

Financing Clean Energy

The push for clean energy and energy improvements has been slowed due to the barrier caused by the lack of attractive financing options. This is in part due to the ongoing financial crisis, which has made investment capital scarce. There is also a concern of increasing the public debt because of traditional government intervention, such as subsidies. This has motivated interest in various forms of financing for both improving energy efficiency and developing renewable resources that do not require government funding.

For commercial buildings, nearly 80% of energy consumed is through electricity, so there is significant financial gain available by improving efficiency. Improvements can be funded through any combination of three methods: Property Assessed Clean Energy (PACE) Financing, Energy Savings Performance Contracting, or On-Bill Financing. None of the three rely primarily on federal or state government financing - PACE Financing is paid by the municipal government and repaid through property taxes, ESP Contracting is paid by energy service companies and repaid through the financial gain of the improvement, and On-Bill Financing is paid by utilities and repaid through bill reductions. Several states already engage in PACE Financing and On-Bill Financing, and the results have been promising.

Renewables development can be financed through feed-in tariffs, production tax credits, and investment tax credits. Feed-in tariffs guarantee that energy produced by a consumer through renewable means will be purchased by the company. Germany's use of feed-in tariffs has largely fueled a large increase in solar energy capacity, especially compared with the U.S. Production and investment tax credits are subsidies given to companies that produce energy with renewables or invest in companies that are developing renewable resources. Currently, wind and solar are largely funded through tax credits, although support is weakening due in part to the financial crisis.