
On-Bill Tariff Financing for energy
efficiency:



THE PAY AS YOU SAVE[®]
MODEL

RENEW MISSOURI

Renew Missouri is a 501(C)(3) organized with the mission to provide advocacy and education to the show-me state on renewable energy and energy efficiency. Our main office is based out of Columbia, Missouri, we have another office in St. Louis, and recently hired organizers in both Southwest and Southeastern Missouri.

What is PAY AS YOU SAVE®



PAYS® is a financing tool (often referred to a "tariffed on-bill" program) that allows utilities to invest in cost-effective energy upgrades in a property, and then secure that investment with a fixed tariff charge for the customer that is significantly less than the expected savings.

Proprietary model: trademark held by the Energy and Efficiency Institute (EEI).

- Concept originated in 1999



PAYS® is also a tool for delivering **equitable energy solutions**. It can be made available to virtually all customers, because it avoids many of the upfront barriers to residential efficiency upgrades (upfront capital costs; income qualification; home ownership; transferability).

What is Pay as you Save[®]



As a tariff program, the upgrades are tied to the meter—not the customer

- The charges are added to the customer's bill
- A typical repayment term will last around 10 years
- If a customer moves, the next occupant of the location takes over the payment obligations
- When the upgrade's cost-recovery payment term ends, the upgrade will belong to the building's owner
- In the event of nonpayment, utilities may disconnect the customer but may not repossess the upgrades

No loan or purchase obligations

- Customers are not borrowing money for the upgrades
- Credit checks are not required
- Customers are not taking on individual debt
- If money does need to be borrowed, only the utility is borrowing the money
- Borrowed money is recovered by the tariff from the customer

PAYS® effect on Customer Bills

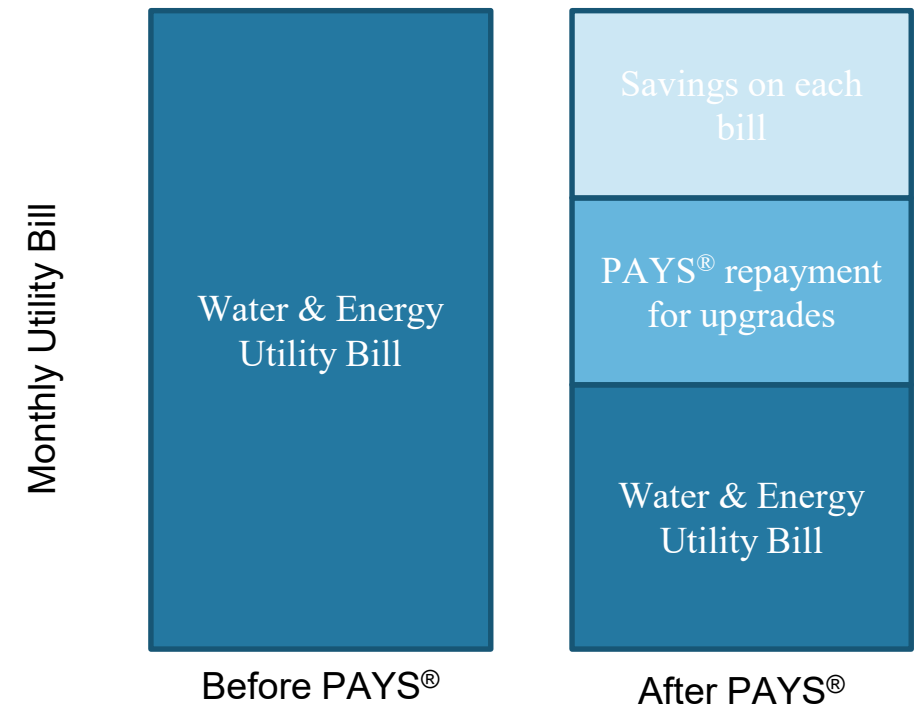


Upgrades are determined with a cost-basis test

- An upgrade will not be installed if monthly payments will exceed the associated monthly savings
- Program costs are set at a fixed amount and will not increase mid-payment term

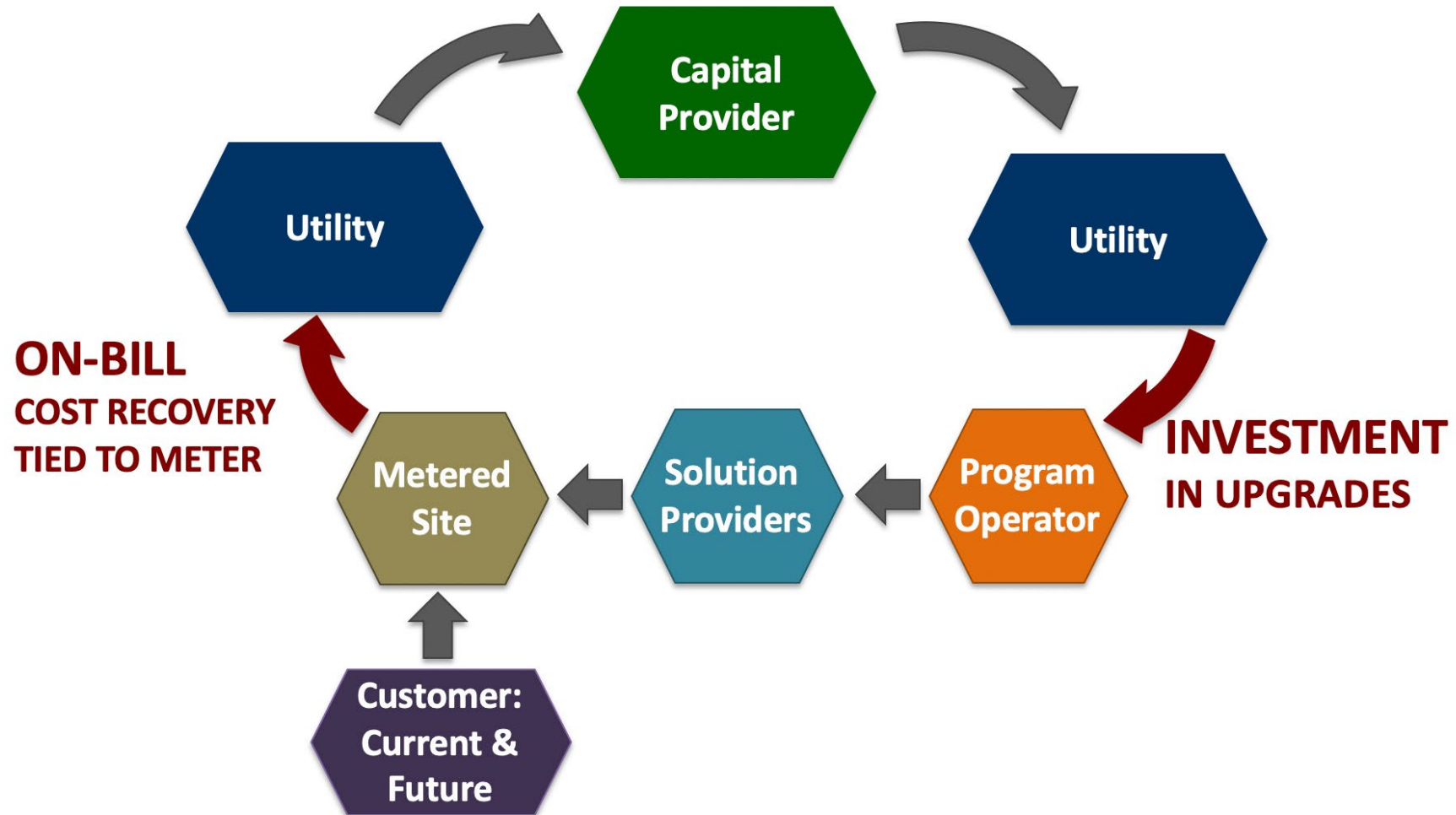
If an upgrade malfunctions or stops working, monthly payments will be paused until the upgrade is repaired

- Repairs will not increase the monthly payments, but may increase the overall term the monthly payments appear on the customer's bill



Tariffed On-Bill Investment Program

PAYS® offers all utility customers the option to access cost effective energy upgrades using a proven investment and cost recovery model that benefits both the customer and utility.










PAYS/OBF Utility Model

On-Bill Program Model



PAYS® compared to other on-bill programs



Attributes for an Efficiency Program	On-Bill Loan	On-Bill Tariff
 Renters are eligible		✓
 No credit score or minimum income level is required to participate		✓
Participant signs a loan or promissory note for a debt obligation	✓	
 Participant accepts an opt-in utility tariff that is tied to meter		✓
Cost recovery is through a fixed charge on the utility bill	✓	✓
 Cost recovery charge is capped at 80% of estimated savings		✓
 Participant accepts tariff with disconnection for non-payment		✓
 Payments end if upgrade fails and is not repaired		✓
 Tariff runs with the meter and remains in effect for subsequent customers at that location until cost recovery is complete		✓

What the PSC has said about PAYS® IN MISSOURI

- Pay As You Save (PAYS) is a system that allows utilities to invest in efficiency upgrades on the customer's side of the meter and recover their costs through a tariffed charge on the participant's bill. It is not a consumer loan or individual debt. As a tariffed program, it is tied to the meter. PAYS enables deeper energy efficiency and demand savings by customers who do not have thousands of dollars of disposable income to make energy-related investments, including many residential customers.
- Under PAYS, the utility collects payments through a tariff to recover its investments from customers at the locations where the upgrades were installed. If any money needs to be borrowed, it is borrowed by the utility. Payment obligations are tied to the location, so whoever is a customer at a location where upgrades are installed makes the payments for only as long as they are a customer there, or until the upgrade costs are recovered.
- (Amended Report and Order, Case No. EO-2019-0132)

PAYS® (Electric Vehicles and Buses)



- **ET-2018-0132 (Ameren Missouri's EV charging station and beneficial electrification plan)**
- The Commission identified benefits of Electric Vehicle adoption, including:
 - Having more EVs on Missouri highways has local environmental and health benefits including cleaner local air because of no exhaust emissions or petroleum spills or leaks. Additionally, EVs can have other environmental benefits from the use of renewable sources to produce the electricity;
 - Incentives for EV charging hardware and installation represent an efficient, low-risk model that will encourage long-term electric vehicle adoption;
 - Incentive-based programs can provide fast deployments of charging stations, competitive choice for customers, and low administrative burdens to utilities and customers, and;
 - Financial benefits from an EV charging network accrue to both the utility and the ratepayers. Utilities and ratepayers benefit economically from the improved utilization of fixed assets when charging is done in off-peak times. EVs are considered to be a flexible load that can charge during periods when demand is low.
- **In light of all of these benefits, the Commission opened a working docket to consider how to address EV infrastructure**

PAYS® (Electric Vehicles and Buses)



- **EW-2019-0229:**
- The Commission has recently explored how to handle electric vehicle charging infrastructure in Missouri.
- Renew Missouri filed comments that the Commission should consider in this workshop a tariffed, on-bill investment program like PayAs-You-Save® (“PAYS®”) for cities and local governments. Such a program could help municipalities develop electric-powered vehicle fleets.

EQUITY CONCERNS – PAYS® FOR income-qualified Renters



■ **Tension** between:

- providing low-income residents with ability to experience significant lasting savings with no upfront cost; and
- protecting low-income residents from disconnection and from undue pressure from marketing or owners.

BENEFITS
Long-term cost reductions (80% rule) with no up front cost or debt
May be the only access to EE for low-income residents, where PACE and OBF fail
Available to renters (stays with meter)
Quick approval: no debt involved, and no credit checks necessary

Equity concerns (Concern 1)

- **Q: What about the potential greater risk of disconnection when the customer savings aren't as big in shoulder months?**
- **A: Any disconnection must meet all requirements in 20 CSR 4240-13.050 which includes protections for all customers, including minimum notice and opportunities to avoid disconnection. Its important to note that in the Evergy MEEIA case (where the Commission ordered the company to offer a PAYS® program), The General Manager of OEC testified in the years the PAYS® program has been offered by OEC, there have been *zero* defaults from participating customers.**

Equity concerns (Concern 2)

- **Q: If this program is successful it may be used as argument for replacing existing incentives and rebates?**
- **A:** MEEIA is authorized by statute in Missouri (Section 393.1075 RSMo.), and Missouri utilities that have offered this are now on their third, three-year program cycle. Prior to that, they offered non-MEEIA energy efficiency rebates (Empire Electric still has non-MEEIA rebate programs). After a decade, most customers haven't participated, and can still benefit from energy efficiency programs. PAYS® works in conjunction with a MEEIA portfolio to increase participation and cause energy efficiency and demand savings. In OEC, nearly 50% of participants in PAYS® are renters. The program has been successful in reaching a group of customers that – in Missouri – have been reluctant or unable to participate in energy efficiency programs.

Equity concerns (concern 2 Continued)

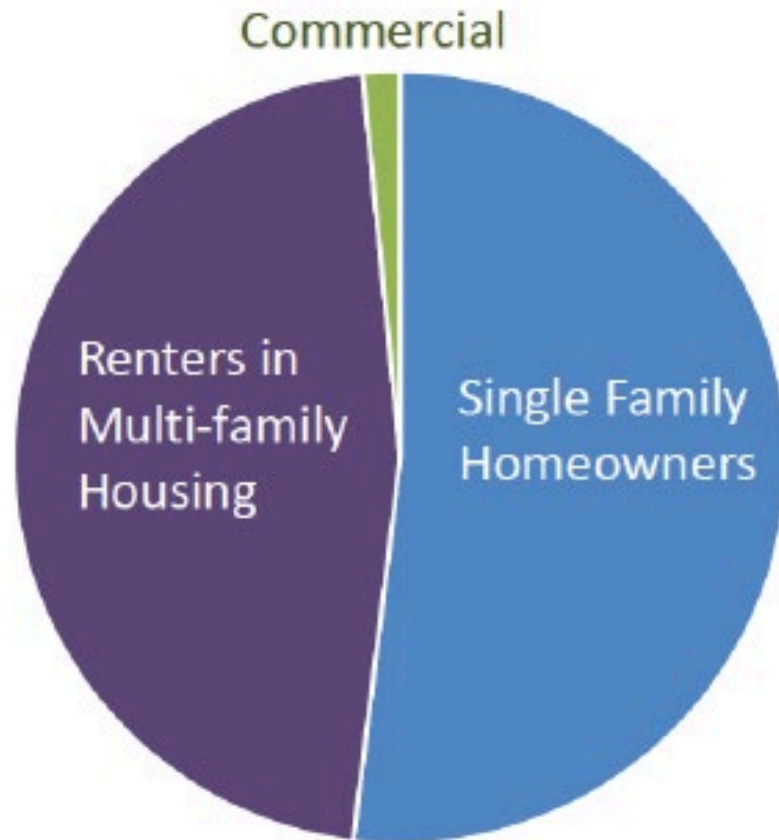
Commission Order in Evergy MEEIA Cycle 3 (EO-2019-0132):

- “It is appropriate to fund the PAYS program through MEEIA and provide an earnings opportunity for Evergy for successful implementation of the PAYS program.” (Amended Report and Order, p. 18)
- “[T]he Commission finds that the PAYS program offers unique opportunities to broaden participation in MEEIA programs to customers who might not otherwise engage in energy efficiency programs.” (Amended Report and Order, p. 27).
- “[I]f Evergy implements a MEEIA Cycle 3, it shall offer a PAYS pilot program as described in the rebuttal testimony of Dr. Marke, with the exception that, the budget for the pilot program shall be reduced to **no less than \$10 million**, and no more than \$15 million.” (Amended Report and Order, p. 27).
 - *****This is in addition to to company’s proposed budget for the traditional rebate centered programs.**

Equity concerns (concern 3)

- **Q: What if this program allows Landlords to avoid obligations to tenants, while improving their property value?**
- **A:** PAYS® has been successful in reaching renters - a group of customers that have been reluctant or unable to participate in energy efficiency programs. The point of the program is to help customers save money by using less energy. If the tenant participates in the program, but moves after a year or two, they see the savings right away and leave with no debt or obligation. The next tenant will see the similar benefits when they move in. All other landlord tenant obligations are governed by the rental contract and by Section 441 RSMo. which outlines obligations between tenants and landlords.

Number of Investments by Type of Project Site



90% of the customers in our service area are residential.

Equity
concerns
(concern 3
Continued)

(OEC project breakdown)

Equity concerns (concern4)

P.S.C. MO. No. _____ Original Sheet No. _____
Cancelling P.S.C. MO. No. _____ Sheet No. _____

For Missouri Retail Service Area

PAY AS YOU SAVE® ON-BILL PROGRAM

(PAYS®)

- 1 **Eligibility:** Eligible on an optional and voluntary basis to any customer who takes service under any rate schedule for energy efficiency improvements (upgrades) where the utility provides electric service to the structure. It shall not be a requirement that the structure be all-electric.
- 2 **Participation:** To participate in the Program, a customer must: 1) request from the utility an analysis of cost-effective upgrades, 2) agree to the terms of the cost-effectiveness analysis fee as described in Section 3.4, and 3) sign the Efficiency Upgrade Agreement that defines customer benefits and obligations, and implement any project that does not require an upfront payment from the customer as described in Section 3.3.]

- **Q:** What if this program makes it difficult to screen customers for likely non-payment? Will we need to use payment history?
- **A:** Eligibility can be addressed in the tariff – here is how Renew Missouri’s witness Philip Fracica proposed the tariff to look in his Rebuttal testimony in the Evergy MEEIA case:

PAYS® Status

PAYS® in other States

Georgia SOUL (Saving On Utilities Long term)



- The SOUL program is an on-bill tariff inclusive financing program using the principles of PAYS. It started as a pilot in 2020 and was approved by the Georgia PSC.
- The program is not fully utilizing the 80/20 rule as we see with PAYS, but it does have a requirement for program fees to be no greater than 80 percent of the estimated annual benefit from reduction in annual utility bills based on current rates.
- The upper limit for length of the program is 12 years and is set as to not exceed 80 percent of the estimated life of upgrades for the length of a full parts and labor warranty for the upgrades.
- All eligible upgrades must have energy star certification when applicable.
- You can learn more about this program and other inclusive tariffed on-bill financing programs through the energystar website here - https://www.energystar.gov/products/current_program_information

Where is PAYS® being used Today?



State	Program Name	Utility	Website
Arkansas	HELP PAYS®	Ouachita Electric	https://www.oecc.com/help
California	Windsor Efficiency PAYS®	Town of Windsor Water Utility	https://www.townofwindsor.com/819/Windsor-Efficiency-PAYS
	EBMUD WaterSmart Pilot (now just called On-Bill Financing)	East Bay Municipal Utility District	https://www.ebmud.com/water/conservation-and-rebates/residential/bill-financing/
Kansas	How\$mart™	Midwest Energy	https://www.mwenergy.com/environmental/energy-efficiency/howsmart

Cities in New York are exploring options to utilize PAYS® to fund the electrification of school buses

Where is pays[®] being used Today?



State	Program	Utility	Website
Kentucky	How\$mart KY	Big Sandy RECC	http://www.howsmartky.com/
		Grayson Electric Co-op	http://www.howsmartky.com/
		Fleming-Mason Energy	http://www.howsmartky.com/
		Jackson Energy Co-op	http://www.howsmartky.com/
New Hampshire	Smart Start	Eversource	https://nhsaves.com/municipal-smart-start-program/
		New Hampshire Electric Co-op	https://www.nhec.com/smartstart-project-financing/
North Carolina	Upgrade to \$ave	Roanoke Electric	https://www.roanokeelectric.com/UpgradeToSave
Tennessee	U-Save Advantage	Appalachian Electric Co-op	http://aecoop.cms.coopwebbuilder2.com

Ouachita Electric Cooperative PAYS Program



- Arkansas HELP PAYS program with Ouachita Electric Cooperative upgraded 198 homes during eight months in 2016, reaching 2% of the market in the utility's service area. The utility prioritized attention to renters in multifamily homes, making an offer to capitalize upgrades in every rental unit assessed. Of eligible units, 100% opted to proceed with the upgrades. More than 80% of the residents in single-family homes who received an offer through the HELP PAYS® program accepted it. Comparing the best four months of the previous on-bill loan program to the first four months of the HELP PAYS® program, the project size and number of participants doubled. The average cost of an upgrade project was \$5,634, and the average estimated energy savings was 22%.

TOB Program Comparison

	AR	KY	NC	TN
Enrollees	850	N/A	1,093	103
Enrollees Assessed	630	607	632	80
PAYS Upgraded Buildings	518	405	511	57
Lite Upgrades	N/A	320	376	N/A
Average Dollars Financed	\$6,041	\$7,743	\$7,096	\$6,730
Average Monthly Energy Savings	\$71.50	\$51.98	\$74.33	\$63.08
Average Monthly Tariff	\$54.45	\$39.98	\$56.97	\$48.95
Charge Offs	0	0	0	0