



## GREEN ON-BILL FINANCING

*On-bill financing is a consumer finance product that helps salaried employees of public and private institutions meet their short and medium-term financing needs for energy-efficient equipment by allowing them to pay for it over time through their monthly utility bills, leading to immediate cost savings and lower total bills.*

### OVERVIEW

On-bill financing is an innovative approach to financing energy efficiency, particularly for smaller investments and the adoption of energy-efficient equipment. This model allows energy utility customers to acquire energy-efficient products and repay the costs over time through their monthly utility bills. One of the key benefits is the immediate cost savings realised without the need for customers to make upfront investments, ensuring bill neutrality. In other words, the monthly energy cost savings resulting from the

energy-efficient equipment are sufficient to offset the additional cost added to the utility bill for loan repayment. There are various ways to structure on-bill financing models. In one approach, the utility covers the capital cost of energy efficiency upgrades and recoups the investment through the utility bill. Another approach involves a third-party provider, such as public or private financial institutions, offering upfront capital, while the utility acts as a conduit for repayment.



Tariff-based on-bill models also exist, tying cost recovery to the property's metre rather than the owner, enabling long-term investments that extend beyond residency changes. The benefits of on-bill financing can be summarised as follows: it eliminates upfront costs for customers, making energy-efficient investments more feasible, and expands access to finance for a wider range of customers. On-bill financing models typically have low default rates due to bill neutrality and customers' prioritisation of utility bill payments. However, there are challenges to consider, such as engaging utilities, evaluating credit risk, adapting data management systems, managing customer risk of power shut-off, ensuring contractor reliability, and resolving repayment allocation issues.

## BUSINESS MODEL

On-bill financing, enables customers to finance energy-efficient equipment through their monthly utility bills. It accelerates the adoption of energy-efficient technologies by offering convenient and affordable financing options. Customers can acquire equipment without upfront costs and repay over time, resulting in immediate cost savings. The model can be structured with the utility or a third-party lender covering the capital cost.

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## ROLE OF DIFFERENT ACTORS

The success of the model depends largely on the interest and engagement of financial institutions (LFIs) and utility companies. Governments and development agencies play important roles by providing technical support in setting up the model and ensuring compliance. Their involvement includes offering guidance and assistance throughout the operationalization process, with utilities playing a key role in facilitating on-bill payments.

## BENEFITS & CHALLENGES

The on-bill financing model offers significant benefits to customers, including the avoidance of upfront capital expenditure and the ease of repayment. This incentivizes investments in energy efficiency that might not otherwise happen and provides access to finance for customers who may not qualify for traditional options.

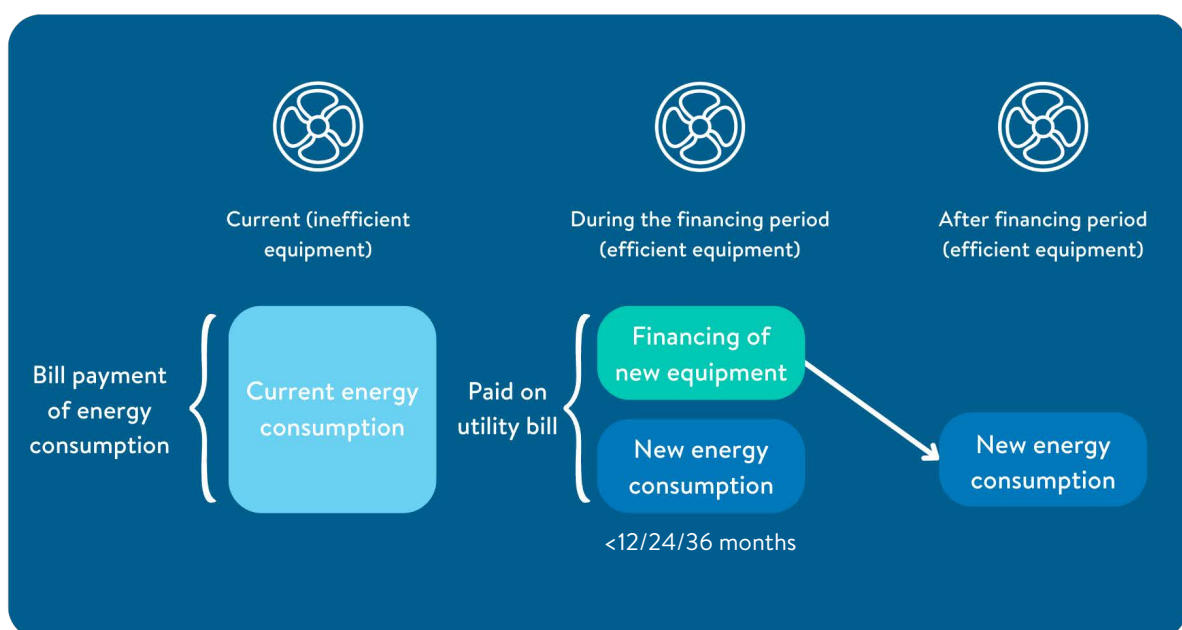


Figure 1: On-Bill process



The low default rates in on-bill financing programs can be attributed to the loan's bill neutrality, as well as the tendency of customers to prioritise utility bill payments and the utility's ability to shut off service in case of non-payment.

From the utility's perspective, increased energy efficiency on the demand side brings several advantages. It helps utilities avoid the costs and risks associated with building additional power plants, power lines, substations, and transformers. Energy efficiency measures also reduce a utility's expenses for complying with environmental regulations. Additionally, the on-bill financing mechanism allows utilities to explore opportunities in financial services, leveraging their existing secured client base that makes frequent payments for utility services.

However, the implementation of on-bill financing comes with its own set of risks and challenges. Engaging utilities to actively support energy efficiency initiatives and serve as financiers can be a complex task that requires strong collaboration. Evaluating the credit risk of customers based on their historical electricity consumption and payment patterns demands careful assessment to ensure financial sustainability. Additionally, adjusting utilities' existing data and information management systems to accommodate on-bill repayment may pose technical and logistical challenges.

To mitigate the risk of power shut-off, it is crucial to provide customers with necessary assistance, establish complaint resolution mechanisms, and offer access to dispute resolution processes. Managing the contractor network is of utmost importance to ensure accurate information dissemination and prevent any misinformation that may hinder the success of the program. Lastly, repayment allocation issues can arise when customers make partial payments on their bills, requiring clear guidelines and procedures to address this situation effectively. Despite these challenges, on-bill financing holds great potential in promoting energy efficiency and enabling sustainable financial solutions for customers.

## SUPPORT MECHANISMS

On-bill financing can be supported by capitalising new on-bill loan funds, through credit enhancement for existing on-bill funds, such as loan guarantees, and by positive lists. The success of the model depends mostly on the interest and engagement of the utility, which in many cases is in part or in whole, government owned. The government can support the model by capitalising new on-bill loan funds, providing credit enhancement for existing on-bill funds, such as loan guarantees. Governments and development agencies can play important roles by providing technical support in setting up the model or providing green credit lines.

## ECOFRIDGES GO IN SENEGAL

ECOFRIDGES Sénégal is a United Nations Environment Programme United for Efficiency (UNEP U4E) project in partnership with the Agency for the Economy and the Control of Energy (AEME), the Directorate of the Environment and Classified Establishments (DEEC), Basel Agency for Sustainable Energy (BASE), la Société Nationale d'Électricité et du Gaz (Senelec) and La Banque Agricole (LBA). It aims to mobilise investment in energy-efficient and environmentally friendly cooling solutions and recycle old appliances. The initiative is financially supported by K-CEP (Kigali Cooling Efficiency Programme).

In Senegal, ECOFRIDGES On-bill financing gives consumers the option to finance the purchase through monthly payments on their electric utility bills, or other channels that meet the country-specific needs. A simple review of bill payment history, income and other basic information will be used to determine eligibility for financing. A financial tracking tool will be used to follow repayment progress and program operations to assure the viability of the mechanism over time. By 2024, ECOFRIDGES Sénégal aims to unlock FCFA 3.3 billion in financing to support the purchase of more than 19,200 energy-efficient and environmentally friendly cooling units, saving approximately 14,000 MWh electricity consumption of households.



#### ABOUT BASE

BASE is a Swiss Foundation and a Specialised partner of UN Environment. BASE develops innovative, actionable financial strategies and market-driven solutions to unlock investment in sustainable energy and to tackle climate change. Around the world, BASE works with all markets and segments including those that are challenging and underserved.

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