

Zero Percent Loan (On-Bill Financing)

Utility companies help finance the high up-front cost of homeowners' transition to cleaner energy



Solar Panel Equipped Homes in Almere Noorderplassen, the Netherlands (Photo Courtesy of Daria Nepriakhina)

The Impact

Zero percent loan programs, also known as on-bill financing, increase the accessibility of transitioning to more energy-efficient infrastructure. Under a zero percent loan model, utilities cover the higher up-front cost of energy-related upgrades. Customers then repay the costs via an additional charge on their utility bill.

Description

Zero percent loan programs that involve on-bill financing are a specific type of financial arrangement where the loan repayment is made through the borrower's regular utility bill. These programs are often used for energy efficiency upgrades or renewable energy installations. With zero percent loans, utility companies incur the initial high cost of clean energy technologies. Customers then are required to repay the investment cost through an additional charge on their utility bill. A similar financing model, on-bill repayment, finances the program through a third party rather than the utility company itself. Since utility companies have access to a customer's energy usage patterns and payment history, they can assess the risk of adopting a zero percent loan program. Some zero percent loan models continue even after the initial homeowner moves, by including a clause designating the transfer of the loan to the next owner of the property. Collectively, zero percent loans are an effective solution to both promote and increase the adoption of clean energy.

Where It's Been Implemented

Pacific Gas & Electric (PG&E) currently offers zero percent loans to commercial customers for upgrading to energy-efficient equipment. Loans range from \$5,000 to \$4 million for residents that have been customers for at least 24 months, of which 12 should be with good standing.

Southern California Edison has offered a zero percent loan program since 2010. Commercial and residential customers are eligible to participate. The program has provided over \$10 million in loans, yielding a projected energy saving of 17 GWh and 2.8 MW.

Sonoma Clean Advanced Clean Energy offers zero percent financing for up to \$10,000 for select energy technologies within Sonoma and Mendocino counties. Residential customers need to complete a screening application, select an energy upgrade and submit a participation agreement to join the program.

Peninsula Clean Energy, which serves San Mateo County in California, currently offers customers loans up to \$10,000 to help with the installation of electric water heaters, heating and A/C, and energy efficiency upgrades. Residential customers who own their properties are eligible for loans. Residents must work with approved contractors, who are listed on the Peninsula Clean Energy site. Repayment plans can range from two to ten years with zero-percent interest.

Key Drivers

Zero percent loans are an attractive solution to finance the high upfront cost of clean energy technologies. Under a zero percent loan program, customers can benefit from cleaner and often more efficient and less costly energy while repaying the loan that makes it possible. Usually, the energy cost savings from the more efficient technology offset the on-bill repayment. Utilities can maintain a secure revenue stream because they can disconnect customers from cleaner sources of energy upon a failure to pay. Overall, zero percent loans promote the market's transition to cleaner energy sources, making it easier for utilities and customers to benefit from clean energy.

Key Factors for Success

Assembling a solid team is essential for implementing a zero percent loan program. Key internal and external stakeholders that can be helpful for implementation include energy auditors, solar installers and other contractors, city or county policymakers, energy advocates, and community organizations. Having a connection to a reliable, committed contractor will be crucial for the success of the program. Additionally, it can be beneficial to collaborate with existing utility companies that have implemented or are thinking about implementing an on-bill financing program. Thus, education and outreach programs can help in garnering more support and customers for the program, lowering the risk for private lenders and utility companies. Local governments can also support zero percent loan programs by creating policy or legislation incentives that would support such a program, collaborating with utility companies and backing zero percent loan programs.

Key Obstacles

Zero percent loan programs encounter several obstacles, including the necessity to implement a new billing system and the redistribution of costs when bills are only partially paid. Additionally, these programs must navigate the intricacies of consumer lending laws and adapt their billing systems to accommodate on-bill financing models. A further complication arises in the event of property resale, where specific financing arrangements might obligate businesses or homeowners to settle the loan in full upon selling the property.

Timeline to Implementation

In the example of Peninsula Clean Energy, the loan process begins with selecting a contractor and applying for a loan. Once the loan gets approved, the upgrades are installed and the contractor is sent a payment for the loan. Lastly, the loan is added to the customer's account and repaid through their monthly electricity bill. Typical loan repayments plan range from two to fifteen years.

References and Resources

- Bret Anderson, Carbon Free Palo Alto, bretande@gmail.com
- Vanessa Shin, Peninsula Clean Energy, vshin@peninsulacleanenergy.com or programs@peninsulacleanenergy.com
- [U.S. Department of Energy On-Bill Financing and Repayment Programs](#)
- [National Resources Defense Council: On-Bill Financing Overview and Key Considerations for Program Design](#)
- [Southern California Edison: On-Bill Financing for Energy Efficiency Projects](#)
- [Peninsula Clean Energy Zero Percent Financing](#)
- [PG&E Energy Efficiency Financing](#)
- [Carbon Free Palo Alto: BE Smart Program Overview \(proposal for mass electrification proposal including on-bill financing\)](#)

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