Introduction to inclusive utility investments

Decarbonization requires upgrading everything that currently uses fossil fuels to be free from that dependence and a financial solution that is both fiscally sustainable and scalable. Neither public funding nor self-finance solutions for building owners have yet met these criteria anywhere.

The prevailing policies for building energy upgrades implicitly assume that owners will independently research the market to get the best pricing on equipment and labor, oversee quality installation, and pay the upfront costs out of pocket or secure personal loans. For decades, policy-makers have believed rebates, tax credits, and lower interest rates would motivate building owners to act. Yet, even with all those inducements, households that have access to cash or credit rarely choose energy upgrades when they make home improvements. Their impact on the pace of building energy upgrades is vastly insufficient compared to the scale of the need.

What is more, even where residents are willing to pursue energy upgrades, over 50% of all U.S. households lack the necessary assets and qualifications for loans. The financial services sector is bound to federal rules for access to credit that systematically discourage or disqualify the 36% of U.S. residents who rent and the 51% of residents with subprime credit scores.

For decades, leaders in the federal government have repeatedly demonstrated that they will not muster spending on climate action that is commensurate with the challenge. The contrast between existing policies (or even pledged ones) and the necessary scale of investment in building decarbonization illuminates a fundamental mismatch between the size of the climate challenge and the political capital available to deliver responsive public spending.

We need to look beyond consumer financial products and public spending to capitalize energy upgrades to more than 100 million buildings – as fast as possible.

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3. https://mitpress.mit.edu/books/they-knew
What are inclusive utility investments?

In an inclusive utility investment program (also known as a tariffed on-bill program), a utility provides up-front capital to pay for energy efficiency upgrades at a customer’s premises and recovers its costs through a fixed charge on the participating customer’s utility bill (known as a cost recovery charge). The cost recovery charge is calculated based on an approved tariff that takes into account installation costs, administrative costs, estimated savings, and cash flow for participating customers.

Unlike on-bill loan programs or third-party financing, Inclusive Utility Investment programs do not require consumer credit checks, upfront customer investment is optional, and cost recovery obligations are tied to the utility meter rather than the customer, making the approach an appealing route for more customers including renters, low-income and other underserved customers.

To make an inclusive utility investment, the utility assesses the energy savings potential of the home, rather than the customer’s financial liquidity or creditworthiness. This makes home energy upgrades accessible to all customers without credit checks, property ownership, or debt obligation. In short, every utility customer is an immediate prospect for the program.

After a home assessment, the customer is offered their choice of cost-effective upgrades. The utility pays the upfront cost of all selected cost-effective energy upgrades at a site (i.e. weatherization, on-site solar, EV charger, etc.) and is paid back with the energy savings over time through a monthly charge on the customer’s bill. The monthly charge is less than the estimated savings from the upgrade so that the customer enjoys a lower energy bill from day one and a more comfortable and healthy home. Until the investment is recovered, the monthly charge automatically transfers to future customers at that site – it does not transfer with the customer.
Having tackled the upfront cost barriers and split incentives that effectively segregate participation in the clean energy economy, the early adopters of inclusive utility investment for affordable energy upgrades have reported results indicating that this financial solution that is open to anyone actually benefits everyone.

Since the utility is making the upfront investment, which depends on an expected rate of return, the utility is motivated to manage the entire process to ensure upgrades are installed correctly to produce the projected savings. This transforms the building upgrade process from one where customers are responsible for managing contractors and paying for upgrades themselves to one where they simply choose to participate in the utility’s program and then receive the benefits of the building improvements.

The uptake rate is dramatically higher than loan options that assume customers will want to take on new debt. Field data has shown that customers accept upgrade offers through inclusive utility investment programs 70-90 percent of the time compared to a loan closure rate of less than 10% for typical loan programs. That difference is not isolated to specific income levels. Customers at any income level appear to be more likely to install building energy upgrades through an inclusive utility investment program than a debt-based option.

Inclusive utility investment is a paradigm shift from the way utilities have historically viewed their core business because most utilities and their regulators have managed efficiency and on-site clean energy programs as cost centers tangential to their core business. With inclusive utility investment, utilities can treat cost effective building energy upgrades as part of the essential services they deliver.

Utilities already have a commercial relationship with the occupants of virtually every building in the country. They can leverage this expansive customer base to access low-cost capital for upgrade investments on terms determined to be just, reasonable, and fair by their regulators or oversight boards. Thus, inclusive utility investments make it financially possible and attractive for utilities to capitalize building electrification and efficiency upgrades on the same scale as conventional power plants.

How do I learn more?

Clean Energy Works provides technical assistance to utilities, regulators, community members, and other stakeholders interested in exploring an inclusive utility investment program.

For more information, explore the inclusive utility investment starter kit by visiting cleanenergyworks.org/resources/#iui-toolkit or go to the resources page on our website: cleanenergyworks.org/resources
Are inclusive utility investments related to PAYS®?

The original inclusive utility investment model was created by the Energy Efficiency Institute, Inc.¹ and trademarked Pay as You Save® (PAYS®). Though Clean Energy Works has partnered with the Energy Efficiency Institute, Inc. in the past, we are not formally affiliated with the organization.

As of January 2022, all active inclusive utility investment programs with strong consumer protections use a version of the Pay As You Save® system. These protections include capping the site-specific charge to be less than the estimated savings from energy cost reductions and assuring a path to ownership for the site owner once the utility’s costs are recovered.

As of 2021², 20 U.S. utilities in 10 states have invested over $43 million to upgrade more than 5,400 locations using this approach.

The PAYS model has also been applied to LED lighting and other efficiency upgrades in India by Energy Efficiency Services Limited (EESL)³, a state-run super-Energy Service Company (ESCO) that has collaborated with utility distribution companies.

Such programs have also been referred to as “tariffed on-bill investments” or “inclusive financing.”

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¹ https://www.eeivt.com/
² https://www.eeivt.com/status-reports/