The SEFI Carveout

State Energy Financing Institutions: Unlocking Billions in Concessional Financing from the LPO

ADVAIT ARUN
DECEMBER 2023

center for public enterprise

center *for* public enterprise

Putting the public sector back to work.

Advait Arun
Energy Policy Associate
December 5, 2023

The "SEFI Carveout": How Creating State Energy Financing Institutions Can Unlock Billions in Concessional Financing from the Loan Programs Office

The Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) have turned the Department of Energy's Loan Programs Office (LPO) into the catalyst for a massive buildout of new energy investment. Under its original Title 17 authority, the LPO was limited to providing credit to borrowers working with experimental technology. But a new carveout in the IIJA and the IRA extends that credit authority to nearly *any* kind of energy project, so long as it's being co-financed by what's called a State Energy Financing Institution (SEFI).

This SEFI carveout enables the LPO to tap its $40 billion loan guarantee authority to augment state government investment in a wide range of clean energy generation and energy efficiency programs. The LPO can team up with a designated SEFI—a state agency such as a green bank, infrastructure bank, or a financing board with a climate-related mandate—to offer a concessional loan and loan guarantee to energy project developers (financial supports referred to here as "Title 17 financing"). When the LPO is co-investing alongside state agencies, it no longer needs to restrict its Title 17 financing authority to developers of innovative, not-yet-commercialized technologies. Because such a wide variety of greenhouse gas-reducing projects are now eligible for support under the SEFI carveout, the LPO essentially becomes the nation's green bank, anchoring investment in all kinds of strategic energy and decarbonization projects by allowing states to sidestep risk-averse private investors and save vital projects.

This briefing note explains how the Title 17 financing authority and its SEFI carveout work in practice, mapping out how developers can interface with both to implement projects.

How Does Title 17 Work?

Title 17 of the Energy Policy Act of 2005 created the Loan Programs Office within the Department of Energy to catalyze investment in new energy technologies. The law empowered the LPO to support qualifying project developers with two financing products designed to lower their borrowing costs and cover their default risks. The first is a loan guarantee on a borrower's commercial debt; the second is a direct concessional loan from the Federal Financing Bank (FFB) to the borrower backed by a DOE loan guarantee.

Loan guarantee on commercial lending: If the borrower takes out a commercial loan from a private lender, they can apply for a loan guarantee from the LPO on that commercial loan, so long as it is in the senior portion of their capital stack. The LPO's loan guarantee is a promise to lenders that the LPO will pay them if the borrower defaults. The size of the guarantee is capped at 90% of the size of the commercial loan. Private lenders may set their own interest rates, but if their loans are subject to an LPO guarantee, the LPO reserves the right to cap the interest rate on that loan at the discretion of the Secretary of the Energy.

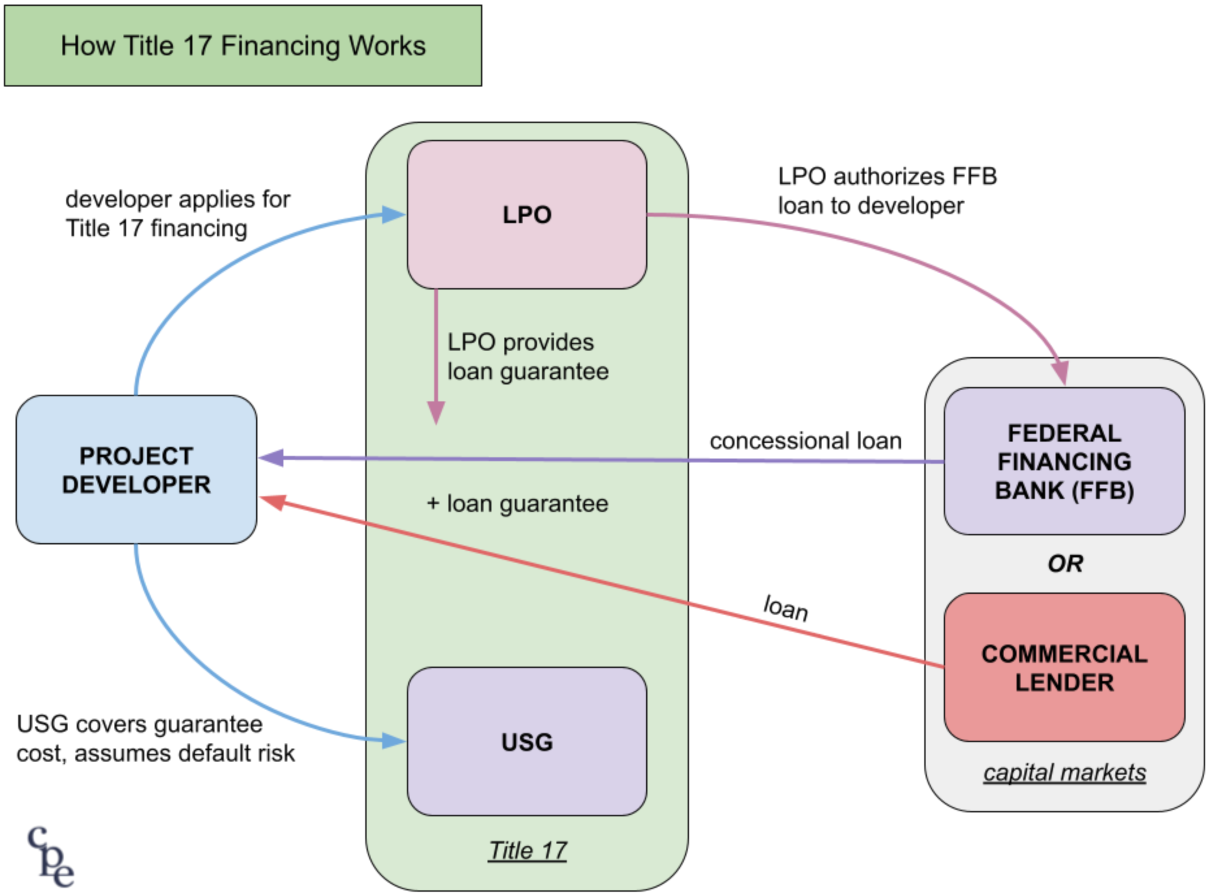
Loan guarantee on concessional FFB lending: If the borrower cannot secure a commercial loan from a private lender, they can apply to the LPO for both a cheap direct loan from the FFB, and a loan guarantee from the LPO on that loan. If the LPO approves the application, it will instruct the FFB—the US Treasury's in-house bank—to provide the loan directly to the borrower. The FFB's loan must be in the senior portion of the borrower's capital stack. The LPO's loan guarantee on this loan is automatic, and is capped at 100% of the size of the FFB loan. These federal loans are crucial backstop for potential borrowers that may not have close relationships with private creditors, including but not limited to municipal governments in energy communities, and tribal corporations.

In both cases, the loan guarantee allows borrowers to worry a lot less about their risk of default. The LPO's guarantee and the standing offer of an FFB loan push down the cost of commercial loans and backstop the entire market for energy project debt. They also allow borrowers to replace more expensive forms of debt that they might have gotten from private lenders (*see Figure 2 below*).

These benefits have some limits. Most importantly, the LPO can only guarantee senior debt in the capital stack. This requirement means that developers must treat concessional FFB loans as senior debt. Additionally, the value of the loans and loan guarantees can never exceed 80% of the borrower's eligible project costs, and the term of the loans and loans guaranteed can never exceed either 30 years or 90% of the project's expected life, whichever is shorter.

Figure 1, below, illustrates how an eligible project developer accesses Title 17 financing.

Figure 1: How Title 17 financing works



A Carveout for the 21st Century

The various sections of Title 17 delineate the kinds of projects that would qualify for LPO financing support. Section 1703 in particular permits the LPO to offer loans and loan guarantees to a range of energy and supply chain projects provided that they are using innovative, not-yet-commercialized energy technologies. The Inflation Reduction Act (IRA) funded this provision with $3.6 billion to enable the LPO to guarantee up to $40 billion in loans.

The 2021 Infrastructure Investment and Jobs Act (IIJA) widened the scope of Section 1703: now *any* energy project that reduces emissions, innovative or not, can receive Title 17 financing under Section

1703 on the condition that it receives "meaningful" financial support from what's known as a State Energy Financing Institution (SEFI). This is the "SEFI carveout" to Title 17.

Section 1703 is just one of a few provisions within Title 17. Section 1706, for example, enables the LPO to finance reinvestment into brownfield energy infrastructure, and has a much larger funding appropriation and guarantee cap.[1] DOE also has other lending programs not covered under Title 17. But Section 1703 in particular remains underexplored despite the catalytic potential of its SEFI carveout.

What's a SEFI?

If the IIJA is the legislative fuel for expanded federal energy lending, the IRA's $40 billion allowance is its spark. The oxygen feeding this flame is the presence of a State Energy Financing Institution (SEFI).

What's a SEFI, and what kind of support counts as "meaningful"? The LPO defines a SEFI thus:

> "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."

So far, the LPO has given SEFI designation to 9 different state financial entities, including but not limited to the New York State Energy Research and Development Authority (NYSERDA), the California Infrastructure and Economic Development Bank (I-Bank), the Connecticut Green Bank, and the Maryland Department of Housing and Community Development. Maryland and California actually have *two* SEFIs each—in Maryland, the Department of Housing and the Clean Energy Center, and in California, the I-Bank and the Strategic Growth Council. Given that states can create multiple

[1] Section 1706 Energy Infrastructure Reinvestment (EIR) lending does not impose an innovation requirement on project developers either. SEFI support is not a condition on the LPO's willingness to finance reinvestment into brownfield energy sites. More information can be found in the LPO's Title 17 guidebook and this whitepaper from Charles River Associates.

SEFI-designated instrumentalities, it stands to reason that state governments can assign individual SEFIs to different aspects of the renewable energy and decarbonization supply chains.

It is also likely that any state government-established financial institution that qualifies for Greenhouse Gas Reduction Fund (GGRF) funding from the EPA also qualifies to become a SEFI, given that an institution that meets the definition of a SEFI also meets key GGRF funding eligibility criteria. An LPO webinar further explained that most state-level economic development authorities can qualify as SEFIs so long as their legislative statute encompasses or is updated to encompass aspects of the above definition—where "Eligible Projects" refers to the kinds of projects eligible for Title 17 financing.

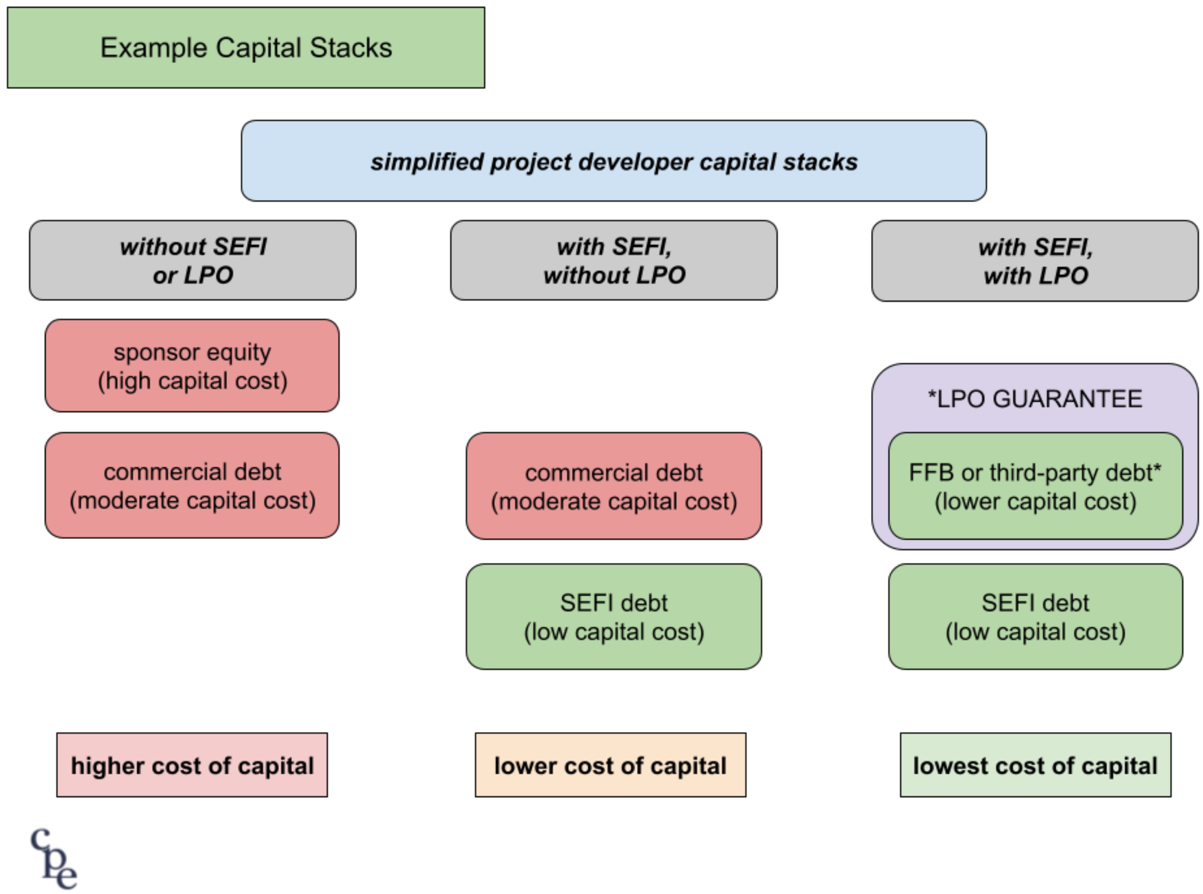
The exact definition of "meaningful" financial support from a SEFI remains opaque. In a June webinar on Title 17, the LPO's representatives clarified that, while they will determine what counts as "meaningful" on a case-by-case basis, they will interpret this criterion fairly flexibly using two metrics: (1) how much risk the SEFI takes on in its financial support of a borrower and (2) how much financing it provides in doing so.

The LPO provides examples of qualifying SEFI support, including but 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), [and] providing financial backstop for specific key project elements that may be subject to regulatory or local market risk." Juxtaposing these illustrative examples with the main metrics the LPO highlighted at their webinar suggests that the most likely way for the LPO to judge a SEFI as providing "meaningful" financial support is for the SEFI to provide higher-risk and subordinated financing products to borrowers.

Green banks, infrastructure banks, bond banks, and other SEFI-like institutions already promise to lower borrowing costs for developers. So why is it important that the LPO further guarantee lending to projects SEFIs might already be involved with? SEFIs are often limited in how much financing they can provide to a project, leaving developers to search for additional, higher-cost financing. Figure 2 illustrates how Title 17 financing complements SEFI financial support by supplying developers with additional financing at far lower costs than they might find elsewhere:[2]

[2] The sample capital stacks in Figure 2 could include other components such as grants, tax equity financing, and elective payments. None of these forms of financing conflict with the rules of the SEFI carveout. We provide additional information in the "Financing Terms" section of this brief.

Figure 2: Example capital stacks for a hypothetical project developer with and without public support



Supercharging State Policy

SEFIs are already beginning to develop plans to make use of the Title 17 carveout. NYSERDA, which was recently designated a SEFI by the LPO, explained how it intends to support project developers in accessing the Title 17 carveout. The process NYSERDA intends to use can be generalized as follows:

1. A state government ensures that a capable state instrumentality receives SEFI designation from the LPO.
2. The newly designated SEFI promises lending and/or credit enhancements to eligible project developers under certain equity and environmental conditions. (For this purpose, NYSERDA set up the State Energy Financing Fund.)

3. Concurrently, eligible project developers apply for both the LPO's Title 17 financing and SEFI financial support.[3] These project developers can include private developers, community development financial institutions (CDFIs), nonprofits, or public developers.

4. The LPO extends credit to the borrower on the basis of committed, "meaningful" SEFI financing. If the borrower plans to finance its project with commercial debt, the LPO will provide a loan guarantee on that debt; if the borrower cannot secure commercial debt financing, the LPO will authorize the Federal Financing Bank (FFB) to provide a loan to the borrower and will provide a loan guarantee on that debt.[4] This will be explained further in the next section on the LPO's financing terms.

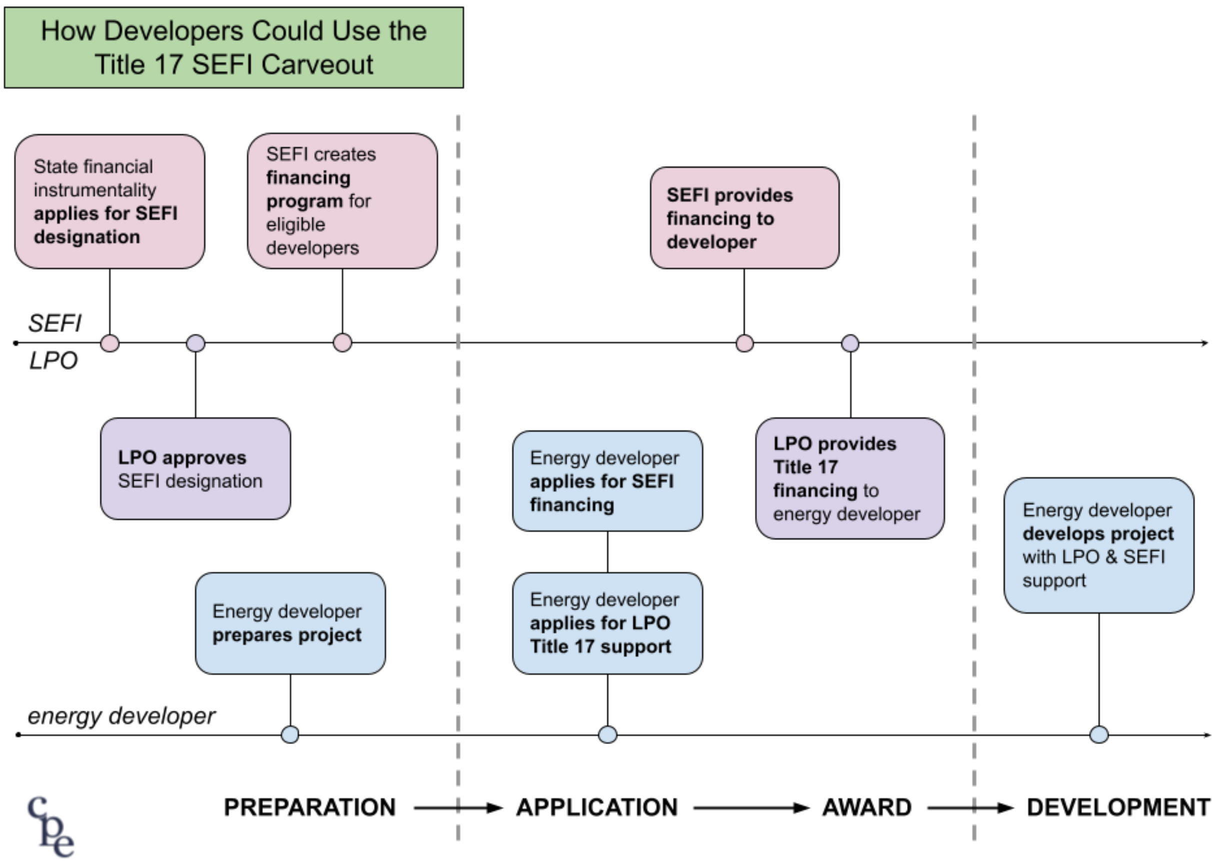
5. The SEFI provides the borrower with the promised financial support.

This interpretation of this multi-step process is broken into preparation, application, award, and development phases in Figure 3 below:

[3] The LPO expects this transaction process to take at most 12 months, during which borrowers must submit documentation including but not limited to a community benefits plan, a greenhouse gas emissions analysis, and a foreign collaboration consideration. Borrowers must also meet NEPA, prevailing wage, and cargo preference regulations—and, if the borrowers are public entities, they must satisfy "Build America, Buy America" domestic content provisions.

[4] It is not clear that the LPO's financial support can cover the same portion of the borrower's capital stack as the SEFI, because "meaningful" support from a SEFI likely requires it to take a subordinate position in that capital stack, while the LPO can only guarantee debt in the senior portion of the capital stack. If the SEFI is the project developer, then it is possible that the LPO could guarantee the SEFI's capital stack. CPE will update this footnote if there is any new guidance.

Figure 3: How developers could use the Title 17 SEFI carveout



Importantly, while the LPO already imposes certain social and environmental criteria on borrowers—including requiring borrowers to submit a community benefit plan and greenhouse gas emissions analysis—SEFIs can set their own policies to condition their awards on state-level just transition criteria. By restricting their awards to certain kinds of projects or by incentivizing prospective borrowers to prepare projects in energy communities or Justice40 areas, SEFIs can direct the LPO's Title 17 financing toward meeting social and environmental goals above and beyond decarbonization.

The SEFI carveout thus transforms the LPO from an institution focusing solely on moonshot technologies to a full-spectrum program for increasing energy resilience and advancing decarbonization nationwide. The LPO's own non-exhaustive guidance marks the following SEFI-supported projects as eligible for financing:

- energy efficiency upgrades and electrification of single-family residences;
- community solar projects;
- facilities related to decarbonized industrial products;
- construction of high-quality, energy-efficient, housing;
- financing of energy efficient and grid-interactive appliances.

Figure 1 clarifies that SEFIs' main role in this process is to commit financial support to any project developer seeking LPO support. The LPO can provide Title 17 financing for conventional projects *only if* SEFIs are always standing at the ready to also support those projects. Doing so will require some level of administrative coordination on the part of individual SEFIs, to ensure that eligible borrowers meet both federal and state conditionalities, including but not limited to prevailing wage and potential domestic content requirements. But SEFIs that always stand at the ready to support any project that meets these criteria will make it far more likely that the project secures Title 17 financing from the LPO on the senior portion of its capital stack.

The LPO's Financing Terms

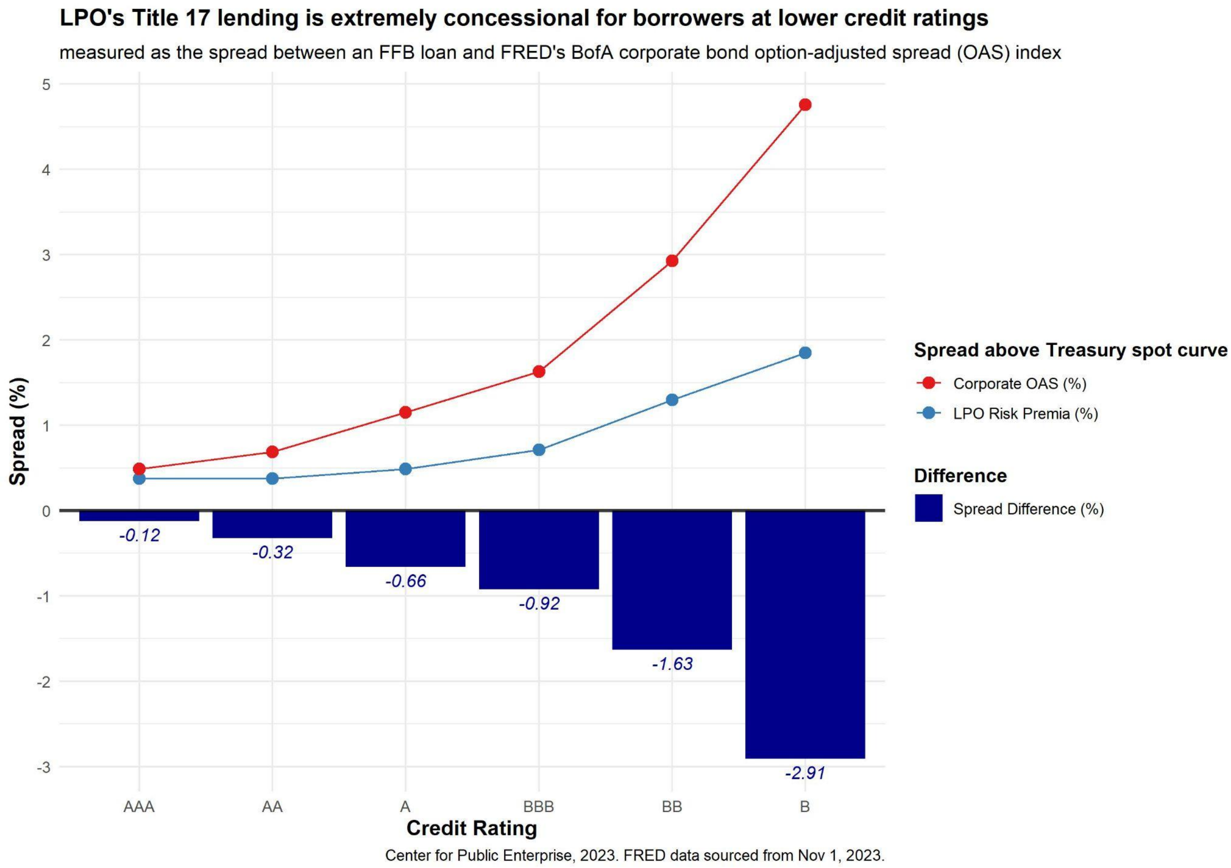
Loans issued by the FFB are not free money. Like any loan, they come with interest and underwriting expenses. However, they are highly concessionary relative to market rate financing. The interest rates on FFB loans are set by regulation at the following spreads above the value of the US Treasury bill rate at *any* given maturity:

Table 1: FFB Loan Credit Spreads

Project Credit Rating	FFB Interest Rate Spread (%)
AAA	0.375
AA	0.375
A	0.490
BBB	0.710
BB	1.300
B	1.850

Compared to a benchmark of the interest rates on corporate bonds—across the same range of credit ratings, also measured as spreads above the value of the applicable US Treasury bill—the FFB's loans are *extremely* concessional, as illustrated in Figure 4, below.

Figure 4: Difference between corporate bond spreads and LPO risk-adjusted lending spreads



Today, the 20-year US Treasury bond rate hovers around 5%. For a borrower rated BBB—reasonable for an energy company—a 20-year loan from the FFB would carry an interest rate of 5.7%. This is not low, by any means, but a 20-year loan from the corporate bond market could carry an interest rate around 6.6%, a massive difference.

While an FFB loan is substantially cheaper than a commercial alternative, the LPO's loan guarantee also reduces the cost of any private credit. Conventionally, borrowers have to pay to secure a loan guarantee, the cost of which is known as a "Credit Subsidy Cost." But the IRA appropriated significant funding for the LPO to pay borrowers' credit subsidy costs for them.

That does not mean the LPO guarantee is *entirely* free of charges and fees. Borrowers must pay underwriting fees, including facility fees, maintenance fees, and transaction fees, which the LPO estimate will likely cost between $2-3 million per transaction. While there is no statutory maximum or minimum transaction size, the LPO's Title 17 guidance notes a preference for a minimum transaction size above $100 million per borrower to ensure that projects can keep these underwriting fees below 2-3% of the transaction's value. As such, the LPO's Title 17 fee structure works better for borrowers with larger balance sheets, including but hardly limited to utility-scale renewable energy developers.

There are two caps on the loan guarantees the LPO can issue: first, a $40 billion cap on the total value of all loans guaranteed under Section 1703 and, second, a $3.6 billion cap on paying borrowers' credit subsidy costs.[5] The LPO has itself publicized that it does not expect to exhaust this appropriation anytime soon.

Additionally, the LPO cannot provide Title 17 financing to projects using federally appropriated funds to repay its loans. In other words, borrowers receiving Title 17 financing cannot "double-dip" by using other federal loan and grant programs to cover costs not paid for by the LPO.[6] This constraint, which is not unique to Title 17, explicitly does not restrict project developers from monetizing tax credits, using tax equity financing structures, or receiving elective payments from the IRS. Thus, LPO loans can still be coupled with the IRA's expanded tax credit monetization mechanisms or elective pay provisions to cover large portions of a public developer's capital stack.

Time to Build

The LPO's SEFI carveout has special importance for public energy developers. In addition to being eligible for elective payments from the IRS in lieu of costlier tax equity investments, they can also access cheaper financing through Title 17 to further reduce the cost of financing renewable energy projects by replacing more expensive debt or equity with LPO-guaranteed loans issued either by private entities or the FFB. The SEFI carveout in Title 17 also seems to allow SEFIs to develop projects themselves, rather than support an external developer.

[5] The cost of each loan guarantee to the LPO is calculated using a model housed at the Office of Management and Budget.

[6] SEFIs that receive federal support at an organizational level (*e.g.* as the recipient of GGRF funding) do not trigger the LPO's prohibition on double-dipping so long as federal funds are not used to directly or indirectly support projects receiving an LPO loan guarantee. The LPO said in its webinar that its guidance on these provisions was not finalized yet. It is not yet clear how the LPO would treat, for example, a borrower receiving a loan from a third-party institution that received a GGRF grant. CPE will stay informed on this particular edge case.

In short, the Title 17 SEFI carveout gives policymakers and project developers disadvantaged by tight private credit markets the financial support they need to meet their clean energy and emissions targets. Creating SEFIs and providing them with sufficient financial firepower would dramatically expand state governments' capacity to undertake investment—and, in doing so, give policymakers more financial flexibility with which to achieve social and environmental goals.

The degree to which state policymakers empower SEFIs to stand by project developers is the biggest constraint on the usefulness of the LPO's Title 17 financing for renewable energy developers. SEFIs are like oxygen to a fire: without them, the clean energy buildout that the IIJA and the IRA promised to spark could fizzle out. But administer SEFIs well, and investment in clean energy will heat up quick.

Agencies interested in learning more about how to make use of these programs can join our Elective Pay Community of Practice here.

Author Contact:

Advait Arun, Energy Policy Associate
advait.arun@publicenterprise.org

About Center for Public Enterprise

Center for Public Enterprise is a 501(c)(3) nonprofit organization focused on expanding public sector capacity to deliver broad economic development. Our work focuses on various sectors of the economy, including housing, energy, and finance. For more information, visit our website at publicenterprise.org.

Paul Williams, Executive Director
Chirag Lala, Energy Policy