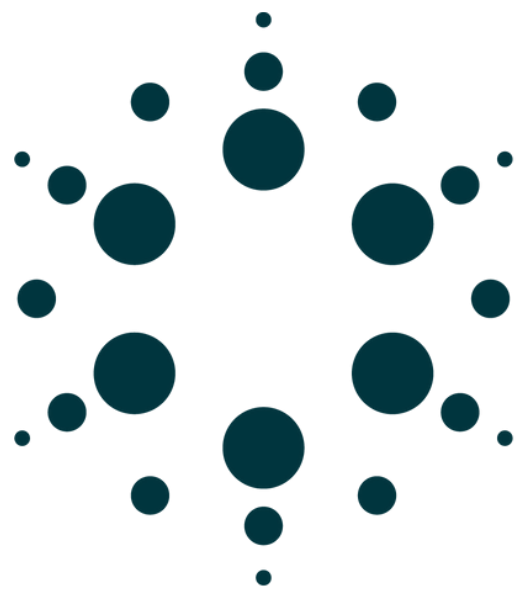
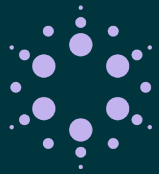


Introduction to Inclusive Utility Investments (IUI)



CET

Resilient climate solutions

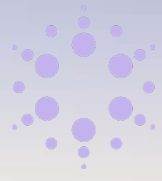


Our Vision

We envision a world that has embraced and advanced just and resilient climate solutions.

Our Mission

Our mission is to innovate, implement, and scale the environmental solutions that communities need to thrive.



Work with Municipal Utilities

Residential Energy Programs

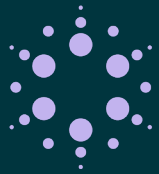
- NextZero, MMWEC
- Westfield Gas & Electric
- Whole-home decarbonization, Ipswich & Wellesley
- Heat pump consultations, design reviews, inspections

Custom Support

- Staff & community trainings and webinars
- Incentive analyses and recommendations

Innovation

- Inclusive Utility Investment programs
- Carbon-based incentives



2020

The search
for solutions

2021-22

IUI feasibility
study

2023-24

IUI pilot in
Ipswich

2024

Scale-up &
expansion to
other MA
utilities

The journey

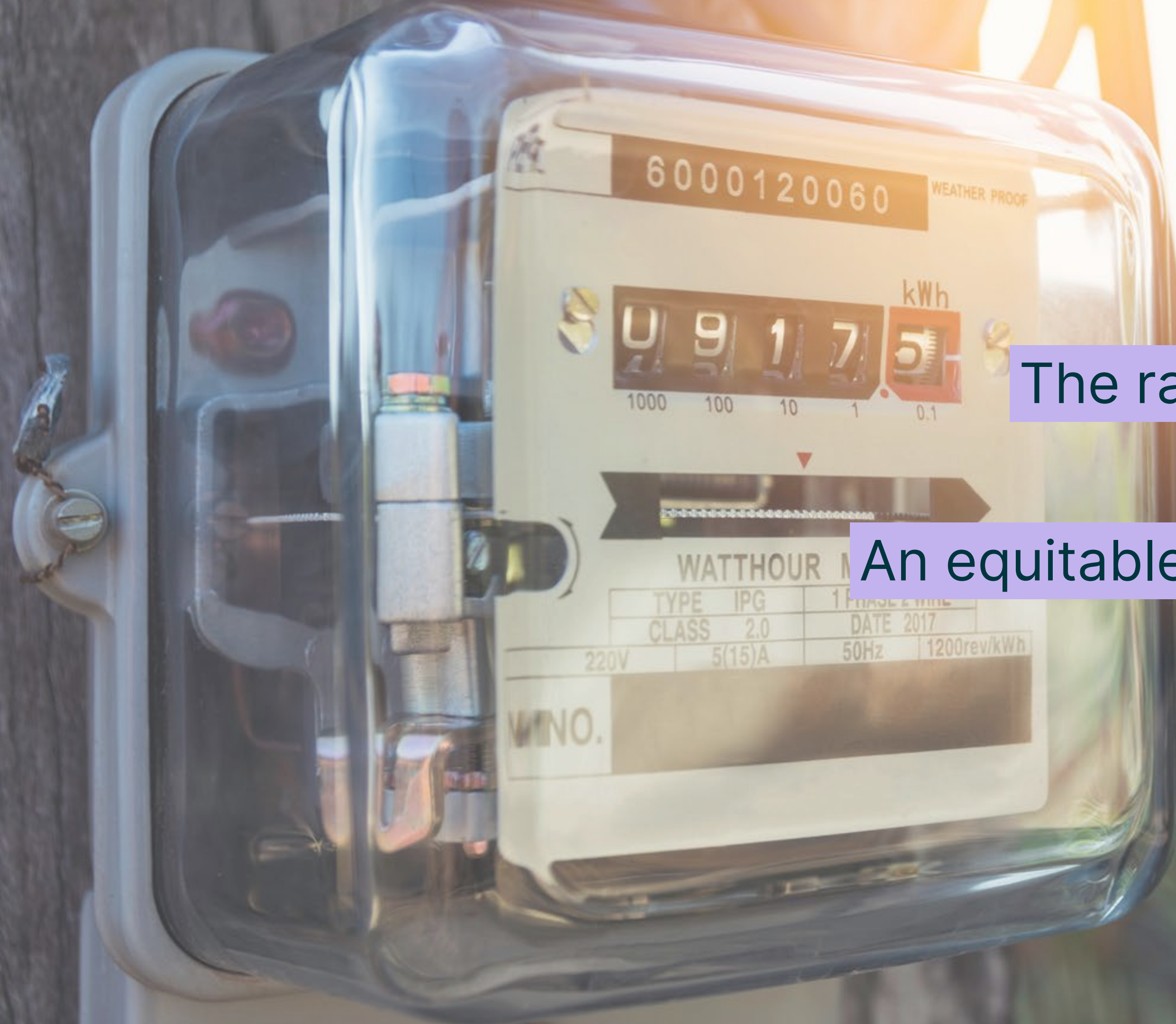
Key milestones in the design
and development of IUI for
Massachusetts



Why IUI?

The race to decarbonize is on

An equitable transition is imperative



Data suggests problems

28%

Report upfront capital is biggest barrier to energy efficiency, electrification

80%

Who access meaningful incentives live in homes above median value

>95%

Incentives go to homeowners

~1/3 utility customers are renters

42%

Residents low- or moderate-income; 2/3 of whom are “cost burdened”

A stack of US dollar bills, including a \$100 bill, a \$20 bill, and a \$10 bill, is shown in the background. The bills are slightly out of focus, creating a sense of depth. The text is overlaid on the right side of the image.

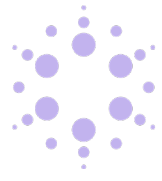
Tariffed On-Bill Financing

Utility invests in building measures

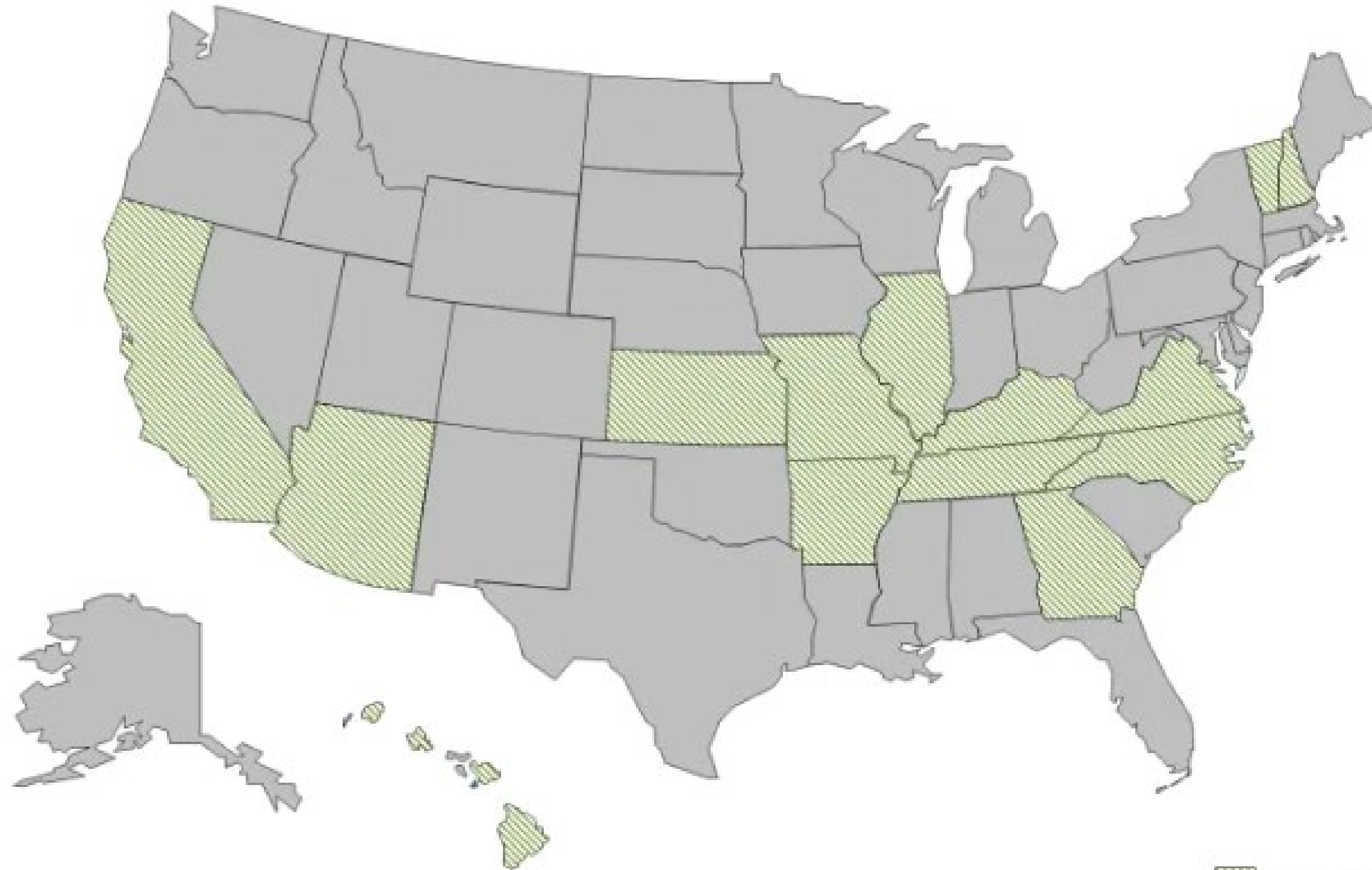
Return recovered through tariff *tied to the meter*


Tariff \leq historic energy costs

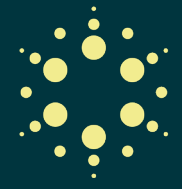
Broad access



Active IUI programs in 13 states (+ MA)

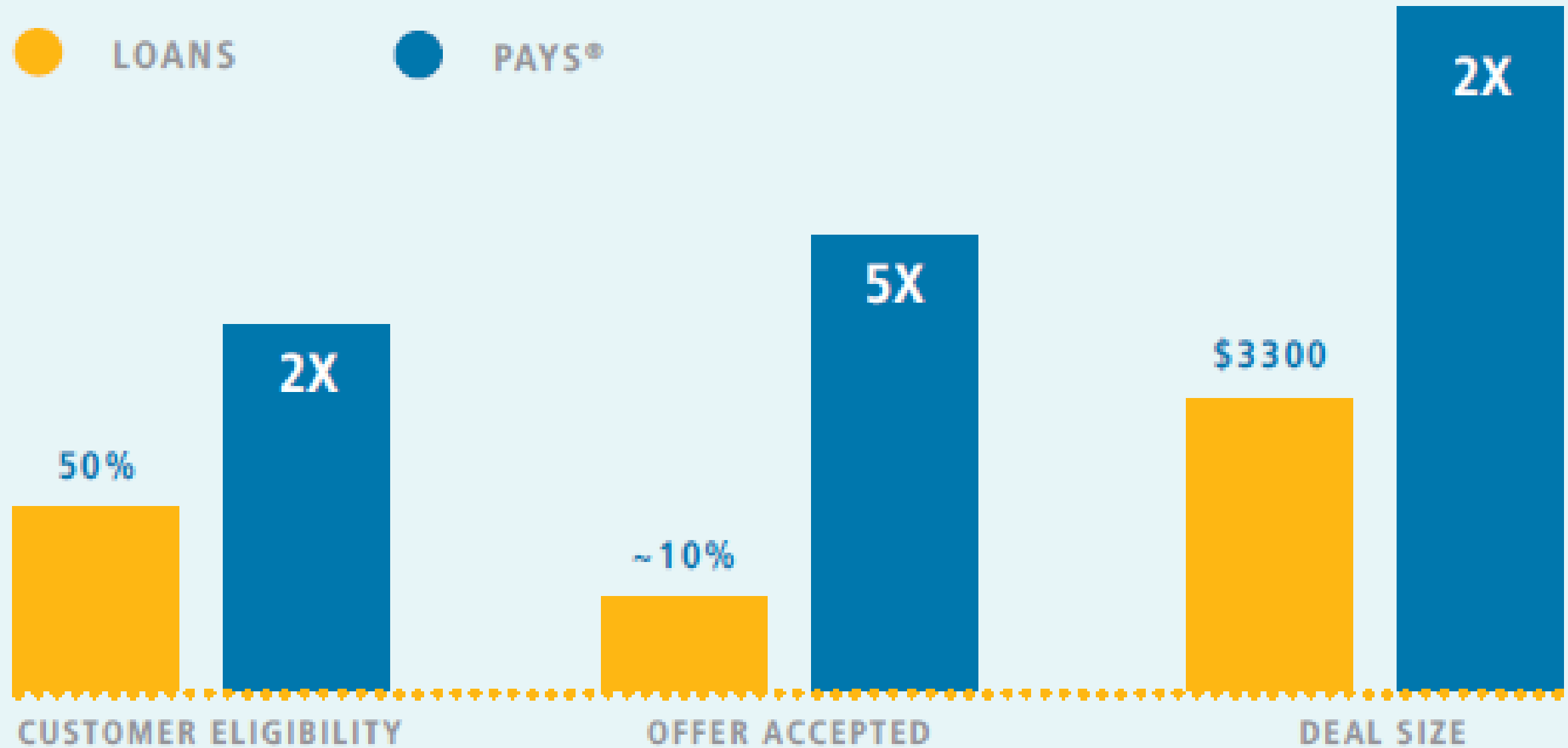


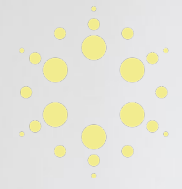
 Inclusive Utility Investment program/pilot activity click for more details



IUI Accelerates Adoption & Deepens Retrofits

Experience with residential energy efficiency programs shows that PAYS has a strong market response, accelerated as a product of these multiples.

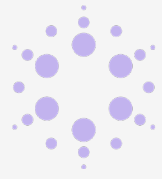




IUI: A sleep-easy utility investment

16 program operators:

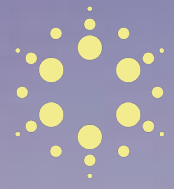
- ✓ 99.9% overall collection since 2002
- ✓ > \$50M deployed
- ✓ > 4.2M participating buildings



Alternatives analysis

	No Upfront Cost?	No Interest?	No Credit Check?	No Single payer?	Year 1 Payment	Year 1 NET Savings
Mass Save HEAT Loan (7 year, 0% interest)	✓	✓	X	X	\$3,311	-\$127
Home Equity Loan (10 year, 7% interest)	✓	X	X	X	\$3,204 (\$897 interest)	-\$20
Pay out of pocket	X	✓	✓	X	\$23,175 (-\$3700 25C tax credit)	-\$19,991 (+\$3700)
IUI	✓	✓	✓	✓	\$1,709	\$1,474





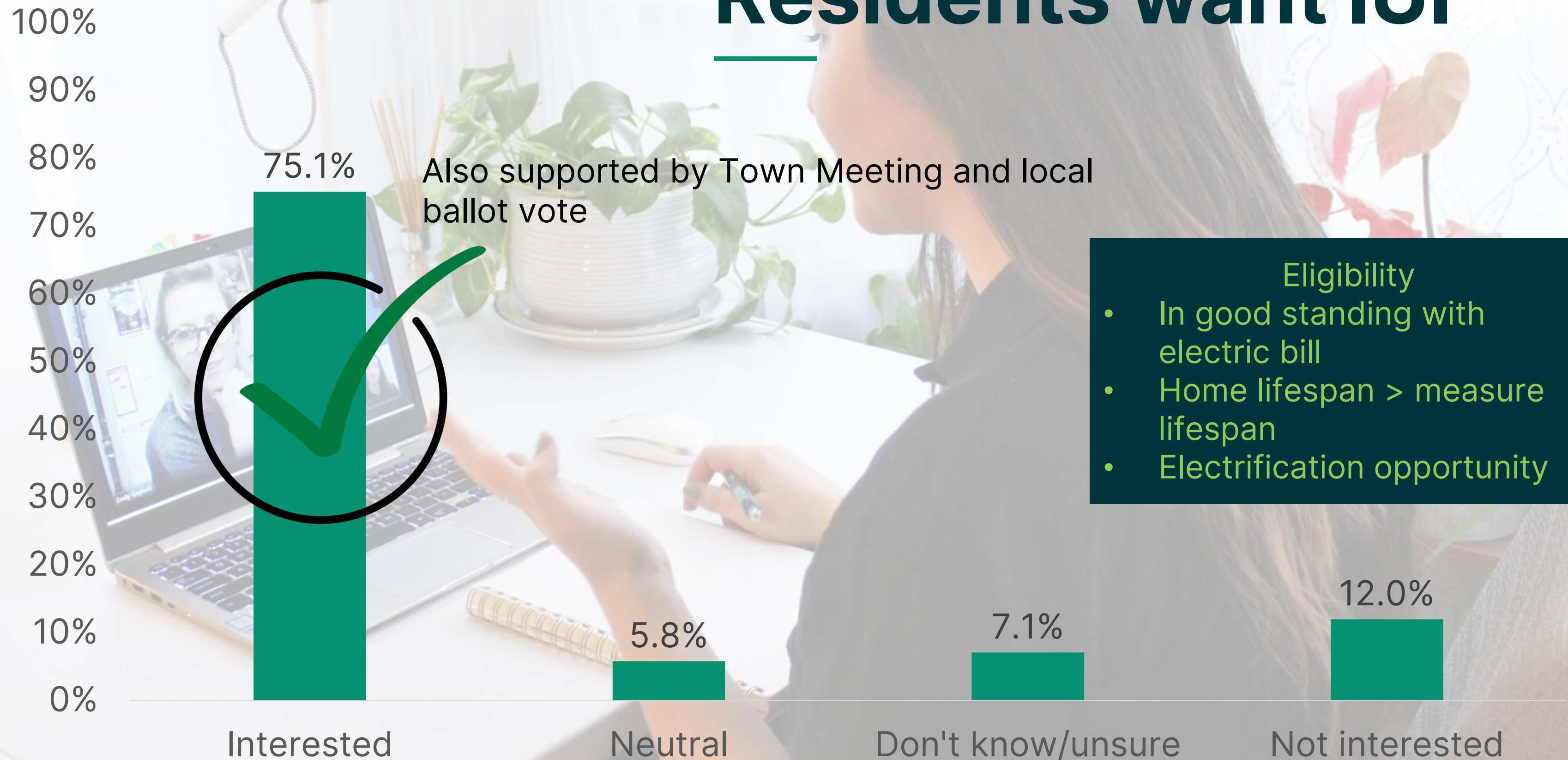
Feasibility Study

Market Study

**Measure
Analysis**

**Economic &
Regulatory
Study**

Residents want IUI



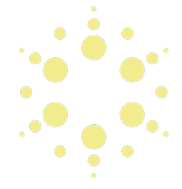
IUI Makes Upgrades More Accessible

What we looked at

- Modeled: weatherization, heat pump hot water heaters, heat pumps, and solar PV plus battery storage
- 3 housing types
- Incorporated utility incentives
- Feasibility of recovering installation cost using 80% savings over 80% measure life

What we found

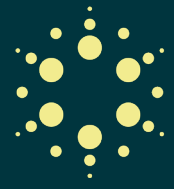
- Easily financed measures
 - Weatherization
 - Solar PV
 - Heat pump water heater
 - Heat pumps with weatherization
- Incentives still matter
 - Mass Save and/or IRA whole-home heat pump incentive unlock HPs
 - Low incentives = large upfront cost



IUI is a Smart Investment for Utilities

- Strong return on investment for every participant (~\$10K/participant in Ipswich)
- Controlling infrastructure investments
- Smoothing demand
- Customer engagement





Pilot Preparation

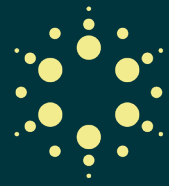


01. Terms & Conditions

02. IUI offer tool – calculating tariff & term

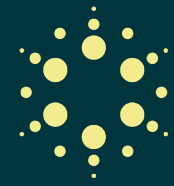
03. Work & financial flows between CET, utility, contractors

04. Readying billing system for tariff



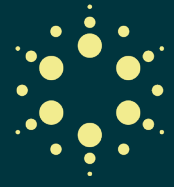
Reinvest Pilot Objectives

Demonstrate	Demonstrate the use of IUI across multiple customer types (e.g., homeowners, renters, single-, multi-family)
Validate	Validate the potential for IUI to finance priority measures (weatherization, whole-heat pumps, and heat pump water heaters) for delivered fuel and natural gas customers
Develop	Develop collateral to disseminate learnings and facilitate scale-up to other utilities.

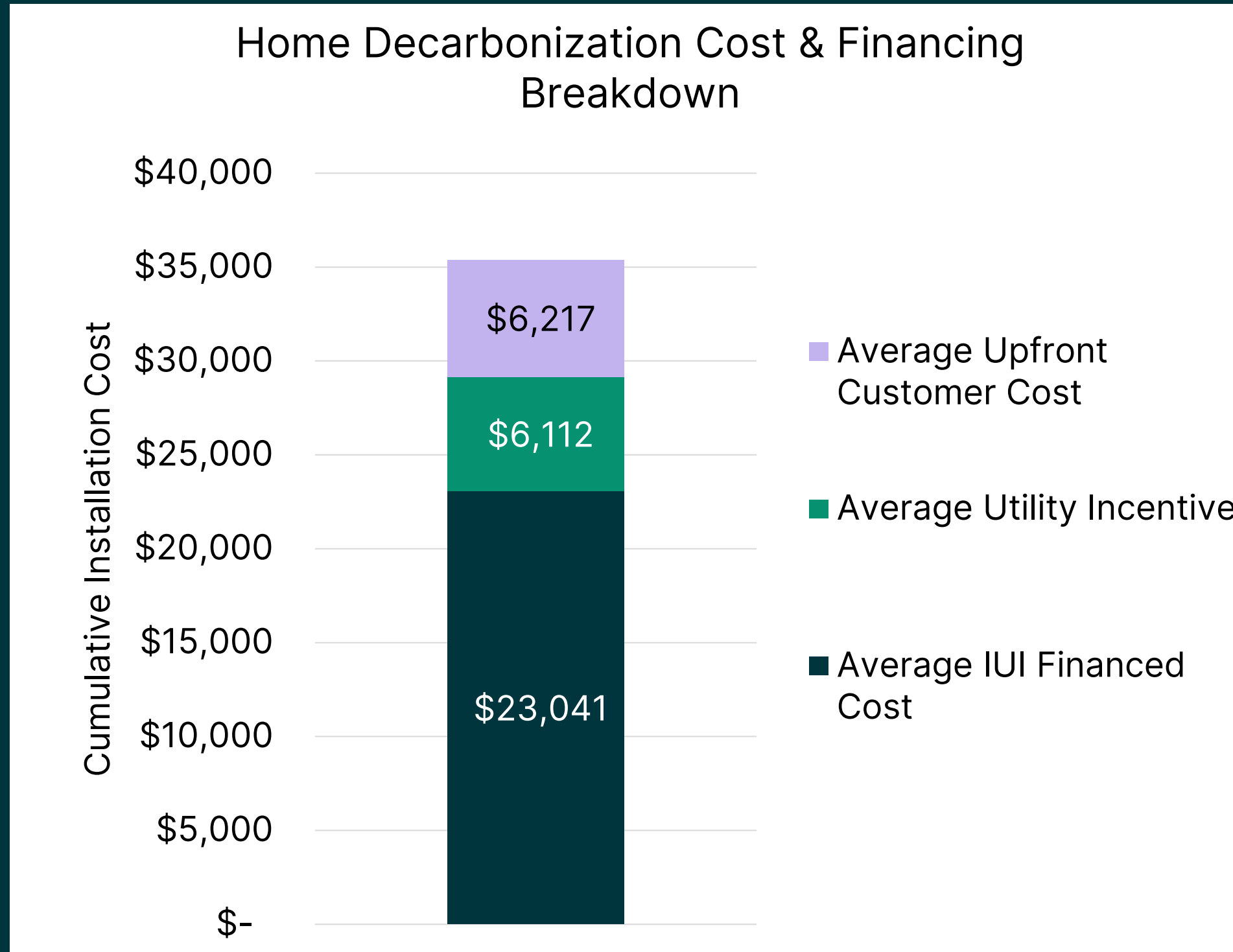


Project Completions

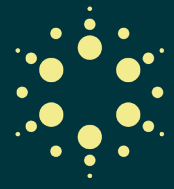
House Type	Heating	Customer Type	Measures Installed
Single Family	Oil Heat	First Time Homebuyer	Weatherization + ASHP
Single Family	Oil Heat	Low-Income Customer	Weatherization + ASHP + Water heater
Single Family	Oil Heat	Heating System EOL	Weatherization + ASHP (Partial)



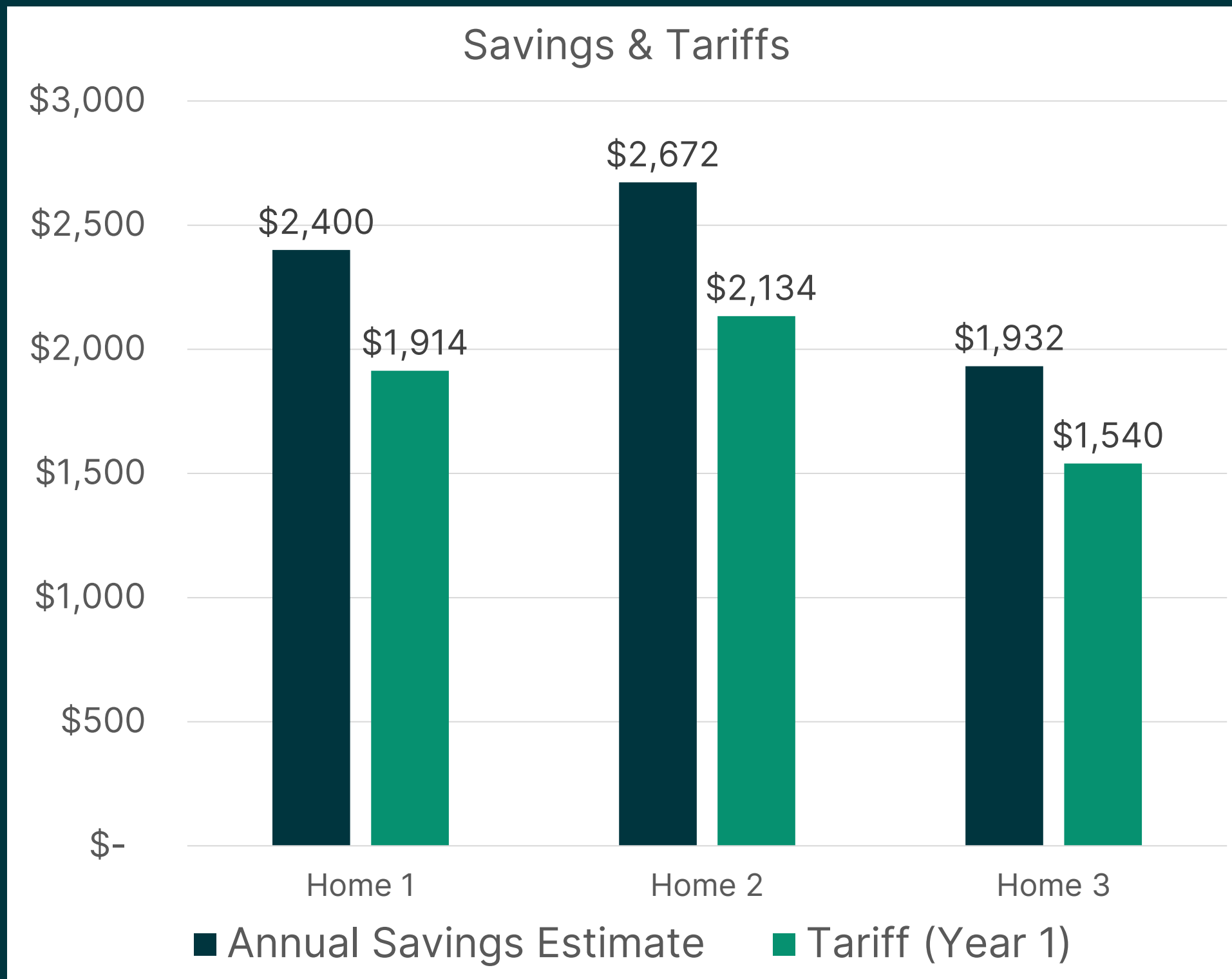
Results: Project Costs



**Eliminated
84% of
upfront costs**



Results: Project Costs

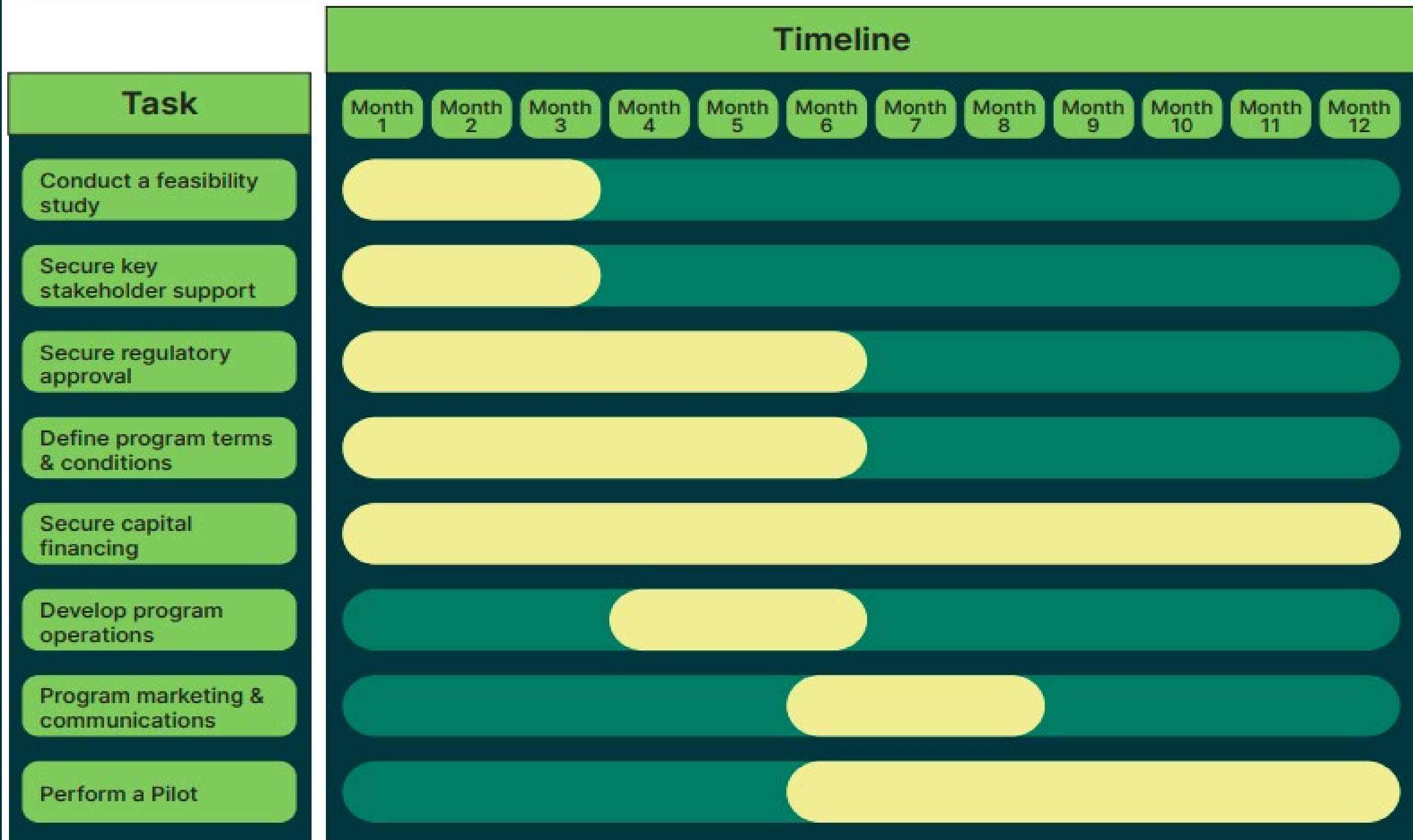




Municipal Utility Toolkit

<https://www.cetonline.org/iuitoolkit/>

IUI Program Development Timeline



Next Steps

CET present to HMLP's Board of Commissioners

CET to send HMLP a cost proposal for working through toolkit tasks

Once approved, commence feasibility study



Mark Fitzgerald said that without the Ipswich program, "I probably would have had to replace the oil-based system with another oil-based system because it was a lot less expensive."

THANK YOU



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