

Federal Home Loan Bank of Boston

Results

VOLUME V / ISSUE 2 / 2012

Funding Supportive Housing in Boston

In recent decades, Casa Esperanza has received four AHP awards to support its extensive affordable-housing and substance-abuse recovery services in Boston.

PLUS...

Advances Fund Vermont Solar Farms

Member Mascoma Savings Bank tapped the Bank's Community Development advance to fund two renewable energy projects in Vermont.

An Interview with HUD's Regional Administrator

Bank Executive Vice President M. Susan Elliott recently sat down with HUD Regional Administrator Barbara G. Fields to discuss the agency's accomplishments and plans for the coming year.

Community Development Advance

Provides Key Funding for Vermont Solar Farms

by Robert O'Malley

FOR MUCH OF HIS WORKING life, Naoto Inoue has been exploring strategies to develop renewable energy, experimenting with wind and solar energy projects and building super-insulated homes.

An early opponent of nuclear power, Mr. Inoue realized that opposing one form of energy — which he considered dangerous — without offering an alternative left him open to charges of hypocrisy and made it more difficult for him to effectively argue his case.

For a time, in the late 1970s and early 1980s, the renewable energy industry in the U.S. was moving in the right direction, Mr. Inoue says. The U.S. government was offering a 30 percent tax credit for investments in renewable energy and many grassroots developers were experimenting with the new technologies.

But the federal tax credit was discontinued during the 1980s — a move that Mr. Inoue believes set development of the budding renewable energy industry back by decades. In the years that followed, companies that were developing renewable technologies either didn't survive or were bought out by larger companies such as ARCO and BP.

Despite this lack of government support during the 1980s and into the 1990s — when the need to develop renewable energy to counteract U.S. dependence on imported oil was not a priority — Mr. Inoue continued to explore various strategies to develop



alternative technologies from his home in Kennebunkport, Maine.

In 1995, he joined neighbor Peter Talmage as a partner in Talmage Solar Engineering Inc., a firm Mr. Talmage founded 20 years earlier. When Mr. Talmage retired from the firm in 2000, Mr. Inoue became the sole partner in what became Solar Markets. He operated the firm on his own until his son Kale joined as a partner in 2008.

Fast forward to 2009 when about 11 states, including Maine and Vermont, passed Feed-In Tariff (FIT) programs, which offer stable prices under long-term contracts for energy generated from renewable sources.

The Inoues looked at the Maine and Vermont programs and concluded that the Vermont program was more bankable because it guaranteed 30 cents per kilowatt hour for 25 years compared with the Maine program's 10 cents per kilowatt hour. The Vermont program was based on four technologies — hydro, wind, solar, and biomass — and a maximum aggregate project capacity of 50 megawatts of generated power.

When FIT passed in Vermont, the Inoues took the necessary steps to participate in the program as the developer of a solar farm. Kale Inoue identified a piece of vacant land in an industrial park in Sharon, Vermont and eventually obtained a purchase and sale agreement.

Vermont's Sustainably Priced Energy Development Program, or SPEED, which administers the state's FIT program, selected the Inoue's solar farm project to participate in the program.

The SunGen Sharon project includes 9,562, 230-watt solar panels spread over nine acres. The project uses state-of-the-art solar panels that degrade no more than 20 percent over 25 years. "That's a very good warranty," Mr. Inoue notes.

The panels are manufactured by a Taiwan-based company that uses technology largely developed in the U.S. A key piece of the equipment — the inverters — are manufactured by a company in Lawrence, Massachusetts.

Although American companies led the way early on in developing solar panels, many of the panels today are manufactured outside the U.S. Mr. Inoue says that until recently there was virtually no government support to keep the renewable-energy industry viable — unlike the Chinese industry that enjoyed considerable government support. "We have to look at the long-term picture," Mr. Inoue says. "We can't be making decisions in a four-year election cycle."

Although construction of the solar farm was physically demanding because of the need to be at the site during construction, "the biggest difficulty was financing the project," says Mr. Inoue, adding that the project includes long-term financing from member Mascoma Savings Bank, FSB, in Lebanon, New Hampshire, and a construction loan from a Florida finance company.

Mr. Inoue says his son Kale contacted Mascoma Savings Bank to gauge the bank's interest in financing part of the project. Mr. Inoue says the key to attracting financing was the company's track record and reliability. "We are lucky in everything we have been doing since 1995," he says. "There are a lot of solar companies and renewable energy companies that have come and gone.

"I'm willing to put my entire life savings on the line," he adds. "When a banker asks, 'can you personally guarantee this?' I will say 'yes, I will risk everything I have,



Opposite page: The SunGen solar farm in Sharon, Vermont.

Clockwise from left: John Ziegler at the CRL Solar site in White River Junction, Vermont; Naoto Inoue; aerial view of the CRL Solar site.

all the real estate assets owned by me and my wife.' When you show that kind of confidence that you'll be successful, they listen to you better."

Financing a solar farm project was a first-time venture for Mascoma Savings Bank. "I became convinced that it worked from an economic standpoint," says John Ziegler, vice president at Mascoma Savings Bank. "It made a lot of sense because they get an attractive rate for the electricity produced."

The project also qualified for a federal 1603 grant that reimbursed the developer for up to 30 percent of hard and soft costs, he adds.

"We look at a lot of different credits for a lot of different companies, and one of the questions we always have to ask when we look at credit is, 'well what happens if they can't sell their product, or what happens to their product if they can't sell it at the price they want or need?'" Mr. Ziegler says. "In this case, we know the state will buy 100 percent of the electricity they produce, and the state is guaranteeing the price of the product for the next 25 years."

Another question to ask is how much

electricity will the farms produce? Mr. Ziegler says a fairly accurate estimate of the power that can be produced by a specific type of solar panel in a specific geographic area is available through the U.S. Department of Energy.

"These solar farms are quite new in this state, but estimating the amount of revenue produced by them should be very reliable," says Mr. Ziegler. "However, you do have a slightly declining revenue stream over time, because 25 years out these panels will produce 80 percent of what they produced on day one."

To address this reduction in operating income over time, the borrower needed fixed-rate financing. "That is why we went to the Federal Home Loan Bank of Boston, which is willing to sell us fixed-rate money for five, 10, 20 years," Mr. Ziegler says. "We then passed that fixed rate on to our customer, who doesn't run the risk of a changing interest rate while we as a bank don't have interest-rate risk either."

To provide that fixed-rate funding for the SunGen project, Mascoma Savings Bank accessed a \$4.2 million Community Development advance from the Bank.

“Normally, I go to Don Thompson, our CFO, and say I need some money, and he figures out how to fund it,” says Mr. Ziegler. “But this was peculiar in that it had to be fixed for 20 years.”

In addition to funding the SunGen Solar project in 2012, Mascoma Savings Bank also provided \$2.6 million in Community Development advance funding to help finance a solar farm developed by CRL Solar, LLC, on land fronting Interstate 91 in White River Junction, Vermont.

Bob Grant, manager and owner of CRL Solar, says the firm’s 2.2 megawatt solar farm is projected to produce three million kilowatt hours of electricity per year. Like the SunGen Solar development, CRL Solar was developed through Vermont’s SPEED program. “We have deployed 10,296 panels,” Mr. Grant says. “The footprint of the arrays is about 10 1/2 acres.”

Mr. Grant says funding from Mascoma Savings Bank as well as a Small Business Administration 504 loan were key elements in making the project financially viable. “I think it wouldn’t be an overstatement to say that Mascoma was critical in putting this project together and getting the job done,” Mr. Grant says. “Quite frankly, without financing there is no project.”

“I tip my hat to them for thinking outside the box and being creative in structuring a program that works for us,” Mr. Grant says. “I think they did a great job.”

While Mr. Grant plans to do more solar projects in the future, he notes that “the industry is extraordinarily fluid. The incentives crafted to make these projects viable change daily, and so timing becomes critical,” he says. “It’s difficult to sit here today and say x,y,z is going to be viable a year from now.

“I was initially introduced to renewable energy from the vantage point of deploying solar on landfill caps,” adds Mr. Grant, who spent the last 15 years redeveloping brownfield sites. “In pursuing this initiative, we ultimately picked a somewhat secluded piece of ground that was zoned appropriately and has the least impact on the community.”

Both the SunGen Sharon and CRL Solar farms were up and running by the latter half of 2012. “We’ve been doing pretty well,” says Mr. Inoue. “I’m very happy with it. We have a few projects of similar size or bigger on the drawing board.” ■

2012 Sees Record Increase in MPF Participation

THE FEDERAL HOME LOAN BANK of Boston was on track in November to record its largest ever annual increase in members participating in its Mortgage Partnership Finance® (MPF®) program.

“We’re having a great year,” says Paul Pouliot, first vice president/mortgage manager at the Federal Home Loan Bank of Boston. “We’ll probably have 20 new members join MPF this year, which is a lot for us. We usually have 10 or 12 each year.”

Mr. Pouliot says members are turning to the Bank’s MPF program to ensure stability in addressing their secondary market needs. “Many of the new members have been long-time participants in the secondary market with either Fannie Mae or Freddie Mac but are concerned that at some point in the near future the door to those government-sponsored enterprises will close,” says Mr. Pouliot. “They want to have an option, and we are the most viable option in the marketplace today.”

Almost 200 Bank members are participating in the MPF program now, which includes Original MPF — a credit-risk-sharing product in which mortgage loans purchased by the Bank remain on the Bank’s balance sheet — and MPF Xtra — a product in which loans are passed on to Fannie Mae.

“Having the two types of programs gives the Bank flexibility in meeting the needs of its members,” Mr. Pouliot says. “We encourage members to have access to both programs and choose the one that best fits their needs.”

Mr. Pouliot says the MPF program allows members to complete post-closing after funding and avoid the typical master-custodian fees associated with loans sold directly to Fannie Mae and Freddie Mac. With the MPF Xtra Best Efforts program, members are able to register a loan without being subject to possible pair-off costs.

Mr. Pouliot says the Bank is currently exploring additional products to provide members with new programs to offer its customers. “We believe investors are interested in buying loans originated by members of the FHLB System because of the quality of the loans,” he says. “Expanding these products to our members provides additional opportunities for profits for the Bank and its members.”

“Mortgage Partnership Finance” and “MPF” are registered trademarks of the Federal Home Loan Bank of Chicago.