

Developing an Effective State Clean Energy Program: Clean Energy Loans

The American Recovery and Reinvestment Act provides an unprecedented level of federal funding (\$3.1 billion) to state energy programs to support investments in energy efficiency and renewable energy technologies. Clean Energy States Alliance (CESA), a nonprofit coalition representing state clean energy programs across the country, has prepared this series of briefs to assist state energy offices in designing programs to make effective use of these federal and other available funds.

Designing an Effective State Loan Program

This briefing paper summarizes innovative **loan** approaches and practices that have worked effectively for state clean energy loan programs across the country.

Loan Program Benefits

Because renewable energy technologies have high up-front capital costs, access to financing is an important factor for advancing investments in both residential and commercial systems. While private lenders provide loans for these systems, lack of familiarity with clean energy technologies, high interest rates and burdensome application procedures can make it challenging to arrange financing. For these reasons, many state clean energy programs have stepped in to offer various types of loan programs targeted at energy efficiency and renewable energy investments.

Key Loan Program Attributes

A state clean energy loan program can be managed as a revolving loan fund and administered directly by a government agency, or through a public-private partnership in which the program is administered by a private financial institution. Based on state experience, the ideal renewable energy loan program will have the following attributes:

1. **Low interest rates.** State clean energy loan programs generally offer interest rates below those of commercial

lenders, offsetting the “risk premium” that lenders may attach to renewable energy projects.

2. **Longer Amortization.** State programs are generally more willing to lengthen repayment terms reflecting the long useful lives of the technologies (10 years or more).
3. **Low hassle and administrative fees.** Applications, paperwork, and fees are usually kept to a minimum, with quick loan approval, especially for smaller loans.
4. **Unsecured Loans.** State loan programs generally do not impose debt service coverage requirements or liens on property (other than the asset being financed).

Types of Loans

States take a number of different approaches in offering subsidized financing for clean energy projects.

- **Direct Loans:** Under a direct loan program, the state acts as loan underwriter and servicer. The advantage of this “full-service” approach is that states control the underwriting process and the capital base of the loan fund is retained through loan repayments (net of defaults) to be loaned on future projects. To supplement the capital base, a state can issue a tax-exempt bond with interest payments on the bond supported by interest payments on projects receiving loans from the loan fund.

- **Matching Loans:** Under a matching loan program, the state provides a certain share of a loan, often at a below-market (or 0%) interest rate, if the borrower can find a commercial lender to provide the balance of the requested loan amount. The state's share of the loan also can offer more flexible repayment terms than the private loan. Iowa manages a renewable energy revolving loan program in which the state will provide 50% of a project's loan at 0% interest while a commercial lender provides the remaining 50% at market interest rates. (www.energy.iastate.edu/AERLP)
- **Interest Rate Buydown:** Under an interest rate buydown program, the state subsidizes the interest rate offered by a private lender for a qualified loan. Administratively, the state provides a lump-sum payment to the lender in exchange for the lender offering a below-market interest rate. This payment represents the present value of the foregone interest over the life of the loan. The principal advantage for a clean energy fund is that this type of interest rate subsidy does not require underwriting, loan servicing resources, or capitalization of a loan fund. However, it does rely on the willingness of private lenders to make these clean energy loans. NYSERDA's "Energy Smart Loan Program" follows this model. (www.nyserdera.org/loanfund)
- **PAYS®:** PAYS ("Pay as You Save") is a financing concept that removes the up-front cost and long payback barriers associated with distributed renewable energy investments. PAYS is essentially an installment payment plan with two unique features: 1) the monthly payments are below the monthly energy savings, thereby making the investment cash-flow positive and 2) the debt obligation is tied to the building's gas or electric meter, not to the specific building owner; therefore, the obligation transfers with building ownership. Although PAYS loans would be best serviced by a utility through on-bill financing, the initial capital base for the program could come from a state clean energy program. PAYS-type programs are largely untested although certain municipalities (e.g., Berkeley, California) are developing a similar program through links to property tax payments.

Organizational Considerations

The success of any state clean energy loan program will depend on the following components:

- **Active program marketing.** The state needs to build program awareness among both potential borrowers and private lending partners.

- **Solid technical and financial skills.** Ideally, loan program staff will have backgrounds in both renewable energy technologies and lending in order to properly evaluate and underwrite loan requests.
- **Efficient program delivery.** Borrowers should be able to get quick review and closure of loan requests.
- **Loan monitoring and support.** Failed projects damage both the borrower and lender. The loan fund needs to closely monitor projects both during construction and in the operating phase to anticipate and solve problems.
- **Program modifications.** Programs need to be designed and adjusted to meet market objectives. For example, if the state program is trying to encourage certain clean energy technologies, the interest rates on those targeted technologies should be lower.

Conclusion

A loan program can play an important part in the portfolio of a state clean energy program. Particularly if a state does not have a steady source of new revenue for its fund, a loan program can allow the fund to continue to assist clean energy project development for many years. A loan program also can provide critical financing at favorable terms, particularly in an environment where private lenders are reluctant to underwrite clean energy projects. Finally, a loan program is an effective way for a clean energy fund to help facilitate projects of many different sizes, from residential solar installations to community wind projects.

For more information or assistance in developing an effective state clean energy program, contact

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