

## Overview

One of the largest barriers to implementing carbon reduction projects in both the public and private sectors is finding funding modes that drive carbon reduction goals. External financing refers to funding acquired from sources outside the organization. Though more complex than internal financing, it gives customers the ability to fund carbon reduction projects that may not have been possible otherwise. This fact sheet summarizes 7 common external financing modes: Energy-as-a-Service, Energy Savings Performance Contracts, Power Purchase Agreements, Sustainability Linked-Loans, Green Loans, Property Assessed Clean Energy, and On-Bill Financing/Repayment.

### 1. Energy-as-a-Service (EaaS)

Energy-as-a-service, which includes [efficiency-as-a-service](#), is a pay-for-performance, off-balance sheet financing solution that allows organizations to implement energy generation and water efficiency projects without upfront payments. The provider pays for project development, construction, and maintenance costs. Once a project is operational, the organization makes service payments to the provider based on actual energy savings or other equipment performance metrics, resulting in immediate reduced operating expenses.

- ▶ **Advantages:** Energy savings pay for projects, off balance sheet, enhanced reliability of operations, flexible enterprise-scale financing.
- ▶ **Disadvantages:** Size limitations, building ownership constraints, longer close times.
- ▶ **Example:** [Citi Riverdale Data Center Energy Services Agreement](#)

#### KEY TAKEAWAYS

External financing for carbon reduction projects may be a good fit if your organization:

- ▶ Wishes to make large capital equipment upgrades that align with carbon reduction goals.
- ▶ Would like to set aside internal financing resources for other core business activities.
- ▶ Does not have the funds readily available for carbon reduction projects.

### 2. Energy Savings Performance Contracts (ESPC)

Under an [ESPC](#), an energy service company (ESCO) installs equipment following a pre-defined scope of work and typically guarantees that the project will achieve an agreed savings threshold called a “performance guarantee.” If the measured savings of the equipment fall below the guaranteed threshold, the ESCO will pay the organization for the under-performance. An ESPC is not technically a financing solution, but rather a performance contract that may or may not be backed by financing. For organizations seeking external financing, a third-party lender can cover some or all upfront costs.

- ▶ **Advantages:** Most ESPCs include a performance guarantee, outsourced project management, enhanced reliability of operations, standardized processes, scalable, eliminates need for third-party investor/lender.
- ▶ **Disadvantages:** Long close time, building ownership constraints, size limitations, high-cost relative to in-house implementation.
- ▶ **Example:** [Jersey City Housing Authority Leverages Energy Performance Contracts for Energy Efficiency Projects](#)

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### 3. Power Purchase Agreement (PPA)

[PPAs](#) are a financial agreement where a developer arranges for the design, permitting, financing, and installation of an energy system on an organizations' site at little to no cost. The organization then purchases the energy from the developer at a set price.

- ▶ **Advantages:** Positive cash flows, third-party ownership and operation, off balance sheet, predictable energy prices.
- ▶ **Disadvantages:** Risk of utility rate overpayment, limited availability, contract complexity.
- ▶ **Examples:** [Sol Systems PPA with D.C. Department of General Services](#), [Regency Center's Landlord-Retailer PPA](#)

### 4. Sustainability-Linked Loans

Loans that incentivize the borrower's commitment to carbon reduction targets through predetermined sustainability performance targets (SPTs) measured using key performance indicators (KPIs). When KPIs are met, the borrower may receive the benefit of a discount in its loan pricing.

- ▶ **Advantages:** Avoids the need for on-going monitoring of SPTs by a lender or other third-party vendor.
- ▶ **Disadvantages:** Borrowers must obtain independent and external verification of the borrower's performance level against each SPT for each KPI at least once a year.
- ▶ **Example:** The inclusion of non-financial clauses and requirements in lending documents is a developing practice and has not been standardized.

### 5. Green Loans

Green loans advance lending for energy efficiency and renewable energy projects being developed as part of an organization's carbon reduction strategy. These loans may have favorable interest rates and terms.

- ▶ **Advantages:** Lower interest rates, high loan amounts, cost savings.
- ▶ **Disadvantages:** Interest may reduce savings, requires extra documentation.
- ▶ **Example:** [LINC Housing's City Garden Apartments](#)

### 6. Property Assessed Clean Energy (PACE)

[PACE](#) is a financing structure in which building owners borrow money for energy generation projects and make repayments via an assessment on their property tax bill. The financing arrangement then remains with the property even if it is sold, facilitating long-term investments in building performance.

- ▶ **Advantages:** Positive cash flow, transferability, favorable terms, flexible balance sheet treatment.
- ▶ **Disadvantages:** Best suited for building owners/mortgage holders, limited to jurisdictions with legislative PACE districts, must be structured for individual properties.
- ▶ **Example:** [Lever Real Estate Capital – PACE Enables Energy Efficiency in Redevelopment Project](#)

### 7. On-Bill Financing (OBF) and On-Bill Repayment (OBR)

On-bill financing and repayment are financing options whereby a utility or lender supplies capital to a utility customer to make energy efficiency improvements and is repaid through regular monthly loan payments on

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an existing utility bill. OBF and OBR are designed for customers looking to finance energy efficiency projects that lower utility bills or are seeking energy conservation measures with a 2-to-5-year payback.

- ▶ **Advantages:** Convenient structure, benefits leased spaces, flexibility, favorable rates.
- ▶ **Disadvantages:** Specifications vary greatly by utility, not suited for very large projects, savings are not guaranteed.
- ▶ **Example:** [Southern California Edison's On-Bill Financing for Energy Efficiency Projects](#)

*Published October 2021 | DOE/EE-2522*