Berkeley Lab and the Clean Energy Group

CASE STUDIES OF STATE SUPPORT FOR RENEWABLE ENERGY

Organizational Structure: The Sustainable Development Fund of Southeastern Pennsylvania

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CASE SUMMARY

Case Description

The Sustainable Development Fund (SDF) is a modest-sized fund operating in Pennsylvania with a mission to promote: (1) the use of renewable energy and advanced clean energy technologies; (2) the use of energy conservation and energy efficiency; and (3) the start-up, attraction, expansion, and retention of sustainable energy businesses. SDF is known for its effective fund management and its innovative renewable energy program designs. A prerequisite to the development of innovative and effective programs is the creation of a strong organizational structure. This case focuses on three elements of the SDF's organizational structure that have been critical to its success.

Innovative Features

The three main organizational strengths of the SDF structure are:

- SDF's market-driven investment approach,
- SDF's ability to avoid the politicization of funding decisions, and
- SDF's capacity to raise additional capital.

Two limitations, narrow geographic focus and modest initial funding, are also discussed.

Results

- As of May 2002, SDF had approved fifteen investments (primarily loans) totaling $7.3 million.
- A small grant budget is also available for business planning, green building design assistance, start-up activities, and other special work; 22 grants totaling $448,000 have been approved by SDF as of May 2002.
- SDF has successfully managed a production incentive auction for new wind power, has developed a buy-down program for solar photovoltaics that incorporates performance features, has managed an innovative offering of subordinated debt to a 9 MW wind project, and currently manages a $500,000 per year

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program to enhance green power awareness in the state.

- SDF's strong organizational structure has been critical to these successes.

CASE STUDY DETAILS

Introduction to the Sustainable Development Fund

The Sustainable Development Fund (SDF) was created by an April 1998 settlement agreement in the PECO Energy restructuring proceeding. The SDF provisions in the agreement fit on a single, double-spaced page, and establish the mission of the fund, define the board, identify the fund manager, and provide for SDF revenue. The funding for SDF originally came from a 1/200th of a cent per kWh charge on PECO's transmission and distribution tariff, which was to generate about $1.6 million per year for the five-year term of the tariff. Funding was to be used for renewable energy, energy efficiency, and other sustainable energy endeavors.

The March 2000 settlement agreement in the subsequent PECO Energy/Unicom merger proceeding, however, provided SDF with a new funding formula, additional funding, and new program responsibilities. The quarterly payments of the first settlement were replaced by a single lump-sum payment of $10 million. In addition, new funding provided for special initiatives in wind ($12 million), solar photovoltaics ($4 million) and public education ($2.5 million). Funding for SDF from the two settlements totals $32 million.

The SDF Board is comprised of seven people representing the major stakeholders in the restructuring proceeding. The interests represented on the Board include PECO Energy, a competing supplier, industrial customers, environmentalists, consumers, as well as a financial expert and a renewable energy technology expert.

SDF is managed by The Reinvestment Fund (TRF), an independent, nonprofit corporation known as a community development financial institution. SDF has a small staff of 4 people: a fund manager, a part-time manager for technology and policy, a senior loan investment officer, and a part-time loan portfolio assistant. In addition, SDF uses other employees of The Reinvestment Fund when needed for such back-office functions as loan processing and public information, and has outsourced the administration of its PV and educational programs to minimize internal administrative burdens.

SDF is known for its effective fund management and its innovative renewable energy program designs. As of May 2002, SDF had approved fifteen investments (primarily loans) totaling $7.3 million. A small grant budget is also available for business planning, green building design assistance, start-up activities, and other special work. Twenty-two grants totaling $448,000 have been approved by SDF as of May 2002. SDF has successfully managed a production incentive auction for new wind power (see case study on production incentive auctions), has developed a buy-down program for solar PV that incorporates performance features (see case study on buy-down programs), has managed an innovative offering of subordinated debt to a 9 MW wind project (see case study on subordinated debt financing), and currently manages a $500,000 per year program to enhance green power awareness in the state (see case study on public education). A prerequisite to the development of innovative and effective programs is the creation of a strong organizational structure. This case focuses on three elements of the SDF's organizational structure that have been critical to its success.

Strength #1: Adopting a Market-Driven Investment Approach

The SDF offers grants-based programs as well as company- or project-based loans, near-equity, and equity investments. What TRF management brings to SDF is a market-driven

investment approach that is very different from that of a government agency or regulated utility. TRF raises its capital from investors who must be paid back, not from taxpayers or ratepayers who expect no direct financial return (but who do expect social benefits to be generated). Under the TRF model, new capital is raised when investors see good performance and the value of making new investments, not because the votes are there for a funding increase. TRF's definition of success is to move markets to support TRF's social missions, not to simply give away a lot of money for a handful of demonstration projects.

That said, SDF is very different from a typical financial institution. While shaped by the discipline of the market, SDF has a definite mission to promote certain sustainable energy technologies in that market. SDF staff must therefore deal with the tension between SDF's mission and the marketplace. For each project, SDF has to decide where that project falls along that mission/market continuum. If, at the end of the day, SDF's portfolio is no different in risk and return than that of an energy-focused venture capital firm, then SDF has failed to push hard enough on its mission of advancing sustainable energy technologies and businesses. SDF is therefore willing to engage in sub-market loans, for example, as well as limited grant-based investments. On the other hand, if the SDF portfolio consists of nothing but demonstration projects that die once the grant dollars end, then no market transformation has been accomplished.

Importantly, this philosophy drives SDF's investment- and grants-oriented programs. Even in its grants programs, SDF is constantly seeking replicable projects and the creation of sustainable markets. As highlighted in other cases, SDF is not afraid of taking innovative steps to pursue this mission.

This "market-driven" approach is a direct outcome of the selection of an experienced community development financial institution as the manager of SDF. SDF's market-driven investment approach stands in contrast to many of the other clean energy funds from around the country.

Strength #2: Avoiding Politicization of SDF Decisions

Any clean energy fund with a substantial amount of money and a board that consists of different political groups runs the risk of having its decisions become a political exercise rather than a business decision. SDF has avoided the politicization of funding decisions by carefully dividing management and decision-making responsibilities between the Board, the staff, and the TRF investment committees.

The SDF Board, with its seven representatives of various interest groups, has important but limited power. The SDF Board reviews and approves an Annual Program Plan (which in general terms defines the types of projects that will be eligible for funding) and the Annual Operating Budget (which defines staff and other expenses). The SDF Board reviews all potential investments for mission fit, but does not approve or disapprove specific investments (as explained below, this is the job of the TRF investment committees). The SDF Board does have the responsibility of reviewing and authorizing all SDF grants, both from the core fund and from the special initiatives.

The SDF staff drafts the Annual Program Plan and the Annual Operating Budget for approval by the Board. Staff prepares the written "mission fit" analysis for all investments. Staff also prepares recommendations for all grant decisions and negotiates and executes the grant agreements. Staff thus has a major role in driving all Board actions.

Because it is TRF that has the fiduciary responsibility for the SDF dollars, it is the TRF investment committees, not the SDF Board, that review and approve all investment requests. TRF has three committees (a loan committee, a near-equity committee, and an equity committee) that SDF uses, depending on the proposed structure of the financial deal. Each of these committees is made up of

financial experts appointed by TRF. The SDF Board and the Pennsylvania Public Utility Commission are prevented from challenging individual investment decisions, though each has the authority to review the SDF portfolio as a whole and to pass judgment on whether TRF is managing SDF properly.

This sharing of responsibility is detailed in the SDF bylaws, but the issue arose during the settlement negotiations when the TRF's founder and CEO warned of the history of these social funds being run off the rails by political fights and insisted that TRF investment decisions be made by apolitical investment committees rather than by the SDF Board.

Strength #3: Raising Additional Capital

In addition to its strength as a lender, TRF brings SDF the model and the capability of raising capital beyond the payments from PECO Energy. Since 1985, TRF has raised over $150 million from approximately 900 investors. Individuals, organizations, foundations, and private banks that support TRF's social mission loan this capital to TRF at below-market rates. Once SDF has established a track record and a portfolio with its initial PECO Energy fund, it plans to go to the TRF investors to raise additional capital. Given the modest initial funding of SDF, it is critical that it be able to attract additional capital. Fundraising is expected to begin in the near future, and may offer a model for other clean energy funds with the ability to raise outside capital.

One aspect of raising additional capital that SDF has already accomplished is co-investing with the three other Pennsylvania sustainable energy funds on projects (see case study on subordinated debt financing of a wind project). SDF is also currently exploring joint investments with other state funds for Pennsylvania wind projects.

Limitations

SDF has faced two important limitations that may not be problematic to many funds, but that must be recognized:

- **Narrow Geographic Focus:** Because it was created out of a single utility settlement proceeding, SDF's investments are focused primarily on the service territory of PECO Energy. In Pennsylvania, similar sustainable energy funds were also created for the electric utility service territories of PPL, GPU (Met Ed and Penelec), and West Penn (Allegheny Power). While SDF has made co-investments with the other Pennsylvania funds, it must be able to show that each investment "benefits" the PECO Energy service territory in some fashion. This geographic constraint has prevented SDF from supporting some projects because of an inadequate link to the area.

- **Modest Funding:** SDF has limited funds to spend on renewable energy and energy efficiency investments. There may be some benefits to this modest funding. For example, SDF has been able to avoid some of the disputes that have plagued clean energy funds in other states, which because of their size have not been able to fly under the political radar as SDF has done for the most part. Nonetheless, funding limits seriously constrain the operations of the fund. This is one reason that SDF, following the TRF model, will seek to secure additional private investment in the near future.

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SDF website – various documents:
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About this Case Study Series

A number of U.S. states have recently established clean energy funds to support renewable and clean forms of electricity production. This represents a new trend towards aggressive state support for clean energy, but few efforts have been made to report and share the early experiences of these funds.

This paper is part of a series of clean energy fund case studies prepared by Lawrence Berkeley National Laboratory and the Clean Energy Group, under the auspices of the Clean Energy Funds Network. The primary purpose of this case study series is to report on the innovative programs and administrative practices of state (and some international) clean energy funds, to highlight additional sources of information, and to identify contacts. Our hope is that these brief case studies will be useful for clean energy funds and other stakeholders that are interested in learning about the pioneering renewable energy efforts of newly established clean energy funds.

Twenty-one total case studies have now been completed. Additional case studies will be distributed in the future. For copies of all of the case studies, see:
http://eetd.lbl.gov/ea/ems/cases/ or http://www.cleanenergyfunds.org/

About the Clean Energy Funds Network

The Clean Energy Funds Network (CEFN) is a foundation-funded, non-profit initiative to support the state clean energy funds. CEFN collects and disseminates information and analysis, conducts original research, and helps to coordinate activities of the state funds. The main purpose of CEFN is to help states increase the quality and quantity of clean energy investments and to expand the clean energy market. The Clean Energy Group manages CEFN, while Berkeley Lab provides CEFN analytic support.

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