## Tariffed On-Bill Investments

**CPUC Affordability Proceeding Phase 3 En Banc** 

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On behalf of the TECH Innovative Finance Team





## Tariffed On-Bill Impact on Energy Affordability

- TOB is a technology-neutral inclusive investment solution for the full suite of BTM decarbonization upgrades:
  - Energy Efficiency
  - PV+storage
  - Building electrification
- Tariffed terms require investments with positive cash flows for participants
- TOB investments' impacts on rates for nonparticipants depends on project scope (technologies and buildings), customers, and locations

# Tariffed On-Bill Investments for beneficial electrification offers ratepayer protections against increasing gas prices

#### Feb. 2021 En Banc found that...

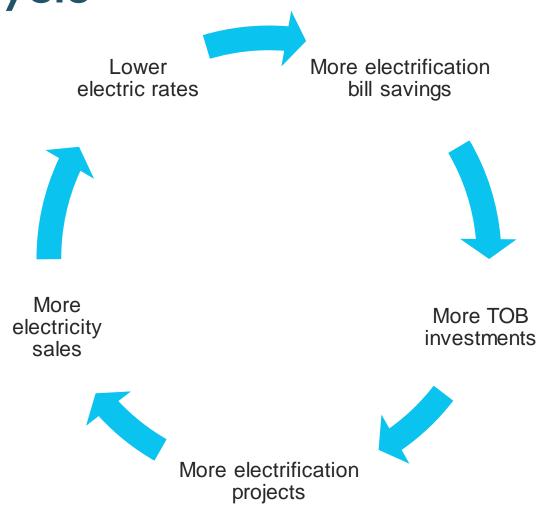
- Electrification can lead to lower household energy costs, however, the up-front investments in EVs and other DERs for lower-income Californians may be a barrier to participation.
- NEM and DER customers are disproportionately wealthier homeowners that are able to arbitrage rates and reduce bill impacts by investing in solar PV, storage technologies, electric vehicles, and other behind-the-meter (BTM) solutions.
- Conversely, Lower-income customers are less likely to participate in BTM offerings and more likely to pay for incremental
  costs displaced by BTM customers.

TOB helps lower-income customers gain access to BTM investment opportunities in a way that more incentives and more consumer lending cannot.

# TOB for beneficial electrification contributes to lower electric rates in virtuous cycle

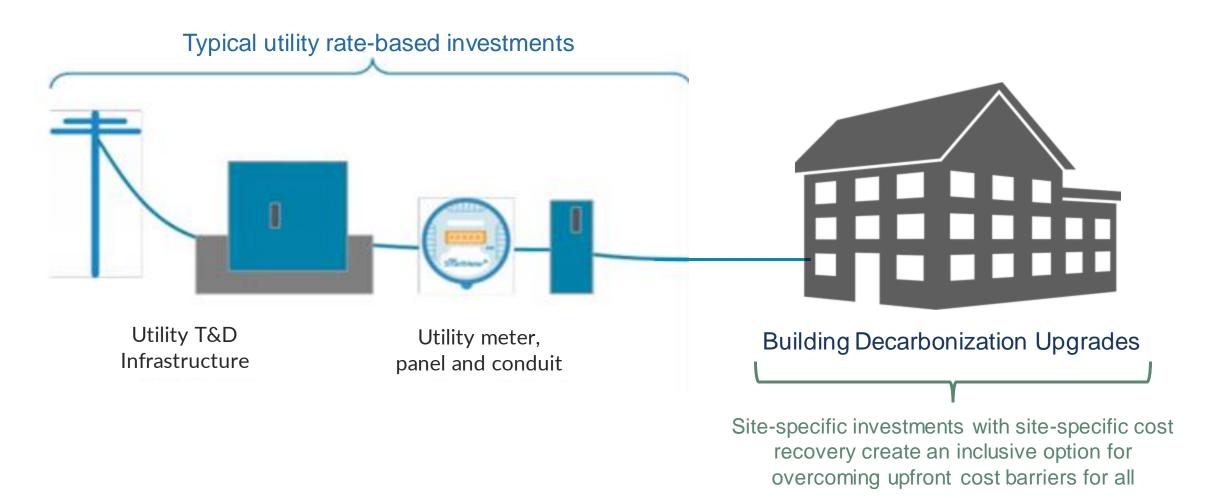
#### Feb. 2021 En Banc found that...

 Residential rates for the three IOUs would fall by 1.4-2.1c/kWh under the High Electrification scenario (because increase in sales exceeds increase in revenue requirements)

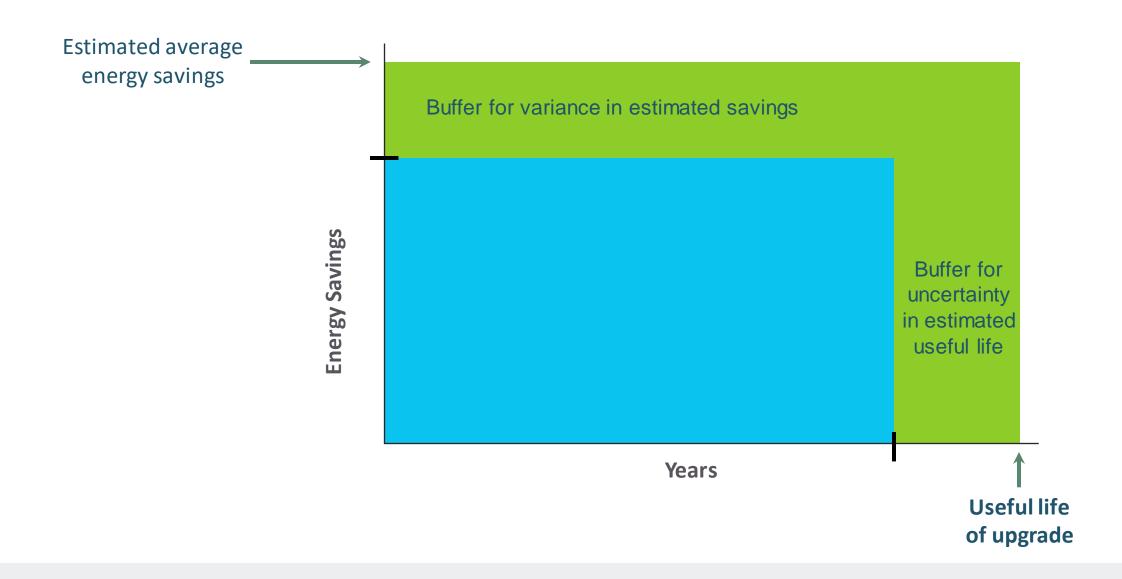


#### Q. What are Tariffed On-Bill Investments?

### A. Site specific investments on tariffed terms with on-bill cost recovery



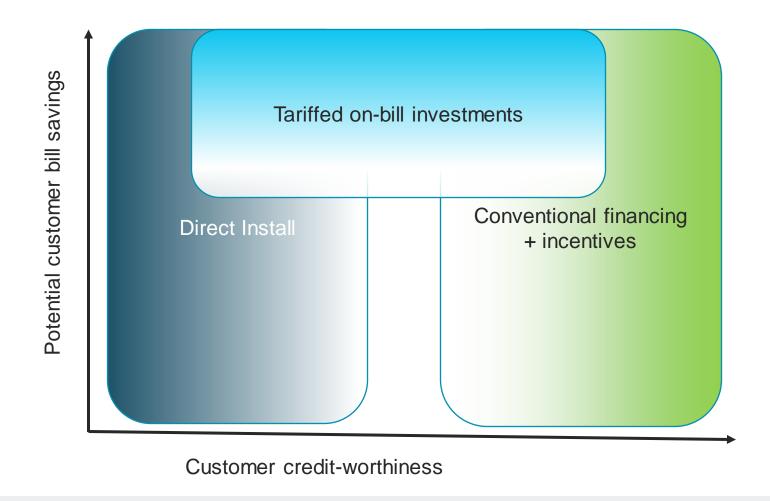
### Assurance of net savings via tariffed on-bill investment



Attributes	On-Bill Loan	TOB Tariff
No upfront participant cost for cost effective upgrades	<b>√</b>	?
No credit or income qualification required		<b>√</b>
Renters are eligible		✓
Estimated savings <u>must exceed</u> cost recovery charges		✓
Participant accepts an opt-in utility tariff tied to the location		✓
Cost recovery is through a fixed charge on the utility bill	<b>√</b>	✓
Cost recovery subject to same repayment obligation as the rest of the bill		<b>√</b>
Payments end if upgrade fails and is not repaired		<b>√</b>
<ul> <li>Cost recovery runs with the location and remains in effect for subsequent customers at that site until cost recovery is complete</li> </ul>		✓

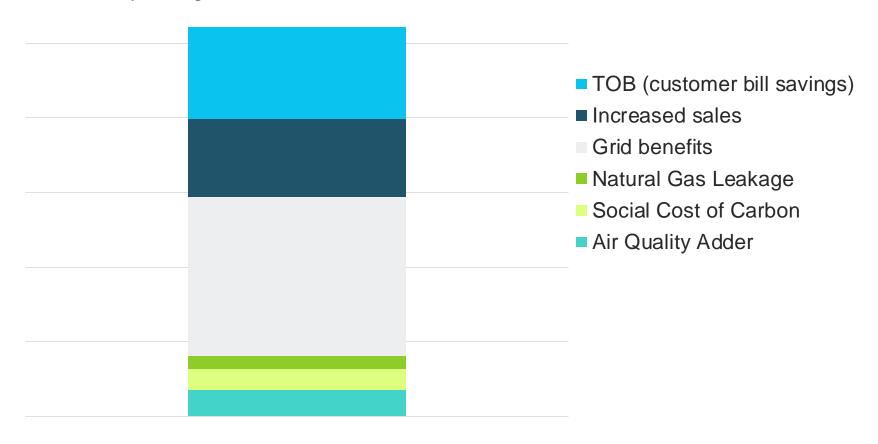
## TOB's Role in the Program Portfolio

• Expand residential customer access to decarbonization upgrades and accelerate investments



## Building Electrification Requires an Integrated Approach

- TOB investments mobilize capital tied to customer bill savings
- Multiple value streams must be monetized to complete the project capital stack, include values to ratepayers and society at large



## Thank You

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