|--|

- 2. Innovation Requirement:** Innovative Energy projects must include a New or Significantly Improved Technology applied to one or more of the 1703 eligible technologies.

“New or Significantly Improved Technology” means a technology, or a defined suite of technologies, concerned with the production, storage, consumption, or transportation of energy, including of associated critical minerals and other components or other eligible energy-related project categories under section 1703(b) of Title 17, and that is not a Commercial Technology, and that either:

- i. Has only recently been developed, discovered, or learned; or
- ii. Involves or constitutes one or more meaningful and important improvements in productivity or value, in comparison to Commercial Technologies in use in the United States.

¹² 42 U.S.C. §16513(b).

¹³ Industrial decarbonization technologies are described as “Technologies or processes for reducing greenhouse gas emissions from industrial applications, including iron, steel, cement, and ammonia production, hydrogen production, and the generation of high-temperature heat” (42 U.S.C. §16513(b)(12)).

¹⁴ Supply of critical minerals is described as “Projects that increase the domestically produced supply of critical minerals (as defined in section 1606(a) of title 30), including through the production, processing, manufacturing, recycling, or fabrication of mineral alternatives” (42 U.S.C. §16513(b)(13)). The current list of critical minerals as defined in 30 U.S.C. §1606(a) can be found at [U.S. Geological Survey Releases 2022 List of Critical Minerals | U.S. Geological Survey \(usgs.gov\)](https://www.usgs.gov/newsroom/publications/2022/02/2022-list-of-critical-minerals).



When evaluating whether a technology is “New or Significantly Improved,” LPO will consider whether the technology could have a catalytic effect on the market and whether the technology has the potential to be employed in other commercial projects.

“Commercial Technology” means a technology in general use in the commercial marketplace. A technology is in general use if it is being used in three or more facilities that are in commercial operation in the United States for the same general purpose as the proposed project and has been used in each such facility for a period of at least five years.

The innovation requirement is specific to applications in commercial use in the United States. A project that intends to use a technology that may be considered “commercial” outside the United States (for example, offshore wind) can be considered innovative if it is one of the first three projects in operation in the United States in the last five years.

If regional variation significantly affects the deployment of a technology, it may still be considered innovative if no more than six projects employ the same or similar technology, and no more than two projects that use the same or a similar technology are located in the same region of the United States as the proposed project. Applicants who believe their project may satisfy Title 17’s innovation requirement on the basis of regional variation affecting the deployment of the project’s technology should explain this to LPO in the Part I Application. Examples of regional variation that DOE may consider impacting an innovation determination include, but are not limited to, evidence of how a technology is deployed in rural compared to urban areas, demonstration of geographic or climate related impacts on technology deployment, and ability of certain technologies to serve specific regional markets, including regional transmission organization or independent system operator territories.

In most cases, a single project should be sited at one location. A project may be located at two or more locations if the project is comprised of installations or facilities employing a single New or Significantly Improved Technology that is deployed pursuant to an integrated and comprehensive business plan. See Section V (Application Process) and the Part II Application for details regarding the integrated and comprehensive business plan. For example,

- Title 17 financing can support “hub and spoke” project configurations, where there may be multiple “spokes” (such as raw materials or intermediate processing facilities) that feed into a single “hub” which could supply the final assembly or processing facility.
- Title 17 financing can help project developers overcome market barriers to accelerate the deployment of innovative configurations or uses of distributed energy technologies such as virtual power plants (VPPs).



Innovative Energy Project Examples

The following concepts describe hypothetical projects that could qualify for an Innovative Energy loan guarantee, for the purpose of illustrating the types of projects that LPO would consider.

Grid-interactive distributed energy resources (Virtual Power Plant): An applicant proposes to provide financing to individuals or businesses for the purchase and installation of distributed energy resources (DERs) such as onsite solar, batteries, EV chargers, smart electric panels, smart thermostats, and other grid-interactive-capable appliances and devices that are integrated with innovative software platforms that optimize these DERs to provide grid services in aggregate. A significant portion of project customers are expected to enroll and utilize the innovative software platform. Coordinated management of participating customer DERs enables the applicant to provide and monetize grid services that result in lower energy costs for customers, reduced CO₂ emissions, and enhanced grid reliability, among other benefits. The private lender seeks financing to support its customer offerings. Financing repayments from customers and revenue from the provision of grid services will be the source of repayment of the LPO-guaranteed loan.

Direct Air Capture: A direct air capture (DAC) developer is planning a new facility that will capture 100 thousand tons per annum (ktpa) of CO₂ from the atmosphere. The developer has secured site control for an area directly on top of a Class VI geologic storage facility, meaning there is no need for transportation of the captured CO₂. The project is eligible for the 45Q tax credit, as well as state and local incentives that the developer will arrange with local governments. The developer will also sell the right to claim the CO₂ removals to companies and other entities with net-zero goals. The developer is seeking a loan guarantee from LPO to support construction of the facility and will use 45Q revenue and revenue from sales of carbon removals to service the debt upon commercial operation.

HVDC Transmission: A developer is seeking LPO financing to support the construction of a new 350-mile high-voltage direct current (HVDC) transmission line. The developer has worked with DOE's Grid Deployment Office to facilitate coordination among the relevant permitting agencies and has secured the necessary rights-of-way and permits. The developer is utilizing innovative HVDC transmission technology which provides a higher power density compared to traditional alternating current technology. The chosen HVDC technology has been implemented in Europe and in one commercial project in the U.S., therefore meeting the criteria for New or Significantly Improved Technology. The new HVDC line will enable the interconnection of more renewable energy resources on the electrical grid, therefore reducing the carbon intensity of the regional energy mix. The developer is in discussion with LPO to determine whether a project is likely to have sufficient prospect of loan repayment given estimates of market demand and a limited set of signed firm transmission service agreements.



Possible Innovative Energy Project Areas

The following is an expanded set of project types that would likely fit the Innovative Energy category. These examples are not exclusive or limiting. They are mentioned for the purpose of further illustrating types of projects that could be eligible, subject to technical review and determination of innovation criteria. Web links are provided in some cases where LPO has published materials relating to a technology or project type.

- Distributed solar and storage (virtual power plant)
- [Distributed demand response \(virtual power plant\)](#)
- [Offshore wind](#)
- Stationary and/or mobile energy storage
- [HVDC transmission](#)
- [Small modular reactor \(SMR\) nuclear](#)
- [“Front-end” nuclear fuel cycle](#)
- [Advanced nuclear reactors](#)
- [Nuclear updates or upgrades](#)
- [Advanced geothermal](#)
- [Carbon capture, utilization, and storage \(CCUS\)](#)
- [Hydrogen production and infrastructure](#)
- Sustainable aviation fuels, biofuels
- Alternative vehicle fuel distribution facilities (e.g., hydrogen, LNG, CNG)

LPO is open to variations on these and invites discussion of additional project proposals.

Prior Innovative Energy Projects

Prior Innovative Energy (Section 1703) financed projects illustrate additional project types and loan structures that could qualify for an Innovative Energy loan guarantee. These past projects can be found on LPO’s website, including at energy.gov/lpo/portfolio-projects.



ii. Innovative Supply Chain Projects

The Innovative Supply Chain project category provides loan guarantees for production facilities that manufacture products with a 1703 Eligible Technology (see Box 1) end use, including products or components relating to industrial decarbonization technologies. Projects must either employ a New or Significantly Improved Technology in the manufacturing process or manufacture a component that represents a New or Significantly Improved Technology.

LPO debt financing can ramp up production of key input and component manufacturing for eligible energy technologies. To minimize supply chain bottlenecks, LPO can engage early with applicants and address “chicken or egg” situations through flexible financing that private lenders typically do not provide to developers that establish manufacturing capacity for innovative components of the low-carbon supply chain.

In addition to meeting the eligibility requirements that apply to all Title 17 projects, Innovative Supply Chain projects must meet the following requirements:

- 1. 1703 Eligible Technologies Requirement:** Innovative Supply Chain projects must involve one or more of the 13 statutorily defined 1703 Eligible Technologies (see Innovative Energy section). In the case of industrial decarbonization technologies, LPO encourages applications that align with the DOE Industrial Decarbonization Roadmap, including [chemicals](#), [iron and steel](#), aluminum, [food and beverages](#), [cement](#), and [paper and forest products](#).¹⁵ As a reminder, these projects will also need to meet project category requirements, such as Reasonable Prospect of Repayment and innovation requirements as applicable.
- 2. Innovation Requirement:** Innovative Supply Chain projects must meet the same innovation requirements as Innovative Energy projects (see Innovative Energy section), either through (1) the manufacturing process of the relevant product or (2) innovation in the relevant product itself. Projects to finance a standard, non-innovative component, used within an innovative end-use product, may not satisfy the innovation requirement.
- 3. Air Pollutant or GHG Avoidance, Reduction, Utilization, or Sequestration:** Innovative Supply Chain projects must avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases through (1) the manufacturing process of the relevant product or (2) the end use of the component on a full lifecycle basis.

¹⁵ [Industrial Decarbonization Roadmap \(energy.gov\)](#).



Innovative Supply Chain Project Examples

The following concepts describe hypothetical projects that could qualify for an Innovative Supply Chain loan guarantee, for the purpose of illustrating the types of projects that LPO would consider.

Innovative solar manufacturing technique: A solar manufacturing company has proposed the construction of a new U.S. facility for processing silicon wafers into solar cells. The company will use an innovative method of solar cell processing that is not being widely utilized in the U.S. They are currently making solar cells using the same process in their Southeast Asia manufacturing plant, and their cells are used in commercial solar modules. Signed offtake agreements with U.S.-based solar panel manufacturers provide assurances of future revenues that will be used to service the loan. Given that the process is new in the U.S. and will contribute to growth in renewable energy generation, the project is eligible for Title 17 LPO financing under the Innovative Supply Chain project category.

Nuclear micro reactors and fuel manufacturing: A developer has designed a micro reactor (~5 MW-electric) that can be factory assembled. The micro reactor has multiple use cases including industrial heat applications and deployment to remote communities for replacing diesel generation. The developer is seeking financing to build a manufacturing facility for scaled production of the micro reactors as well as a nuclear fuel manufacturing facility to produce the high assay low enriched uranium (HALEU) fuel. The developer has identified a mix of non-federal industrial and community customers for its first ten micro reactors; these initial sales will enable repayment of the LPO-guaranteed loan.

Iron inputs for low-emissions steelmaking: A steel producer has proposed the construction of a new U.S. facility to produce high-grade iron ore pellets that are suitable for use in direct reduced ironmaking (DRI) to reduce the emissions of the steel production process. The company plans to use the pellets to supply a clean hydrogen-fueled DRI facility to produce low-emissions steel, which is not otherwise available in the U.S. LPO's financing will enable the company to build a large-scale pellet production facility. Expected low-emissions steel sales provide reasonable assurances of repayment.



Advanced grid components: A manufacturing company has designed a new type of composite conductor that is lighter weight and higher strength than the conductors commonly used in high voltage alternating current transmission lines. The high strength-to-weight ratio of the new conductor will make it possible to increase the distance between towers, therefore reducing costs and complexity of new transmission lines. The new conductor will also be more efficient compared to existing conductors, which will lead to less transmission loss. The technology has been tested and certified as meeting industry specifications but has not been deployed in more than two commercial projects in the U.S. LPO's financing will enable the company to build a large-scale manufacturing facility; forecasted sales provide reasonable assurances of repayment.

Possible Innovative Supply Chain Project Areas

The following is an expanded set of project types involving manufacturing, production, or processing that would likely fit the Innovative Supply Chain category. These examples are not exclusive or limiting. They are mentioned for the purpose of further illustrating types of projects that could be eligible, subject to technical review and determination of innovation criteria. Web links are provided in some cases where LPO has published materials relating to a technology or project type.

- Solar supply chain components
- Low-carbon cement, steel, or iron
- [Onshore and/or offshore wind components](#)
- [Small modular reactors and micro reactors](#)
- [Advanced nuclear components](#)
- [Critical minerals](#) (including processing, manufacturing, and recycling of mineral alternatives)
- Electric vehicle charging infrastructure
- [Electric grid components](#)
- Low-carbon pulp and paper
- Low-carbon chemicals
- Low-carbon aluminum
- Electrolyzer manufacturing

LPO is open to variations on these and invites discussion of additional project proposals.



iii. State Energy Financing Institution (SEFI)-Supported Projects

Title 17's State Energy Financing Institution (SEFI) lending authority can be used to augment state-administered clean energy programs, providing additional financial support to projects that align federal energy priorities with those of U.S. states.

SEFI-supported projects are exempt from Title 17's innovation requirement, so long as the projects are from a 1703 eligible technology category (see Box 1) and receive meaningful financial support or credit enhancements from a SEFI. Exemption from the innovation requirement expands eligibility for LPO loan guarantees to projects that incorporate commercial technologies and aggregations of technology-diverse projects.

A SEFI is an entity established by a State, or an Indian Tribal entity or Alaska Native corporation, to provide financing support or credit enhancements for eligible projects and to take steps to reduce financial barriers to the deployment of existing and new eligible projects. For this purpose, "eligible projects" means projects that involve one or more of the statutorily defined 1703 Eligible Technologies and would otherwise meet the applicable prerequisites for LPO support under Title 17.

To qualify, a SEFI-supported project should receive meaningful financial support or credit enhancements from a SEFI. A demonstration of meaningful financial support or credit enhancements will be determined by LPO on a case-by-case basis taking into account the circumstances of the State and the position of SEFI support in the capital stack.

Examples of qualifying SEFI financial support may include, but are not limited to:

- Providing equity/subordinate portion of capital stack
- Providing loan loss reserve with respect to junior portion of capital stack
- Co-lending with LPO (pari passu or mezzanine)
- Providing financial backstop for specific key project elements that may be subject to regulatory or local market risk.

A SEFI-supported project may include a partnership between one or more SEFIs and private entities, Tribal entities, or Alaska Native corporations. Support that flows through a non-SEFI intermediary or contracted entity selected by the SEFI or its associated governmental jurisdiction may constitute SEFI support, as determined by DOE on a case-by-case basis.



City and county agencies will generally not qualify as SEFIs. Statewide policies, such as Renewable Portfolio Standards (RPS), that result in parties unrelated to the SEFI providing additional funding, such as renewable energy certificates (RECs) purchased by utilities to projects in a general category (such as renewable generation), typically will not constitute meaningful SEFI support for a particular project. LPO encourages local governments and other interested organizations to contact our office via the [pre-application consultation](#) page to discuss ideas for SEFI projects or other project opportunities.

The following are additional SEFI eligibility considerations, some of which represent additional considerations for Title 17 requirements that are described later in this guidance but that may have unique application to SEFI projects.

- **Build America, Buy America (BABA).** Public and nonprofit organizations that receive LPO-guaranteed loan proceeds for a project may be required to comply with BABA's domestic preference requirements. In the case of a publicly administered program the ultimate beneficiaries of which are private homeowners or for-profit organizations, the status of the ultimate beneficiaries of the loan proceeds may be taken into account. See Section V.E (Application process – Federal Requirements) for more details on BABA requirements.
- **Federal Support Restriction.** Like all Title 17 projects, a SEFI-supported project is subject to certain restrictions on receiving federal support. A SEFI project may not utilize federally appropriated funds for the repayment of a guaranteed loan. The fact that a SEFI receives federal support at an organizational level or for projects other than the project applying for LPO financing does not disqualify the proposed project, provided such federal support does not directly or indirectly support the project in question. See Section VI (Additional Provisions) for more details on Federal Support Restrictions.
- **Multistate Projects.** LPO loan guarantees can support multistate projects if the qualifying SEFI allows its support to benefit aspects of the project that are not within its State. In this case, the entire multistate project may be viewed as SEFI supported and eligible for an LPO loan guarantee, regardless of whether state support is provided by those other States.
- **Indirect SEFI support.** If a SEFI provides indirect project support, such as through the channeling of SEFI bond proceeds through a non-SEFI program or administering entity, this project may be eligible for consideration as a SEFI-supported project, provided that the intent to support the specific category of project is clear and the support is meaningful.



SEFI Project Examples

The following concepts describe hypothetical projects that could qualify for a SEFI loan guarantee, for the purpose of illustrating the types of projects that LPO would consider.

Energy improvements for residential housing: A private lender provides debt financing and servicing to businesses that acquire, renovate, and rent or re-sell mid-market single-family and multi-family homes. The businesses use the proceeds to install on-site renewables, build EV infrastructure, and improve the overall energy efficiency of the homes. This home improvement will lower customer energy costs. One or more state agencies provide subordinated debt capital or loan loss reserves for the project. The lender seeks a loan guarantee from LPO for senior debt used to originate or purchase the portfolio of business loans. Loan repayment will be the source of repayment of the LPO-guaranteed loan.

Community solar to expand access: A community solar developer is constructing multiple solar facilities. The project portfolio has SEFI funding in the form of up-front state grants, which the developer receives for serving certain geographic areas of the state and for serving lower- and moderate-income and disadvantaged communities. The developer has requested that LPO guarantee a multi-draw construction loan or similar facility used to finance the portfolio of planned solar facilities. The developer plans to repay the construction loans through customer subscription payments and tax-credit support including the ITC low-income solar adder.

Facilities related to decarbonized industrial products: A state has invested in a project to transport natural gas for use in production of hydrogen that will be used as feedstock for low-carbon ammonia. Additionally, the SEFI has selected a developer to construct, own, and operate new electrolyzer facilities to produce hydrogen for the same ammonia plant. The clean ammonia will be sold for multiple uses, including fertilizer production and textile manufacturing. The ammonia may also be used in the future as a means of transporting hydrogen. The developer seeks an LPO guarantee of the loan used to construct the electrolyzer facilities, with loan repayment tied to future ammonia sales.

High quality new housing construction: A state housing finance agency (which has qualified as a SEFI) leverages state financing and credit enhancements to private developers who construct single- and multi-family residential housing projects to high energy efficiency, renewable energy, storage, resilience, and/or grid interactivity standards. The developers will need additional financing to build their projects. Acting on their behalf, the SEFI decides to bundle projects from multiple developers into a single application to LPO. This loan will be repaid by revenues from the rental or sale of the new housing.

Energy efficient and/or grid-interactive devices: A company finances the purchase of energy-efficient appliances through an online utility marketplace and provides point-of-sale rebates for customers around the U.S. Grid interactivity by the devices supports virtual power plant functions. The company's primary revenue stream is through customer loan repayment. In several states, the company developed loan-loss reserve (LLR) programs with state energy offices. The LLR programs cover a significant portion of qualifying losses resulting from consumer loan defaults, which are infrequent. The company seeks a loan guaranteed by LPO to scale up its offerings and make more loans available to consumers in states where it receives SEFI funding.



iv. Energy Infrastructure Reinvestment (EIR) Projects

Energy Infrastructure Reinvestment (EIR) projects support reinvestment in communities throughout the United States where existing Energy Infrastructure has been challenged by market forces, resource depletion, age, technology advancements, or the broader energy transition. This infrastructure might include power plants, fossil fuel extraction sites, transmission systems, fossil fuel pipelines, refineries, or other energy facilities that have ceased to operate or that continue to operate but could benefit from GHG or pollution-reducing improvements.

These energy assets have often served as economic backbones for local communities for decades and can continue to do so, with targeted investment and economic development support. Redeveloping energy infrastructure typically comes with valuable benefits to new industry, including reuse of existing infrastructure assets, ready access to roads, rails and other means of transportation, existing grid connections, and water access, as well as additional use permits. In addition, these areas are often home to a workforce that is well-suited to building and operating complex energy infrastructure.

Applications for EIR financing must fall into one or more of the following types of projects:

- i. Projects that retool, repower, repurpose, or replace **Energy Infrastructure that has ceased operations**; provided that if the project involves electricity generation through the use of fossil fuels, it is required to have controls or technologies to avoid, reduce, utilize, or sequester air pollutants **and** anthropogenic emissions of greenhouse gases; or
- ii. Projects that enable **operating Energy Infrastructure** to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases.

Definition of Energy Infrastructure

For purposes of EIR eligibility, Energy Infrastructure means a facility, and associated equipment, used for (1) the generation or transmission of electric energy; or (2) the production, processing, and delivery of fossil fuels, fuels derived from petroleum, or petrochemical feedstocks.

This can encompass a wide variety of facilities and sites, including, but not limited to, decommissioned or operating power plants, related grid interconnection facilities, existing transmission lines and related facilities, oil and gas infrastructure including pipelines, refineries, gas stations, or refueling terminals, chemical production facilities, and distributed electric energy assets that are suitable for improvements.

EIR projects are not required to meet statutory requirements for use of innovative technology. The scope of a project receiving EIR project financing may include remediation of environmental damage associated with Energy Infrastructure. At DOE's discretion, the costs of refinancing outstanding indebtedness directly associated with eligible Energy Infrastructure may also be included as part of EIR financing.

The EIR category can support a wide range of investments to utilize existing facilities and support host communities, including:

- Repowering or retooling Energy Infrastructure, such as nuclear or wind facilities, to restart or operate more efficiently or at higher output;
- Replacing energy, capacity, or other grid services of retired Energy Infrastructure;
- Building new facilities for clean energy purposes, which utilize legacy Energy Infrastructure;
- Repurposing retired Energy Infrastructure for Title 17-qualified industrial purposes as presented above for 1703 Eligible Technologies; or
- Environmental remediation at sites of abandoned or uneconomic Energy Infrastructure and upgrades to the site.

Energy Communities and EIR

EIR eligibility is not limited to particular geographic areas or communities. EIR financing can support projects in “energy communities” as defined in some federally administered programs, as well as other qualifying projects to reinvest in Energy Infrastructure throughout the United States. These include fossil and non-fossil electric infrastructure, as well as facilities used for the production, processing, and delivery of fossil fuels, petroleum, and petrochemical feedstocks. In some cases, EIR-financed projects are eligible for additional tax benefits available to IRS-defined energy communities, providing a boost to community reinvestment opportunities. LPO applicants should refer to IRS tax guidance and other (non-LPO) program documents for direction on eligibility for those benefits and consider Federal Support Restrictions applicable to non-tax benefits in some cases.

EIR projects qualifying under the “energy infrastructure that has ceased operations” clause must meet the following additional criteria:

- **Proximity Requirement.** The new or updated Title 17-financed infrastructure should be at or near the site of the legacy Energy Infrastructure, to credibly retool, repower, repurpose, or replace the Energy Infrastructure that has ceased operations. Applications that are replacing Energy Infrastructure must show a clear relationship between new services and benefits provided by the Title 17 financed infrastructure and services, and benefits lost from the legacy infrastructure that ceased operations, such as grid capacity, reliability, and workforce retention and opportunities, including if the replacement plan differs from the legacy infrastructure physically and/or geographically.
- **GHG and Pollution Controls Requirement.** Any project that will invest in Energy Infrastructure that has ceased operations and which will generate electricity through the use of fossil fuels is required to have controls or technologies to avoid, reduce, utilize, or sequester air pollutants and anthropogenic emissions of greenhouse gases.

As a policy matter, LPO encourages all EIR projects that will invest in Energy Infrastructure that has ceased operations to demonstrate air pollutant or anthropogenic greenhouse gas emission avoidance, reduction, utilization, or sequestration.

All EIR projects that involve an electric utility as the applicant must meet the following additional criterion:



- **Customer and/or Community Benefit Requirement.** Electric utilities that apply for an EIR loan guarantee must provide assurance to DOE that financial benefits received from the guarantee will be passed on to the customers of, or associated communities served by, that utility. This assurance can take a variety of forms, including approvals by State regulatory authorities or other utility governing bodies, and demonstrations of support by affected communities. For purposes of EIR projects, the term 'electric utility' means an entity that sells electric energy at retail and that includes its cost of capital in its cost of service recovered through retail electric rates and shall include a municipal or community utility or an electric cooperative.

EIR Project Examples

The following concepts describe hypothetical projects that could qualify for an EIR loan guarantee, for the purpose of illustrating the types of projects that LPO would consider.

Fossil replacement with solar and storage: An independent power producer owns the site of a 300 MW coal-fired power plant that has ceased operations. The plant has been demolished, but the interconnection and road infrastructure remain. The company plans to reuse the site and repurpose the existing interconnection to build 30 MW of solar and 250 MW of 4-hour battery storage. The project is eligible for, and the company is exploring, relevant federal Investment Tax Credits.¹⁶ The company has developed a plan to retrain and provide new employment opportunities for plant employees. The company is seeking a loan guaranteed by LPO to support construction of the solar and storage, which will be repaid through a combination of tax credits and revenue from the new solar-plus-storage facility. A portion of the loan will also be used to finance the remediation of several on-site coal ash ponds.

¹⁶ Subject to compliance with the rules established by the U.S. Department of Treasury.



Transition to nuclear: A utility plans to install a small modular reactor (SMR) on the site of a retired coal-fired power plant. The SMR's 300 MW-electric generation capacity is similar to that of the retired coal plant, therefore making it well-suited for reusing the existing grid interconnection. Several balance of plant systems, such as the plant make-up water and water storage systems, cooling towers, and chemical stores from the coal plant can be repurposed for use with an SMR. The SMR has the potential to benefit from the existing pool of skilled workers able to transition from their prior employment at the coal plant. Further cost savings include avoiding land acquisition costs for the SMR, utilizing rail and road infrastructure, and having an existing water source. The SMR design has been certified by the U.S. Nuclear Regulatory Commission (NRC), and the utility's plans have received state regulatory approval. The utility is seeking a loan guaranteed by LPO to finance the construction of the SMR, with repayment assured through a long-term power purchase agreement (PPA) and the regulatory approval for cost recovery via customer rate base.

Power plant replacement with an energy-related industrial facility: A private developer has purchased the site of a retired gas-fired power plant and plans to repurpose the site through the construction of several large, clean energy manufacturing facilities. The developer has identified the existing electrical, pipeline, rail, and road infrastructure as attractive assets that will accelerate and simplify site conversion. The manufacturing facilities will create numerous construction and permanent jobs. The developer is working closely with the local community and labor organizations.

Transmission reconductoring: A utility plans to upgrade several high-voltage transmission lines through reconductoring. The utility estimates that replacing the conductive core of older transmission lines will double the electricity carrying capacity compared to the existing conductors, while reducing line losses by up to 50%. The reconductoring plan will retool the existing towers and utilize established rights-of-way. This investment will significantly increase the utility's ability to interconnect new clean energy generation without requiring the time and expense associated with the permitting and construction of new transmission lines. The reconductoring plan has received regulatory approval for cost recovery, which LPO considers sufficient to ensure Reasonable Prospect of Repayment on the loan.

Possible EIR Project Areas

The following is an expanded set of project types that would likely fit the EIR category. These examples are not exclusive or limiting. They are mentioned for the purpose of further illustrating types of projects that could be eligible, subject to LPO review.



- Retired power plant or other qualifying Energy Infrastructure retooled, repowered, repurposed, or replaced with:
 - Renewable energy
 - Renewable energy and storage
 - Distributed energy (i.e., virtual power plant)
 - Transmission connection to off-site clean energy (e.g., onshore or offshore renewable energy)
 - Nuclear energy
- Fossil or biomass generation with carbon capture and sequestration
- New manufacturing facilities for clean energy products or services
- Repowering of nuclear power plant to resume operations
- Retrofitting of fossil-fuel power plant with carbon capture and sequestration
- Upgrades to wind farms to increase output
- Transmission reconductoring to expand transfer capacity
- Coal ash remediation with site redevelopment
- Oil & gas pipeline repurposing (e.g., hydrogen, CO₂ pipelines)
- Refinery retrofit or upgrades (e.g., biofuels, hydrogen)
- Energy Infrastructure repurposing for industrial decarbonization (e.g., low-carbon cement, etc.)
- Decarbonization of existing petrochemical facilities

LPO is open to variations on these and invites discussion of additional project proposals.



IV. Terms & Conditions

Terms and conditions for Title 17 financing are determined based on the specific financing needs and credit profile of the project. They are negotiated between LPO and the applicant after Part II application review and before conditional commitment and are subject to the requirements of the Title 17 Regulations.¹⁷

This section lays out considerations for LPO applicants including eligible Project Costs; loan terms; and interest rates, fees, and expenses. Title 17 loan guarantees are also subject to the federal requirements described in Section V.E (Application Process – Federal Requirements).

A. Loan Size and Eligible Project Costs

The total amount of a Title 17 loan may not exceed eighty percent (80%) of the reasonably anticipated eligible Project Costs,¹⁸ although loans have commonly been in the range of 40-60% of Project Costs. Project Costs are defined in the Title 17 Regulation as the costs, including escalation and contingencies, that are expended or accrued by a Borrower and are necessary, reasonable, customary, and directly related to the design, engineering, financing, construction, startup, commissioning, and shakedown of an Eligible Project. DOE is able to make loan advances to support the payment or reimbursement of properly incurred and documented Project Costs. The full definition of Project Costs is set forth in Box 2 on the next pages.

While design and engineering of an Eligible Project are considered Project Costs, the research, development, and demonstration costs associated with developing an innovative technology are not eligible Project Costs, and therefore are not eligible to receive Title 17 financing.

Notwithstanding the estimated Project Costs, the maximum amount of financing offered by DOE will be determined during due diligence based on expected project cash flows over the loan tenor under reasonable forecast scenarios. There is no upper limit on the size of a project and applicable project costs that LPO may support, but Title 17 projects are subject to maximum program limits on LPO's loan authority.

¹⁷ 10 C.F.R. 609.

¹⁸ 42 U.S.C. §16512(c).



Box 2: Title 17 Eligible Project Costs (§609.10 of Title 17 Regulations)

- a. The Project Costs of an Eligible Project are those costs, including escalation and contingencies, that are expended or accrued by a Borrower and are necessary, reasonable, customary, and directly related to the design, engineering, financing, construction, startup, commissioning, and shakedown of an Eligible Project.
- b. Project Costs include:
 1. Costs of acquisition, lease, or rental of real property, including engineering fees, surveys, title insurance, recording fees, and legal fees incurred in connection with land acquisition, lease or rental, site improvements, site restoration, access roads, and fencing;
 2. Costs of engineering, architectural, legal and bond fees, and insurance paid in connection with construction of the facility;
 3. Costs of equipment purchases, including a reasonable reserve of spare parts to the extent required;
 4. Costs to provide facilities and services related to safety and environmental protection;
 5. Transaction Costs;
 6. Costs of necessary and appropriate insurance and bonds of all types including letters of credit and any collateral required therefor;
 7. Costs of design, engineering, startup, commissioning, and shakedown;
 8. Costs of obtaining licenses to intellectual property necessary to design, construct, and operate the Eligible Project;
 9. To the extent required by the Loan Guarantee Agreement and not intended or available for any cost referred to in paragraph (d) of this section, costs of funding any reserve fund, including without limitation, a debt service reserve, a maintenance reserve, and a contingency reserve for cost overruns during construction; provided that proceeds of a Guaranteed Obligation deposited to any reserve fund shall not be removed from such fund except to pay Project Costs, to pay principal of the Guaranteed Obligation, or otherwise to be used as provided in the Loan Guarantee Agreement;
 10. Capitalized interest necessary to meet market requirements and other carrying costs during construction;
 11. In DOE's sole discretion, the cost of refinancing outstanding indebtedness that is directly associated with the Eligible Project, including the principal amount of such indebtedness, accrued interest thereon, and any reasonable and customary prepayment premium or breakage costs; provided that DOE determines that the refinancing furthers the purpose of the Eligible Project;
 12. With respect to Energy Infrastructure Reinvestment Projects, the cost of remediation of environmental damage associated with the Energy Infrastructure; and



13. Other necessary and reasonable costs, including, without limitation, previously acquired real estate, equipment, or other materials, costs of interconnection, and any engineering, construction, make-ready, design, permitting, or other work completed on an existing facility or project.
- c. Where a Project consists of the financing and installation of a series of distributed energy resources, DOE may deem the Eligible Project Costs to consist of the reasonable and documented costs incurred by the end-user of each distributed energy resource in connection with the contractual agreement between the end-user and the Project Sponsor or its agent; provided that:
 1. DOE is able to validate such reasonable and documented costs through standard customer contracts and standard distributed energy resource system attributes; and
 2. The Borrower institutes a compliance system satisfactory to DOE to ensure that each distributed energy resource supported by a Guarantee complies with any eligibility criteria required by DOE, including with respect to approved customer contracts and approved distributed energy resource systems.
 - d. Project Costs do not include:
 1. Fees and commissions charged to Borrower, including finder's fees, for obtaining federal or other funds;
 2. Parent corporation or other affiliated entity's general and administrative expenses, and non-Eligible Project related parent corporation or affiliated entity assessments, including organizational expenses;
 3. Goodwill, franchise, trade, or brand name costs;
 4. Dividends and profit sharing to stockholders, employees, and officers;
 5. Research, development, and demonstration costs of readying an innovative technology for employment in a commercial project;
 6. Costs that are excessive or are not directly required to carry out the Eligible Project, as determined by DOE;
 7. Expenses incurred after startup, commissioning, and shakedown of the facility, or, in DOE's discretion, any portion of the facility that has completed startup, commissioning, and shakedown;
 8. Borrower-paid Credit Subsidy Costs, the Administrative Cost of a Loan Guarantee, and any other fee collected by DOE; and
 9. Operating costs.
 - e. Costs incurred in connection with an Eligible Project may be subject to such other criteria for inclusion as Project Costs as published by DOE from time to time on the Title 17 Clean Energy Financing Program webpage pursuant to §609.19.



B. Key Loan Terms

The following are important loan terms for applicants to be familiar with.

Significant Equity

Project Sponsors must commit to provide significant equity to the project and to maintain control of the Borrower and the project as agreed in the financing documents. Equity consists of (i) cash, and (ii) at DOE's discretion and DOE's sole determination of value (subject to timing and type considerations, as well as transaction-specific factors), in-kind contributions and property, in each case contributed to the permanent capital stock (or equivalent) of the Borrower or the Eligible Project by the shareholders or other owners of the Borrower or the Eligible Project. In-kind contributions may not include services, but may include physical and/or intellectual property. Equity may not include proceeds from the non-guaranteed portion of a Guaranteed Obligation, proceeds from any other non-guaranteed loan or obligation of the Borrower, or the value of any federal, State, or local government assistance or support or any cost-share requirements under a federal award.

Eligible Lender

The Federal Financing Bank (FFB) is an Eligible Lender for DOE loan guarantees, and commercial lenders may also be eligible subject to certain conditions. The FFB is the only lender for which DOE is permitted to guarantee 100% of the principal and interest on a loan. Where DOE guarantees 90% or less of principal and interest, the guaranteed portion may be separated or "stripped" from the non-guaranteed portion if the loans are participated, syndicated, or otherwise resold in the secondary market.

Commercial lenders that seek partial loan guarantees must meet regulatory and programmatic requirements for eligibility to the satisfaction of DOE.¹⁹ In particular, all such commercial lenders, when reviewing and evaluating a proposed Eligible Project, must exercise the level of care and diligence that a reasonable and prudent lender would exercise when reviewing, evaluating, and disbursing a loan made by it without a federal guarantee. A newly formed special purpose entity may constitute an Eligible Lender in certain circumstances where the entity is an intermediary lender in a back-to-back contractual arrangement with a lender that meets the requirements.

Applicants should indicate in their application their intent to use the FFB or an alternative lender or lenders for the proposed loan guarantee. An application to LPO serves as the application for an FFB loan; applicants do not need to separately secure an FFB loan.

¹⁹ See Sections 609.2(a) and 609.9 of the Title 17 Regulations.



Loan Duration and Disbursement

The term (length) of a Title 17-guaranteed loan can vary dependent on project needs. The loan may not exceed the shorter of 30 years or, for all projects other than EIR projects, ninety percent (90%) of the expected life of the asset whose construction is financed by the LPO loan guarantee. Funds loaned through the FFB and guaranteed by LPO may be disbursed in tranches based on milestones of completion with verification of eligible costs at each milestone, or in a single lump sum (at DOE's discretion).

C. Interest Rate, Fees, and Expenses

Interest rates on DOE-guaranteed loans are at or below rates available in commercial debt markets. In addition, applicants are responsible for the following in connection with Title 17 financing transactions:

- Certain third-party expenses, including the costs of third-party advisors retained by LPO;
- A non-refundable facility fee, payable at closing; and
- A periodic maintenance fee, payable annually, to cover DOE administrative expenses post- financial close.

Interest Rate

For loans issued by FFB and backed by a 100% DOE loan guarantee, the interest rates are set based on the U.S. Treasury curve at the day or days the funds are drawn, according to the tenor of the loan, plus a liquidity spread equal to "three-eighths" (0.375%), plus a Risk-Based Charge.²⁰ The risk-based charge is intended to make DOE's charges closer, but not equal, to commercial markets by increasing the interest rate as the credit risk of the project increases. For loans issued by non-federal lenders but guaranteed by DOE, the interest rate will be described in the term sheet and may include a risk-based charge. The total interest rate may not exceed a level that the Secretary determines appropriate taking into account the prevailing interest rate in the private sector for similar loans and risks.

²⁰ See [Credit-Based Interest Rate Spread 7.9.14.pdf \(energy.gov\)](#).

Credit Subsidy Cost

The Federal Credit Reform Act of 1990 (FCRA) requires agencies to estimate the cost to the government of extending or guaranteeing credit. This cost, referred to as Credit Subsidy Cost, equals the net present value of estimated cash flows from the government minus estimated cash flows to the government over the life of the loan, excluding administrative costs. The credit subsidy cost is calculated by LPO using a model approved by the Office of Management and Budget (OMB). The credit subsidy cost is expressed as a percentage of the Guaranteed Obligations.

DOE will allocate appropriated funds to pay the credit subsidy cost of a loan guarantee at the time DOE offers a conditional commitment, subject to the availability of appropriated funds. DOE anticipates having adequate appropriated funds to pay the credit subsidy costs of loan guarantees and will provide significant advance notice to the public and applicants if it expects to exhaust such appropriated funds. Absent appropriated amounts from Congress to cover credit subsidy costs, borrowers in the Title 17 program are required to directly pay the credit subsidy cost prior to, or at the time of, the conditional commitment. DOE makes no representation regarding the amount of a particular applicant's credit subsidy cost or whether there will be sufficient appropriated funds to cover such credit subsidy cost. In the event that a loan guarantee that has been offered a conditional commitment is canceled, withdrawn, or expires, any credit subsidy costs allocated to the project and paid by the borrower may be refunded, subject to the provisions of the applicable conditional commitment.

More information can be found under "LPO Guidance on Paying Credit Subsidy Cost for Title 17 Borrowers" on the program website.²¹

Federal Support Restrictions

Unless explicitly authorized, no funds obtained from the Federal Government, or from a loan or other instrument guaranteed by the Federal Government, may be used to pay for the Credit Subsidy Cost, the Facility Fee, the Maintenance Fee, and any other fees charged by or paid to DOE relating to Title 17 or any Guarantee thereunder. An Applicant may, at any time, use non-Federal monies to pay the Credit Subsidy Cost or DOE fees. The Applicant may not use federal funding as repayment for the loan.

These restrictions are described further in Section VI (Additional Provisions).

²¹ See <https://www.energy.gov/lpo/articles/lpo-guidance-paying-credit-subsidy-cost-title-17-borrowers>.



Third-party Expenses

DOE may, and typically does, utilize independent technical, financial, or other consultants and outside legal counsel in the due diligence of projects, structuring of transactions, and drafting of term sheets and financing documents. Upon DOE's decision to retain an outside advisor, the Project Sponsor will be required to execute an agreement satisfactory to DOE to pay the advisor's fees and expenses.²² These third-party expenses, which can be in the range of \$1-3 million through the closing date, will accrue and shall be payable by the applicant as set forth in the sponsor payment agreement, whether or not the closing date occurs. These third-party expenses constitute Eligible Projects Costs and can be amortized in the loan itself. DOE shall not be financially liable to any independent consultant or outside counsel for services rendered in connection with an application under any circumstances.

In addition, the applicant will be responsible for the payment of the fees and expenses charged by any collateral agent or account bank retained by DOE in connection with the Loan Guarantee Agreement.

Facility Fee

On the closing date of a Loan Guarantee Agreement, all applicants must pay a non-refundable Facility Fee in an amount equal to 0.6% for the portion of the principal amount of the Guaranteed Obligation (net of any capitalized interest) that does not exceed \$2 billion. For applications as to which the principal amount of the Guaranteed Obligation (net of any capitalized interest) exceeds \$2 billion, applicants pay an amount equal to 0.6% for the portion of the principal amount of the Guaranteed Obligation that does not exceed \$2 billion plus, for the portion of the principal amount that exceeds \$2 billion, an additional 0.1%.

For example, an applicant for a guaranteed loan in the principal amount of \$250,000,000 (net of any capitalized interest) would pay a Facility Fee of \$1,500,000 (0.6% of \$250,000,000). An applicant for a guaranteed loan of \$2.5 billion (net of any capitalized interest) would pay a total Facility Fee of \$12,500,000 (0.6% of the first \$2 billion, which is \$12,000,000; plus 0.1% on the amount over \$2 billion, which is 0.1% x \$500,000,000 = \$500,000).

Maintenance Fee

Applicants must pay a non-refundable annual Maintenance Fee to cover DOE's administrative expenses in servicing and monitoring the Loan Guarantee Agreement from the execution of the Loan Guarantee Agreement through payment in full. The amount of the Maintenance Fee is typically in the range of \$150,000-200,000 per calendar year, although can be up to \$500,000 depending on the complexity of the loan. The Maintenance Fee shall be paid each year in advance, commencing with payment of a pro-rated annual payment prior to the financial closing date of the Loan Guarantee Agreement, on or prior to the date and in the amount specified in the Loan Guarantee Agreement.

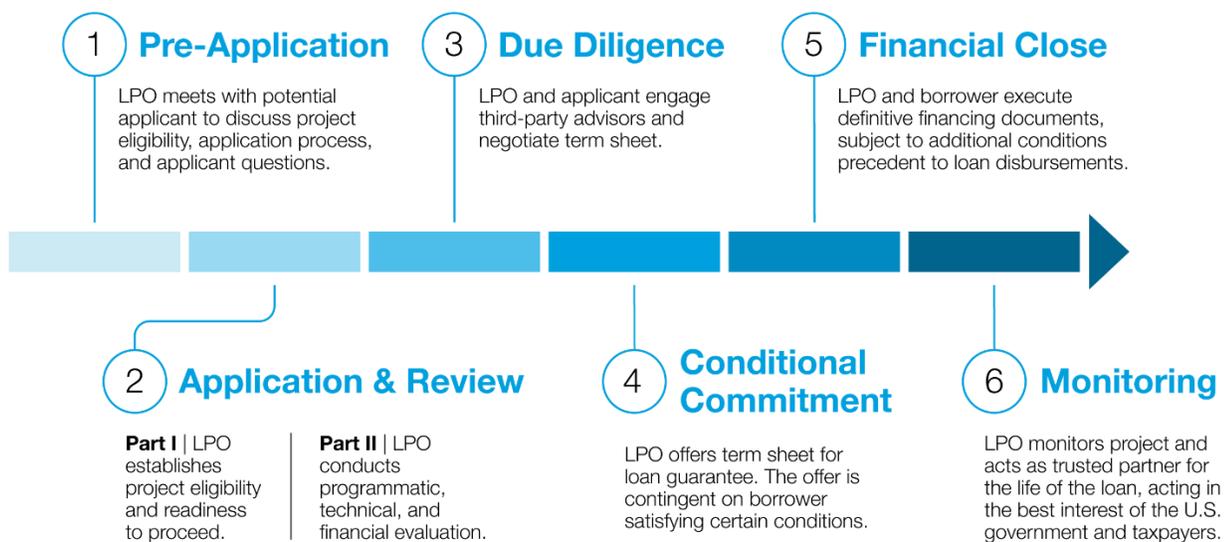
²² See Section 609.11 of the Title 17 Regulations.

V. Application Process

LPO operates an open program for applications, negotiation, and making loan guarantees. This means that there is no solicitation period or funding opportunity announcement (FOA) for Title 17 loan guarantees: applicants are invited to contact LPO and submit applications at any time.

The application process through conditional commitment commonly takes up to a year. However, it can move faster or slower depending on applicant readiness with required materials. Applicants are assigned an LPO expert from an applicable technology field to support applicants through the LPO process.

The basic steps for an LPO loan process are shown below.



A. Pre-Application Consultation

LPO strongly encourages prospective applicants to engage in no-cost [pre-application consultations](#) with LPO to facilitate a more efficient application review process and a shorter timeline between application submission and financial close.



During pre-application consultations, LPO will:

- a. Discuss project eligibility, including the appropriate Title 17 project category;
- b. Assess whether the project is ready to proceed with a Title 17 application;
- c. Discuss the phases of the process to obtain a Title 17 loan guarantee; and
- d. Answer questions that the potential applicant may have.

To facilitate a productive consultation, all potential applicants are encouraged to include information summarizing the project goals, technology, financing needs, and timing.

B. Application Submission

An application for a Title 17 loan guarantee is comprised of two parts. In the Part I Application, the applicant provides sufficient information for LPO to determine whether the project satisfies eligibility requirements. If LPO determines that a project satisfies the eligibility requirements and is ready to proceed, LPO invites the applicant to submit a Part II Application.

LPO will advise applicants throughout the development of their applications to help ensure that submitted materials are complete. Applicants are strongly encouraged to clearly and succinctly identify the merits of the proposed project as they pertain to the basic eligibility requirements as described in this guidance and defined in the Title 17 Regulations. Applicants are also encouraged to ensure the completeness of the submitted application.

Detailed application requirements and submission instructions through the LPO Application Portal are described in Part I and Part II Applications, available on LPO's [Title 17 Overview](#) page.

C. Application Review

LPO reviews each submission to determine whether the application meets the project eligibility requirements and lending criteria. LPO conducts a comparable review and due diligence process as commercial lenders, with added consideration from industry and energy experts and attention to certain policy factors. LPO evaluates eligibility through research, literature review, and consultation with private industry and/or DOE and National Laboratory subject matter experts. Typically, LPO will need to ask clarifying questions of the applicant to determine whether the proposed project meets applicable eligibility requirements as described for each project category.



i. Part I Evaluation Criteria

LPO's review of a Title 17 Part I application focuses on determining if the project is ready to proceed and meets eligibility requirements, including the following:

- Qualifies as an eligible technology (as applicable).
- Avoids, reduces, utilizes, or sequesters anthropogenic emissions of greenhouse gases or air pollutants (applies to all 1703 projects and 1706 projects as applicable).
- Is located in the United States or its territories.
- For an Innovative Energy or Innovative Supply Chain project, is located in one location or is located at multiple locations as part of an integrated and comprehensive business plan.
- Meets project category-specific requirements as appropriate, including:
 - Review of Innovative Energy and Innovative Supply Chain projects will also focus on evaluating if the project employs New or Significantly Improved Technology as compared to Commercial Technology in service in the United States.
 - DOE will consider the following factors:
 - Does the technology have a potentially catalytic effect on the market?
 - Does the technology have the potential to be employed in other commercial projects (i.e., replicability)?
 - Does the New or Significantly Improved Technology used in the project involve or constitute a meaningful improvement in productivity or value, as compared to Commercial Technology?
 - Innovative Energy and Innovative Supply Chain applications will be denied if:
 - The project is not ready to be deployed commercially in the United States.
 - The project is for demonstration, research, or development.
 - Review of SEFI-supported projects will also focus on evaluating if the SEFI provides meaningful financial support or credit enhancements to the project.
 - Review of EIR Projects will also focus on evaluating if the project demonstrates a clear nexus between ceased or operating Energy Infrastructure with the proposed investment in new or upgraded energy asset(s), as well as other EIR eligibility requirements.

If deemed eligible and ready to proceed in the application process, applicants will be invited to submit a Part II application.



ii. Part II Evaluation Criteria

LPO conducts a comprehensive review of the totality of Part II project applications, including satisfactory fulfillment of all required application parts in appropriate detail, to determine whether a project is highly qualified and suitable for a Title 17 loan guarantee. This includes attention to the financial viability of the project as well as DOE policy factors. LPO's Part II Application review process consists of a programmatic, technical, environmental, and financial evaluation of the application and project to determine whether the proposed project is ready to advance to due diligence and term sheet negotiation.

During Part II Application review, LPO assesses if a project provides a Reasonable Prospect of Repayment of the principal and interest on the Guaranteed Obligation and other project debt, in light of:

- The strength of the contractual terms of the eligible project (if commercially reasonably available);
- The forecast of noncontractual cash flows;
- Cash sweeps and other structural enhancements;
- The projected financial strength of the borrower at the time of close and throughout the loan term;
- The financial strength of the investors and strategic partners of the borrower, if applicable;
- Appropriate attention to management of project risk, including through the Community Benefits Plan; and
- Other financial metrics and analyses that are relied on by the private lending community and rating agencies.

Part II applications should also demonstrate an integrated project structure to show that LPO-guaranteed funds are not used to build assets that will operate independently and provide different services or serve different markets. This integrated structure is particularly important for distributed energy projects (including VPPs) and projects that propose phased development timelines in which later stages are contingent on project and financial success of earlier stages. This also applies to industrial and manufacturing projects in which LPO-guaranteed funds are sought for multiple sites or steps in a manufacturing process. The scope and nature of the integrated business structure is important for LPO's assessment of eligibility criteria, including innovative technologies (as applicable), GHG analysis, community benefits, and eligible Project Costs.

LPO will also evaluate the extent to which an application for a project achieves DOE's policy objectives, including those described in Subsection D (Policy Factors) below and related application requirements.

A full list of evaluation criteria considered by LPO during Part II application review is set forth in Box 3.



LPO's invitation to submit a Part II application is not an assurance that LPO will invite the applicant into the due diligence and term sheet negotiation process, that LPO will offer a term sheet to the applicant, or that the terms and conditions of a term sheet will be consistent with terms proposed by the applicant. The foregoing matters are wholly dependent on the results of LPO review and evaluation of a Part II application, and LPO's determination whether to proceed.

Box 3: Evaluation Criteria Considered in LPO's Part II Application Review

1. To what measurable extent the proposed project avoids, reduces, utilizes, or sequesters air pollutants or anthropogenic emissions of greenhouse gases, as applicable, or contributes to the avoidance, reduction, utilization, or sequestration of air pollutants or anthropogenic emissions of greenhouse gases;
2. To what extent the technology to be deployed in the proposed project
 - i. Is ready to be deployed commercially in the United States, can be replicated, yields a commercially viable product or service in the use proposed in the proposed project, has potential to be deployed in other commercial projects in the United States, and is or will be available for further commercial use in the United States; and
 - ii. As applicable for Innovative Energy and Innovative Supply Chain projects, constitutes an important improvement in technology, as compared to available Commercial Technologies, used to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases, as applicable;
3. As applicable, to what extent the Applicant has a plan to advance or assist in the advancement of that technology into the commercial marketplace in the United States;
4. The extent to which the level of proposed support in the Application is consistent with a Reasonable Prospect of Repayment of the Guaranteed Obligations by considering, among other factors:
 - i. The extent to which the requested amount of the loan guarantee, the requested amount of Guaranteed Obligations and, if applicable, the expected amount of any other financing or credit arrangements, are reasonable relative to the nature and scope of the proposed project;
 - ii. The total amount and nature of the Project Costs and the extent to which Project Costs are to be funded by Guaranteed Obligations; and
 - iii. The feasibility of the proposed project and likelihood that it will produce sufficient revenues to service its debt obligations over the life of the loan guarantee and assure timely repayment of Guaranteed Obligations;



5. The likelihood that the proposed project will be ready for full commercial operations in the time frame stated in the Application;
6. The amount of Equity committed and to be committed to the proposed project by the Borrower, the Project Sponsor, and other Persons;
7. Whether there is sufficient evidence that the Borrower will diligently implement the proposed project, including initiating and completing the proposed project in a timely manner;
8. Whether and to what extent the Applicant will rely upon other federal and non-federal government assistance such as grants, tax credits, or other loan guarantees to support the financing, construction, and operation of the proposed project and how such assistance will impact the proposed project;
9. The levels of safeguards provided to the federal government in the event of default through collateral, warranties, and other assurance of repayment described in the Application, including the nature of any anticipated intercreditor arrangements;
10. The Applicant's, or the relevant contractor's, capacity and expertise to operate the proposed project successfully, based on factors such as financial soundness, management organization, and the nature and extent of corporate and individual experience;
11. The ability of the proposed Borrower to ensure that the proposed project will comply with all applicable laws and regulations, including all applicable environmental statutes and regulations;
12. The levels of market, regulatory, legal, financial, technological, and other risks associated with the proposed project and their appropriateness for a loan guarantee provided by DOE;
13. Whether the Application contains sufficient information, including a detailed description of the nature and scope of the proposed project and the nature, scope, and risk coverage of the loan guarantee sought to enable DOE to perform a thorough assessment of the proposed project;
14. How the Applicant plans to engage the community and workforce, invest in quality jobs, address diversity, equity, inclusion, and accessibility, and support the Justice40 Initiative as outlined in the Community Benefits Plan; and
15. Such other criteria that DOE deems relevant in evaluating the merits of an Application.

iii. Determination to Proceed

If at any time during the application process, (i) LPO determines that the project does not meet the Title 17 eligibility requirements or that the application does not demonstrate the project's readiness to proceed, or (ii) the applicant does not respond in a timely manner to the information requests from LPO, then LPO may offer the applicant the opportunity to withdraw the application or LPO may reject the application. An applicant may resubmit a withdrawn application. If LPO reviews an application and decides not to proceed, LPO will inform the applicant in writing of the reason(s) for not moving forward.²³ LPO's decision not to proceed with any application shall be final and non-appealable but will not prevent the applicant from re-applying at a later time for a loan guarantee for the same or a different proposed project.

LPO notes that any material changes to the project in any phase of the submission could impact the project's eligibility and delay the review and approval process.

D. Policy Factors

Certain policy factors are considered in the course of LPO's review of Title 17 applications, as required by statute, adopted in administrative rulemaking, or as a matter of DOE policy.

i. Community Benefits Plan

All Title 17 applicants are required to submit a Community Benefits Plan with their Part II Application. To support the goal of building a clean and equitable energy economy, LPO projects are expected to (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the President's goal that 40% of the overall benefits of clean energy investment flow to disadvantaged communities (the Justice40 Initiative). Details for what to include in a Community Benefits Plan are provided as an attachment to the Part II Application.

The Community Benefits Plan is considered in the evaluation of applications. In addition to ensuring communities benefit from DOE programs, LPO considers the quality of a Community Benefits Plan among the factors that indicate the prospect of loan repayment. For example, indications in project planning of community support and a strategy to recruit and prepare an adequate and skilled workforce demonstrate higher likelihood of additional project approvals and completion.

²³ See Section 609.5 of the Title 17 Regulations.

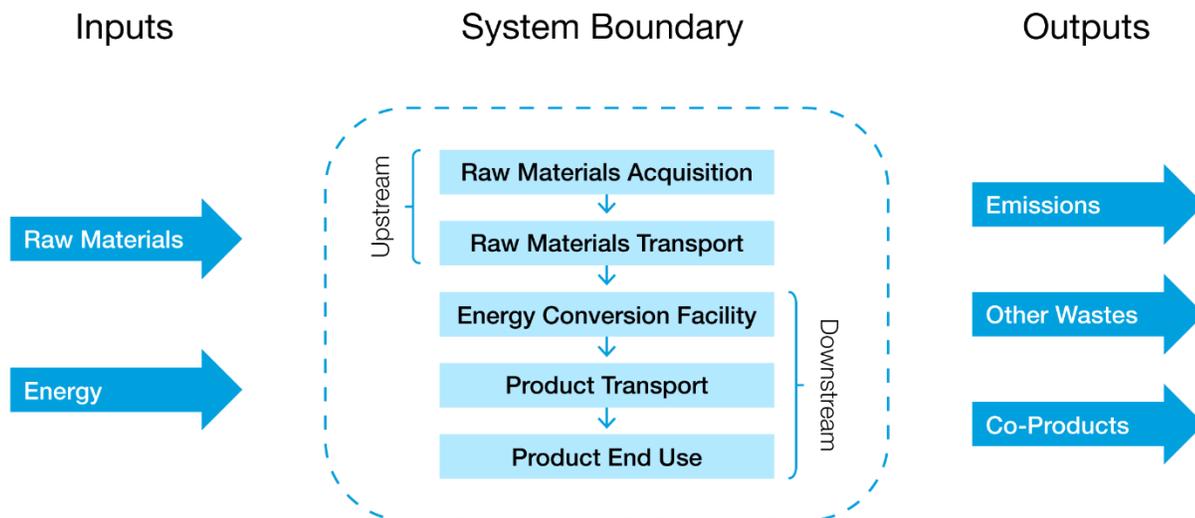
It is anticipated that elements of the Community Benefits Plan will be incorporated into the resulting agreements, and public transparency of the Community Benefits Plan will be important during project implementation. The Community Benefits Plan may evolve through the duration of the project. Borrowers should report on their fulfillment of goals and activities included in the Community Benefits Plan during the project implementation phase, as part of LPO's project monitoring.

ii. Greenhouse Gas Analysis

LPO performs a greenhouse gas (GHG) lifecycle analysis (LCA) on proposed Title 17 projects based on the information provided in the Part I Application. The LCA estimates the global warming impact of a product or process relative to a baseline case.

For the purpose of this assessment, LPO quantifies the emissions of each project on the basis of the products produced by the project, more commonly referred to as a "functional unit." LPO uses a "cradle to grave" approach for the studies of the functional units analyzed. Emissions associated with the following life cycle stages are studied:

1. Raw material extraction;
2. Raw material transport;
3. Energy inputs to the facility;
4. The applicant's facility or project and activities associated with it;
5. Product transportation and distribution;
6. Product end use, and product end of life (only where the primary product is not fully consumed; required for any waste byproducts created in the manufacture of the primary product).



LPO uses the industry-accepted ISO 14064 principles to conduct the GHG LCA. LPO does not expect applicants to conduct a GHG study themselves; instead, applicants should



provide data to LPO, which allows LPO to conduct the study.²⁴ Application and data requirements are described further in Attachment I.A (Lifecycle GHG Emissions Data Requirements) of the Part I Application and the GHG Emissions Data Worksheet.

The GHG lifecycle analysis is not required for some classes of technologies and project types, as described in Attachment A of the Part I Application.

As a policy matter, LPO encourages all EIR projects eligible under Section 1706(a)(1) to demonstrate air pollutant or anthropogenic greenhouse gas emission avoidance, reduction, utilization, or sequestration. However, the GHG LCA may be adapted for some EIR projects under Section 1706(a)(1) that reinvest in qualifying energy infrastructure (other than electricity generation through the use of fossil fuels) for which a normal baseline case is not applicable. This could include, for example, new infrastructure built at the site of old infrastructure that has ceased operations and consequently has negligible GHG emissions at the time of application submission, while the new investment is determined to serve clean energy purposes and meet other Title 17 and EIR program objectives. Applicants should discuss specific project circumstances with LPO during pre-application consultations.

iii. Foreign Collaboration Considerations

As DOE invests in critical infrastructure and funds the deployment and manufacturing of critical technology areas, DOE considers risks of undue foreign influence. If high risks are identified and cannot be sufficiently mitigated, DOE may elect to not provide a loan guarantee to the applicant.

The applicant will be required to provide DOE with a written list of all direct and indirect foreign ownership and formal agreements with foreign entities which the applicant has entered into in connection with the project seeking a DOE loan guarantee.

Following financial close, the borrower will be required to provide DOE with advance written notification of any potential collaboration with foreign organizations or governments in connection with its DOE loan guarantee. The borrower will then be required to await further guidance from DOE prior to contacting the proposed foreign organization or government regarding the potential collaboration or negotiating the terms of any potential agreement.

In general, a collaboration should be reported if it will involve some provision of a thing of value to, or from, the borrower. A thing of value includes but may not be limited to all resources made available to, or from, the borrower in support of and/or related to the DOE loan guarantee, regardless of whether or not they have monetary value. Things of value also

²⁴ Applicants can suggest an applicable baseline for the LCA study, but LPO will make determinations consistent with ISO 14064 standards. Baselines are typically based on national average emissions factors and modeled to be functionally equivalent to the product output of the proposed project. In some cases, localized data can be used, such as electricity emission factors for a region of the grid. For retrofits to an existing facility, LPO may use a baseline of that facility before implementation of the proposed project.



may include in-kind contributions (such as office/laboratory space, data, equipment, supplies, employees, students). In-kind contributions not intended for direct use on the DOE-financed project but resulting in provision of a thing of value from or to the DOE financing must also be reported. Collaborations do not include routine workshops, conferences, use of the borrower's services and facilities by foreign investigators resulting from its standard published process for evaluating requests for access, or the routine use of foreign facilities by borrower staff in accordance with the borrower's standard policies and procedures.

E. Federal Requirements

Federal law requires the following reviews and project provisions be met for a project to receive LPO support under Title 17:

- a. NEPA compliance
- b. Prevailing wage requirements
- c. Cargo-Preference Act
- d. Build America, Buy America

These are described here, and additional information is provided in the Part I and Part II application instructions and through consultation with LPO.

i. NEPA Compliance

The National Environmental Policy Act (NEPA) requires federal agencies to consider the environmental impacts of their actions in the decision-making process. LPO's NEPA process is integrated into its review and processing of applications to ensure that a project's environmental impacts are properly considered and are part of LPO's decision-making process. Prior to financial close of a Title 17 loan guarantee, projects must complete the appropriate environmental review pursuant to NEPA (e.g., an Environmental Assessment (EA) and Finding of No Significant Impact, or an Environmental Impact Statement (EIS) and Record of Decision). Expectations for NEPA, including when to begin the NEPA process, whether a project falls within an established categorical exclusion (see 10 CFR §1021.410) or requires the preparation of an EA or EIS, the amount of time required for completion of the NEPA process, and the relationship between NEPA and a project's Community Benefits Plan can be discussed between the applicant and LPO during pre-application and application consultations.



The NEPA review process for Title 17 applications typically occurs during the due diligence phase, following formal acceptance of LPO's invitation into due diligence and concludes prior to or at financial close. LPO also seeks an environmental report as part of the Part II application. The environmental report provides a general description of the physical and natural resources and setting of the project site or sites and assists LPO in determining the appropriate level of NEPA review, the notable regulatory permits, approvals, and/or consultations required for the construction and/or operation of the project, and whether other federal agencies may be involved in the project. As appropriate and helpful to an applicant, LPO can advise applicants on the NEPA process and may request applicable documents or studies to support the NEPA review and associated regulatory agency consultations (e.g., consultations pursuant to Section 7 of the Endangered Species Act, or Section 106 under the National Historic Preservation Act) before entering into due diligence. The required information to be included in the environmental report is presented in Attachment II.B (NEPA Compliance) of the Part II Application.²⁵

ii. Prevailing Wage Requirements (Davis-Bacon)

Each laborer or mechanic employed by a contractor or subcontractor for a project financed, in whole or in part, with a loan guaranteed under Title 17 shall be paid wages at rates not less than those prevailing on the same type of work on similar construction projects in the applicable locality, as determined by the Secretary of Labor under subchapter IV of chapter 31 of part A of subtitle II of title 40, United States Code (commonly referred to as the 'Davis-Bacon Act'). Applicants are advised that in accordance with the Davis-Bacon Act and its implementing regulation at 29 CFR §1.6(g), the Davis-Bacon obligations described above with respect to payment of wages at rates not less than those prevailing on similar work in the locality of the project to all laborers and mechanics employed in the performance of the project must be complied with beginning with the "construction, prosecution, completion or repair" (as defined in 29 CFR §5.2(j)) of such project, regardless of whether the closing of the DOE loan guarantee has occurred. An exception to such requirement is any case in which the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor (DOL) finds that there is no evidence of Intent to apply for federal funding or assistance prior to the start of construction. Applicants should visit the Department of Labor website at [Davis-Bacon and Related Acts | U.S. Department of Labor \(dol.gov\)](https://www.dol.gov/eis/whd/acts) and review the [Title 17 Governing Documents](#) on the LPO website for additional guidance regarding the Davis-Bacon Act and its related acts.²⁶

²⁵ Additional information on the NEPA process for a loan guarantee, as well as completed NEPA reviews and documentation are available on the LPO website at: <https://www.energy.gov/lpo/title-17/title-17-environmental-compliance>.

²⁶ 42 U.S.C. §16512(k).



iii. Cargo-Preference Act

All projects that receive an LPO loan guarantee under Title 17 must comply with the Cargo Preference Act of 1954,²⁷ which establishes certain requirements for the use of U.S.-flagged vessels in the movement of cargo in international waters. These requirements may apply to shipments contracted for or made prior to receiving an LPO loan guarantee. DOE urges applicants to contact the Maritime Administration directly to ensure that relevant project agreements provide for compliance with the Cargo Preference Act.²⁸

iv. Build America, Buy America Requirements

The Build America, Buy America Act, enacted as part of the IIJA in 2021, established a domestic content procurement preference with respect to iron, steel, manufactured products, and construction materials used in certain infrastructure projects. The requirements apply if the Title 17 borrower is a “non-Federal entity,” which is defined to include States, local governments, Indian tribes, institutions of higher education, and non-profit organizations. As a general matter, for-profit organizations are not considered “non-Federal entities” and, therefore, are not subject to Build America, Buy America requirements. LPO anticipates that most Title 17 applicants will constitute for-profit organizations and will be exempt from Build America, Buy America. Applicants who have questions regarding whether Build America, Buy America will apply to their project should consult with LPO on the matter. Additional information on Build America, Buy America can be found at [Build America, Buy America | Department of Energy](#).

²⁷ 46 U.S.C. §55305.

²⁸ General information on cargo preference can be found at the Maritime Administration’s website: [Cargo Preference | MARAD \(dot.gov\)](#). Questions on cargo preference may also be addressed by contacting the Maritime Administration’s Office of Cargo Preference and Domestic Trade at (202) 366-4610 or via e-mail to cargo.marad@dot.gov.



VI. Additional Provisions

Commitment of Public Funds

DOE shall not be bound by oral representations made during the application stage or during any negotiations. No binding commitment, agreement, obligation, or right of any kind may be assumed or enforced by any applicant or project sponsor against DOE other than in accordance with a duly and validly executed Loan Guarantee Agreement.

Procurement or Financial Assistance Award

Neither a procurement action under Title 48 of the CFR nor a financial assistance award under 10 CFR Part 600 is contemplated by this guidance document, which only relates to loan guarantees under Title 17.

False Statements

It is a crime to knowingly make false statements to a federal agency. Misrepresentation of material facts may be the basis for denial of an Application for a loan guarantee from DOE. Penalties upon conviction may include fine and imprisonment. For details, please refer to 18 U.S.C. §1001.

Restrictions on Disclosure and Use of Information

Title 17 authorizes the collection of the information requested in loan applications. This information will aid DOE in its review of applications for loan guarantees pursuant to Title 17.

Confidential business information shared with LPO is subject to federal laws, regulations, and DOE policies. As a matter of policy, LPO and its federal employees do not enter into Non-Disclosure Agreements. Application materials may become federal records and subject to disclosure statutes such as the Freedom of Information Act.²⁹ To the extent practicable DOE will protect confidential business information from public release.

²⁹ 5 U.S.C. §552.



Patentable ideas, trade secrets, and proprietary and confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only to the extent that such information is necessary to convey an understanding of the project. The use and disclosure of such data will be restricted, to the extent consistent with applicable law, provided the applicant specifically identifies and marks such data in accordance with 10 CFR §600.15, as described below:

1. Upload the following legend on a separate page when submitting Part I and Part II of the Application (be sure to specify the section number(s) from the Application that contain(s) such data):

“Applicant submits this Application based on DOE’s assurance that the Application will be kept confidential to the extent consistent with applicable law. Applicant hereby certifies that Section(s) [___] of this Application contain(s) trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with the Loan Guarantee Agreement, if any, entered in response to this Application. If Applicant is issued a loan guarantee under Title XVII of the Energy Policy Act of 2005, as amended, as a result of, or in connection with, the submission of this Application, DOE shall have the right to use or disclose the data contained herein, other than such data that have been properly declared in the Loan Guarantee Agreement to be trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure.”

2. Include the following legend on the first or cover page of each document or electronic file submitted that contains such data (be sure to specify the page numbers from such document or electronic file that contains such data):

“Notice of Restriction on Disclosure and Use of Data

Pages [___] of this document contain trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.”

3. Include the following legend on each page containing trade secrets or commercial or financial information that is privileged or confidential:

“Contains trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure.”



4. In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential should be marked with brackets or other clear identification, such as highlighting.

For more guidance on the treatment of confidential information, please refer to the [Treatment of Confidential Materials fact sheet](#) and DOE's regulations implementing the Freedom of Information Act (10 C.F.R. §1004).

Federal Support Restrictions

Pursuant to the legislation providing DOE with Title 17 loan authority, DOE may not be able to issue loan guarantees to projects that are expected to benefit directly or indirectly from certain other forms of federal support ("Federal Support Restriction").³⁰ Examples of such federal support include grants, cooperative agreements, or other loan guarantees from federal agencies or entities, including DOE; federal agencies or entities serving as a customer or off-taker of the project's products or services; or other federal contracts, including acquisitions, leases and other arrangements, that support the project.

Otherwise allowable federal tax benefits, including energy production and investment tax credits, are excluded from the Federal Support Restriction, meaning that receipt of tax credits or direct payment do not prohibit a project from receiving LPO financing. Limited other exceptions apply to the Federal Support Restriction, which LPO can consider on a case-by-case basis.³¹ LPO can provide support for transactions utilizing common market structures to monetize tax credits (e.g., tax equity), provided non-subordination and other statutory requirements are met.

LPO staff will work with applicants to understand how Federal Support Restrictions impact each potential project. DOE encourages potential applicants that may seek or anticipate federal support for a proposed project to arrange a pre-application consultation to better understand the potential impact to any loan guarantee issued under Title 17.

³⁰ The Federal Support Restriction applies to the Title 17 loan guarantee authority authorized by the Inflation Reduction Act pursuant to the "Denial of Double Benefit" provision contained in section 50141(d) of the Inflation Reduction Act.

³¹ The Inflation Reduction Act "Denial of Double Benefit" provision exceptions are for "(A) projects benefitting from otherwise allowable Federal tax benefits; (B) projects benefitting from being located on Federal land pursuant to a lease or right-of-way agreement for which all consideration for all uses is— (i) paid exclusively in cash; (ii) deposited in the Treasury as offsetting receipts; and (iii) equal to the fair market value; (C) projects benefitting from the Federal insurance program under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210); or (D) electric generation projects using transmission facilities owned or operated by a Federal Power Marketing Administration or the Tennessee Valley Authority that have been authorized, approved, and financed independent of the project receiving the guarantee."



Multiple Applications

Applicants may apply for more than one Title 17 loan guarantee, but an applicant is limited to one application for an Innovative Energy or Innovative Supply Chain Project using a particular technology. An applicant may submit a single application for multiple projects using different technologies or at different sites; however, LPO may require the applicant to separate such projects into multiple applications at any time during the application process.

Questions

Questions regarding this guidance or requests for a printed copy may be submitted to:

U.S. Department of Energy, Loan Programs Office
Attn: Title 17 Applications
1000 Independence Avenue, SW
Washington, DC 20585

You may also send questions or other correspondence to LPO electronically. Please direct initial project inquiries to the [pre-application consultation](#) page, while non-project related questions can be sent to lpo@hq.doe.gov and should include "RE: Title 17 Question -" and a short title describing the question in the subject line. If you have been assigned an LPO point of contact, please reach out to that person for all subsequent questions and/or discussions regarding the Application.



VII. Attachments

A. Loan Authority Limits by Appropriation

Title 17 loan authorities are established by legislative appropriations from more than one source. This attachment provides a summary of currently available appropriations by Title 17 category, at the time of publication of this guidance. The following information is subject to change, including, inter alia, with respect to legislative developments and DOE's allocation of appropriated funds. At this time, Title 17 applicants may apply for loan guarantees seeking to utilize the following sources of loan guarantee authority.

i. Section 1703

The amount of loan guarantee authority made available for loan guarantees under section 1703 is \$40 billion under the Inflation Reduction Act and \$15 billion under the Consolidated Appropriations Act, 2023. In addition, \$3.492 billion in Credit Subsidy Cost from the Inflation Reduction Act is available as of May 1, 2023 for the cost of loan guarantees utilizing the Inflation Reduction Act authority.

This loan guarantee authority will be applied by DOE to support the following project categories:

- Innovative Energy,
- Innovative Supply Chain, and
- SEFI Projects.

The resources provided for section 1703 loan guarantees under the Inflation Reduction Act need to be designated for Conditional Commitment on or before September 30, 2026, after which time the authorization expires.

In addition, \$702.9 million of loan guarantee authority and \$10.659 million of Credit Subsidy Cost are available for section 1703 renewable energy or efficient end use technology projects under the Department of Defense and Full-Year Continuing Appropriations Act, 2011, Pub. L. No. 112-10 (2011).



This loan guarantee authority will be applied by DOE to support qualified technologies from the following project categories:

- Innovative Energy,
- Innovative Supply Chain, and
- SEFI Projects.

This loan guarantee authority and Credit Subsidy Cost appropriation is available until committed.

ii. Section 1706 – Energy Infrastructure Reinvestment (EIR Projects)

The amount of loan guarantee authority available under the Inflation Reduction Act is \$250 billion. \$5 billion in Credit Subsidy Cost is available. These funds need to be designated for Conditional Commitment on or before September 30, 2026, after which time the authorization expires.



B. Burden Disclosure Statement

This data is being collected by DOE's Loan Programs Office for the purpose of evaluating the eligibility of loan guarantee applications for projects seeking such financing under Title 17. Applying for such benefit is voluntary, but if you choose to apply, your application must contain the data described in this Guidance and the Part I and Part II Application Instructions and Attachments.

Public reporting hour burden for this collection of information is estimated to be 132.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Enterprise Policy Development & Implementation Office, IM-22, Paperwork Reduction Project OMB Control Number 1910-5134, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget, OIRA, Paperwork Reduction Project OMB Control Number 1910-5134, Washington, DC, 20503.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number. The OMB Control Number for this collection of information is 1910-5134. The OMB expiration date for this collection of information is February 28, 2026.



C. Prohibition Related to Foreign Government-Sponsored Talent Recruitment Programs

i. Prohibition

Persons participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign Country of Risk are prohibited from participating in projects selected for federal funding under Title 17. Should a loan or loan guarantee result from the Title 17 application process, the Borrower must exercise ongoing due diligence to reasonably ensure that no individuals participating in the LPO-financed project are participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign Country of Risk. Consequences for violations of this prohibition will be determined according to applicable law, regulations, and policy. Further, the Borrower must notify DOE within five (5) business days upon learning that an individual on the project team is or is believed to be participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign Country of Risk. DOE may modify and add requirements related to this prohibition to the extent required by law.

ii. Definitions

- **Foreign Government-Sponsored Talent Recruitment Program.** An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States research facilities or receipt of federal funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.
- **Foreign Country of Risk.** DOE has designated the following countries as foreign countries of risk: Iran, North Korea, Russia, and China. This list is subject to change.

D. Definitions

For purposes of the Title 17 Guidance Document, the following words and terms have the following meanings. Applicants may contact LPO to request clarification of any term not defined below.

<i>Administrative Cost of a Loan Guarantee</i>	<p>The total of all administrative expenses that DOE incurs during:</p> <ol style="list-style-type: none">i. The evaluation of an Application for a Guarantee;ii. The negotiation and offer of a Term Sheet;iii. The negotiation of a Loan Guarantee Agreement and related documents, including the issuance of a Guarantee; andiv. The servicing and monitoring of a Loan Guarantee Agreement, including during the construction, startup, commissioning, shakedown, and operational phases of an Eligible Project. <p>Administrative Costs of a Loan Guarantee do not include Transaction Costs.</p>
<i>Applicant</i>	<p>A prospective Borrower, Project Sponsor, or Eligible Lender that submits an Application to DOE.</p>
<i>Application</i>	<p>A submission of written materials to DOE completed in accordance with the applicable requirements published by DOE on the Title 17 website.</p>
<i>Attorney General</i>	<p>The Attorney General of the United States.</p>
<i>Borrower</i>	<p>Any Person that enters into a Loan Guarantee Agreement with DOE and issues or otherwise becomes obligated for the Guaranteed Obligations.</p>
<i>Cargo Preference Act</i>	<p>The Cargo Preference Act of 1954, 46 U.S.C. 55305, as amended.</p>



<i>Commercial Technology</i>	A technology in general use in the commercial marketplace in the United States at the time the Term Sheet is offered by DOE. A technology is in general use if it is being used in three or more facilities that are in commercial operation in the United States for the same general purpose as the proposed project, and has been used in each such facility for a period of at least five years. The five-year period for each facility shall start on the in-service date of the facility employing that particular technology or, in the case of a retrofit of a facility to employ a particular technology, the date the facility resumes commercial operation following completion and testing of the retrofit. For purposes of this section, facilities considered to be in commercial operation for five years include projects that have been the recipients of a loan guarantee from DOE under this part whether or not commercial operations have commenced.
<i>Conditional Commitment</i>	A Term Sheet offered by DOE and accepted by the offeree of the Term Sheet, all in accordance with § 609.6.
<i>Contracting Officer</i>	The Secretary of Energy or a DOE official authorized by the Secretary to enter into, administer or terminate DOE Loan Guarantee Agreements and related contracts on behalf of DOE.
<i>Credit Subsidy Cost</i>	The same meaning as “cost of a loan guarantee” in section 502(5)(C) of the Federal Credit Reform Act of 1990.
<i>Davis-Bacon Act</i>	The statute referenced in section 1702(k) of Title 17.
<i>DOE</i>	The United States Department of Energy.



Eligible Lender

- i. Any Person formed for the purpose of, or engaged in the business of, lending money, including State Energy Financing Institutions, financial institutions, and trusts or other entities designated as trustees or agents acting on behalf of institutional investors, bondholders, or other lenders that, as determined by DOE in each case, is:
 - a. Not debarred or suspended from participation in a Federal Government contract or participation in a non-procurement activity (under a set of uniform regulations implemented for numerous agencies, such as DOE, at 2 CFR part 180);
 - b. Not delinquent on any Federal debt or loan;
 - c. Legally authorized and empowered to enter into loan guarantee transactions authorized by Title 17 and this part;
 - d. Able to demonstrate experience in originating and servicing loans for commercial projects similar in size and scope to the Eligible Project, or able to procure such experience through contracts acceptable to DOE; and
 - e. Able to demonstrate experience as the lead lender or underwriter by presenting evidence of its participation in large commercial projects or energy-related projects or other relevant experience, or able to procure such experience through contracts acceptable to DOE; or
- ii. The Federal Financing Bank.

Eligible Project

Has the meaning set forth in § 609.3.

Energy Infrastructure

A facility, and associated equipment, used for (1) the generation or transmission of electric energy; or (2) the production, processing, and delivery of fossil fuels, fuels derived from petroleum, or petrochemical feedstocks.

*Energy Infrastructure
Reinvestment
Project*

Has the meaning set forth in § 609.3.



- Equity*
- i. Cash, and
 - ii. At DOE's sole discretion and subject to DOE's sole determination of value, in-kind contributions and property, in each case contributed to the permanent capital stock (or equivalent) of the Borrower or the Eligible Project by the shareholders or other owners of the Borrower or the Eligible Project.

In-kind contributions may not include services, but may include physical and/or intellectual property. Equity does not include proceeds from the non-guaranteed portion of a Guaranteed Obligation, proceeds from any other non-guaranteed loan or obligation of the Borrower, or the value of any Federal, state, or local government assistance or support or any cost-share requirements under a Federal award.

Facility Fee The fee, to be paid in the amount and in the manner provided in the Term Sheet, to cover the Administrative Cost of a Loan Guarantee for the period from the Application through issuance of the Guarantee.

Federal Financing Bank An instrumentality of the United States Government created by the Federal Financing Bank Act of 1973, under the general supervision of the Secretary of the Treasury.

Guarantee The undertaking of the United States of America, acting through the Secretary pursuant to Title 17, to pay in accordance with the terms thereof, principal and interest of a Guaranteed Obligation.

Guaranteed Obligation Any loan or other debt obligation of the Borrower for an Eligible Project for which DOE guarantees all or any part of the payment of principal and interest under a Loan Guarantee Agreement entered into pursuant to Title 17.

Holder Any Person that holds a promissory note made by the Borrower evidencing the Guaranteed Obligation (or his or her designee or agent).

Innovative Energy Project Has the meaning set forth in § 609.3.

Innovative Supply Chain Project Has the meaning set forth in § 609.3.

Intercreditor Agreement Any agreement or instrument (or amendment or modification thereof) among DOE and one or more other Persons providing financing or other credit arrangements to the Borrower (or an Eligible Project) or that otherwise provides for rights of DOE in respect of a Borrower or in respect of an Eligible Project, in each case in form and substance satisfactory to DOE.

Loan Agreement A written agreement between a Borrower and an Eligible Lender containing the terms and conditions under which the Eligible Lender will make a loan or loans to the Borrower for an Eligible Project.

Loan Guarantee Agreement A written agreement that, when entered into by DOE and a Borrower, and, if applicable, an Eligible Lender, establishes the obligation of DOE to guarantee the payment of all or a portion of the principal of, and interest on, specified Guaranteed Obligations, subject to the terms and conditions specified in the Loan Guarantee Agreement.

Maintenance Fee The fee, to be paid in the amount and manner provided in the Term Sheet, to cover the Administrative Cost of a Loan Guarantee, other than extraordinary expenses, incurred in servicing and monitoring a Loan Guarantee Agreement after the issuance of the Guarantee.

New or Significantly Improved Technology A technology, or a defined suite of technologies, concerned with the production, storage, consumption, or transportation of energy, including of associated critical minerals and other components or other eligible energy-related project categories under section 1703(b) of Title 17, and that is not a Commercial Technology, and that either:

- i. Has only recently been developed, discovered, or learned; or
- ii. Involves or constitutes one or more meaningful and important improvements in productivity or value, in comparison to Commercial Technologies in use in the United States at the time the Term Sheet is issued.

If regional variation significantly affects the deployment of a technology, such technology may still be considered “New or Significantly Improved Technology” if no more than 6 projects employ the same or similar technology as another project, provided no more than 2 projects that use the same or a similar technology are located in the same region of the United States.

OMB The Office of Management and Budget in the Executive Office of the President.



<i>Person</i>	Any natural person or any legally constituted entity, including a state or local government, tribe, corporation, company, voluntary association, partnership, limited liability company, joint venture, and trust.
<i>Project Costs</i>	Those costs, including escalation and contingencies, that are expended or accrued by a Borrower and are necessary, reasonable, customary, and directly related to the design, engineering, financing, construction, startup, commissioning, and shakedown of an Eligible Project, as specified in § 609.10. Project Costs do not include costs for the items set forth in § 609.10(d).
<i>Project Sponsor</i>	Any Person that assumes substantial responsibility for the development, financing, and structuring of an Eligible Project and owns or controls, by itself and/or through individuals in common or affiliated business entities, a five percent or greater interest in the proposed Eligible Project or the Borrower.
<i>Reasonable Prospect of Repayment</i>	Has the meaning set forth in 42 U.S.C. 16512(d)(1)(B).
<i>Risk-Based Charge</i>	A charge that, together with the principal and interest on the guaranteed loan, or at such other times as DOE may determine, is payable on specified dates during the term of a Guaranteed Obligation.
<i>Secretary</i>	The Secretary of Energy or a duly authorized designee or successor in interest.
<i>State</i>	Any State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and any territory or possession of the United States.
<i>State Energy Financing Institution</i>	A quasi-independent entity or an entity within a State agency or financing authority established by a State (i) to provide financing support or credit enhancements, including loan guarantees and loan loss reserves, for Eligible Projects; and (ii) to create liquid markets for Eligible Projects, including warehousing and securitization, or take other steps to reduce financial barriers to the deployment of existing and new Eligible Projects. The term "State energy financing institution" includes an entity or organization established by an Indian Tribal entity or an Alaska Native Corporation to achieve the purposes described in clauses (i) and (ii) of the first sentence of this definition.



*State Energy
Financing Institution
Project*

Has the meaning set forth in § 609.3.

Term Sheet

A written offer for the issuance of a loan guarantee, executed by the Secretary (or a DOE official authorized by the Secretary to execute such offer), delivered to the Applicant, that sets forth the detailed terms and conditions under which DOE and the Applicant will execute a Loan Guarantee Agreement.

Title 17

Title 17 of the Energy Policy Act of 2005 (42 U.S.C. 16511-16517), as amended.

*Title 17 Clean
Energy Financing
Program*

The program administered by DOE pursuant to Title 17, regulations under this part, DOE guidance and policy documents, and other applicable laws and requirements.

Transaction Costs

- i. Out-of-pocket costs of financial, legal, and other professional services associated with the financing of an Eligible Project, including services necessary to obtain required licenses and permits, prepare environmental reports and data, conduct legal and technical due diligence, develop and audit a financial model, negotiate the terms and provisions of project contracts and financing documents, including those costs associated with the advisors to DOE and any other Eligible Lender; and
- ii. Costs of issuing Eligible Project debt, such as commitment fees, upfront fees, and other applicable financing fees, costs and expenses imposed by Eligible Lenders.

Transaction Costs do not include the Administrative Cost of a Loan Guarantee or Credit Subsidy Costs

United States

The several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and any territory or possession of the United States of America.

