Low Income Conservation

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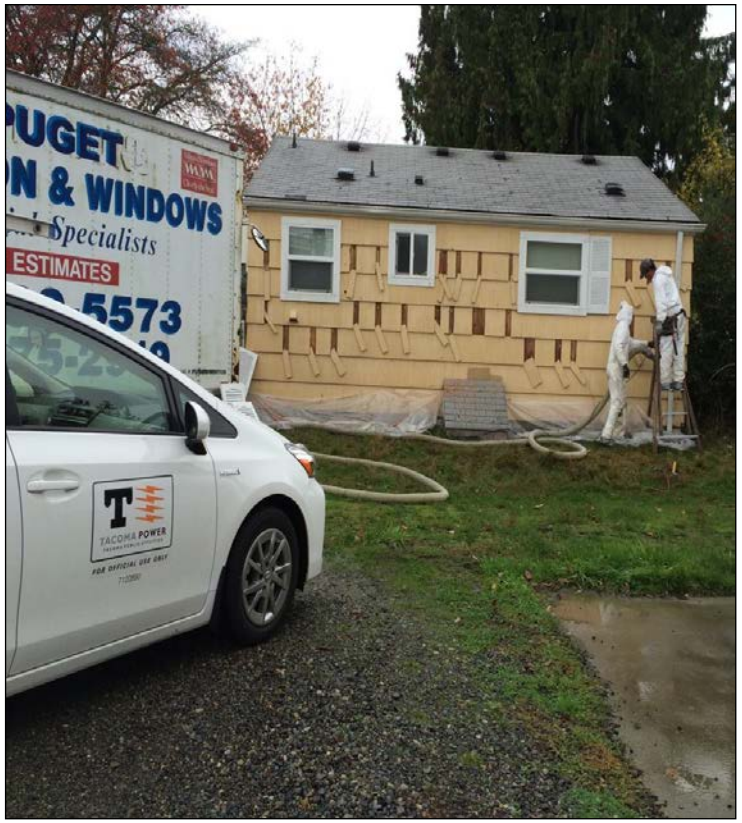
Tacoma Power has weatherized over 16,000 homes

Tacoma Power has had an active weatherization program active since 1980

- Records indicate half of potential homes have been weatherized, 2019/20 study will calculate remaining potential
- In 2018 low-income and multifamily conservation accounted for 22% of sector savings, but 48% of sector incentive spending



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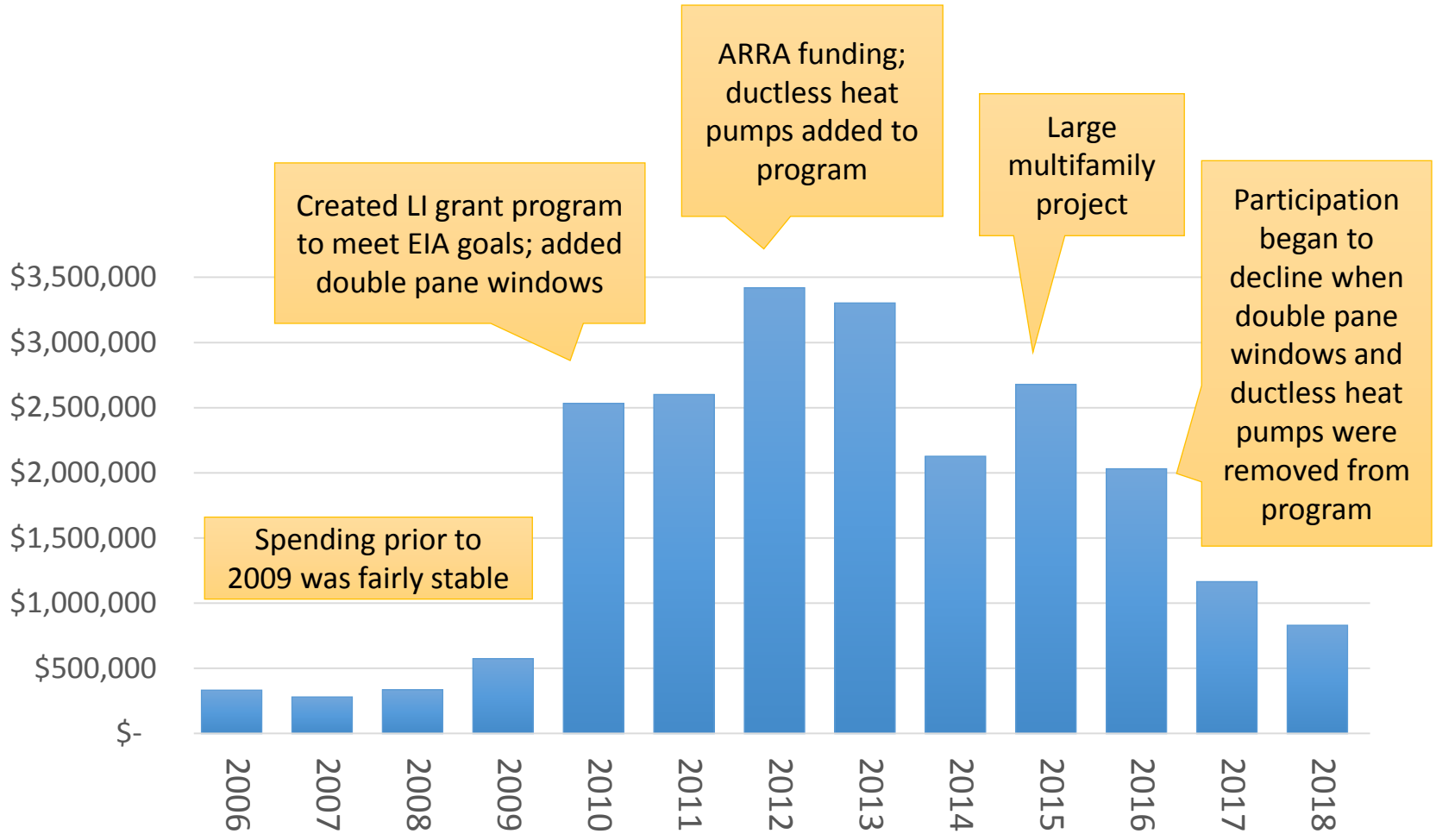
Our aggressive low-income program is in decline



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Two trends are responsible for this decline

Lower savings value

Lower measure savings

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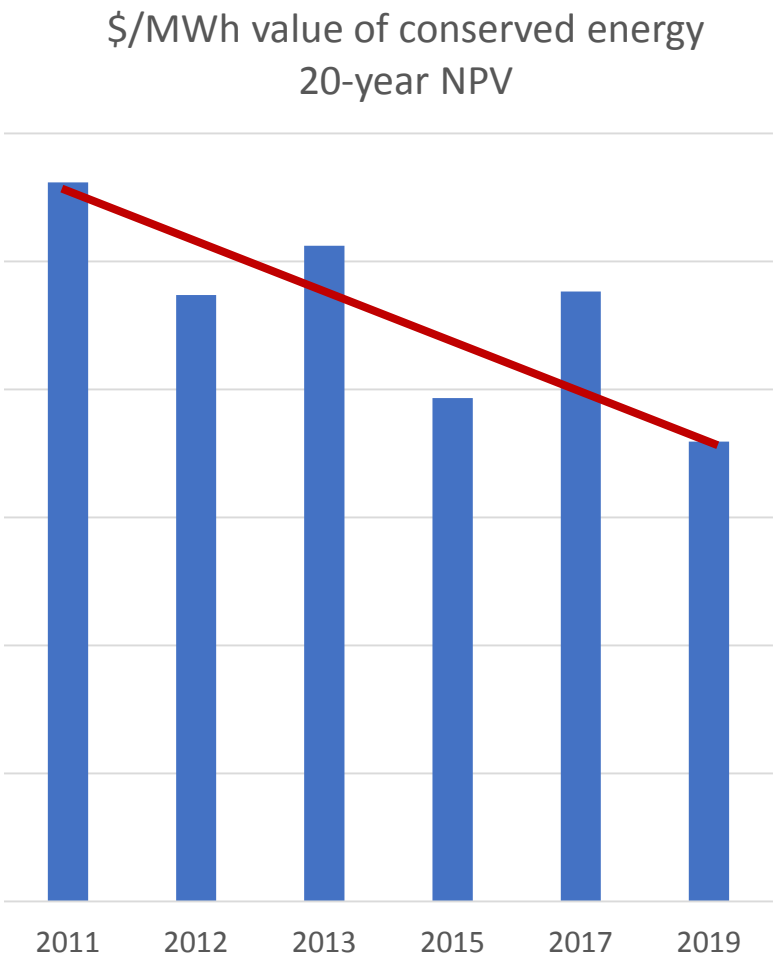
Savings value is declining

Value of conservation today is about 35% lower than 2011

- Declining loads
- Lower natural gas prices
- More renewable generation



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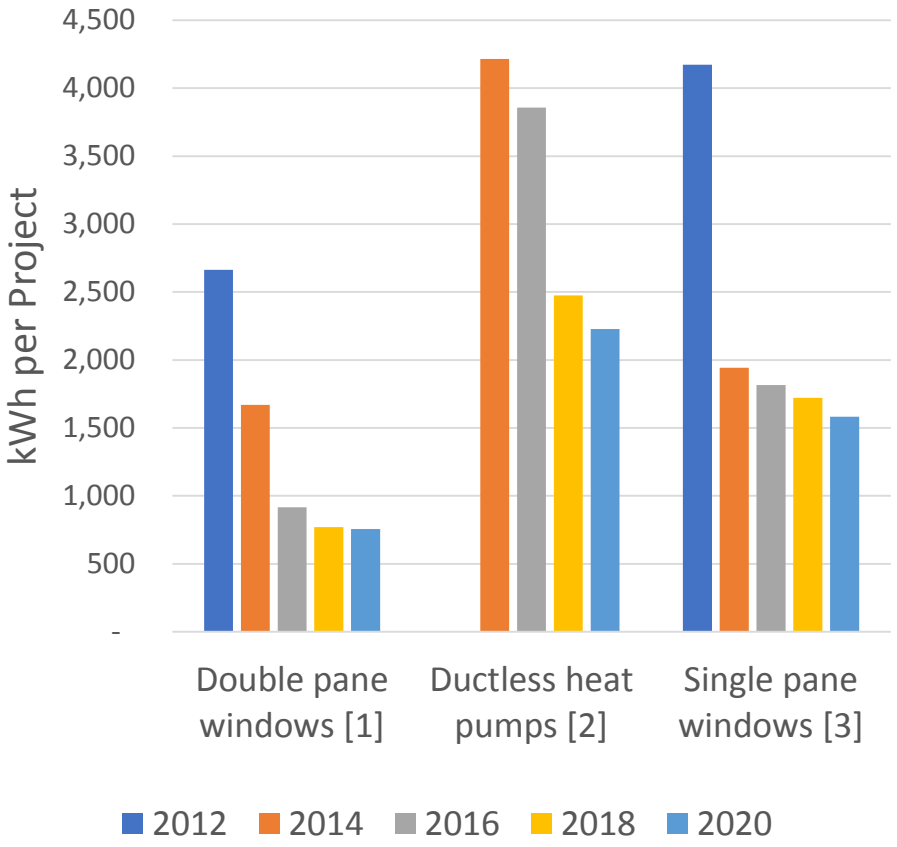
Measures are saving less

Measure savings have declined about 45% since 2014

Savings determined by the Regional Technical Forum, part of the Northwest Power and Conservation Council.

Key drivers:

- Improved modeling
- More heat pumps
- Interactive effects



[1] Double pane windows removed from program in 2016.
[2] Ductless heat pumps removed from program in 2018.
[3] Under current program design single pane windows will be removed from the program in 2020.

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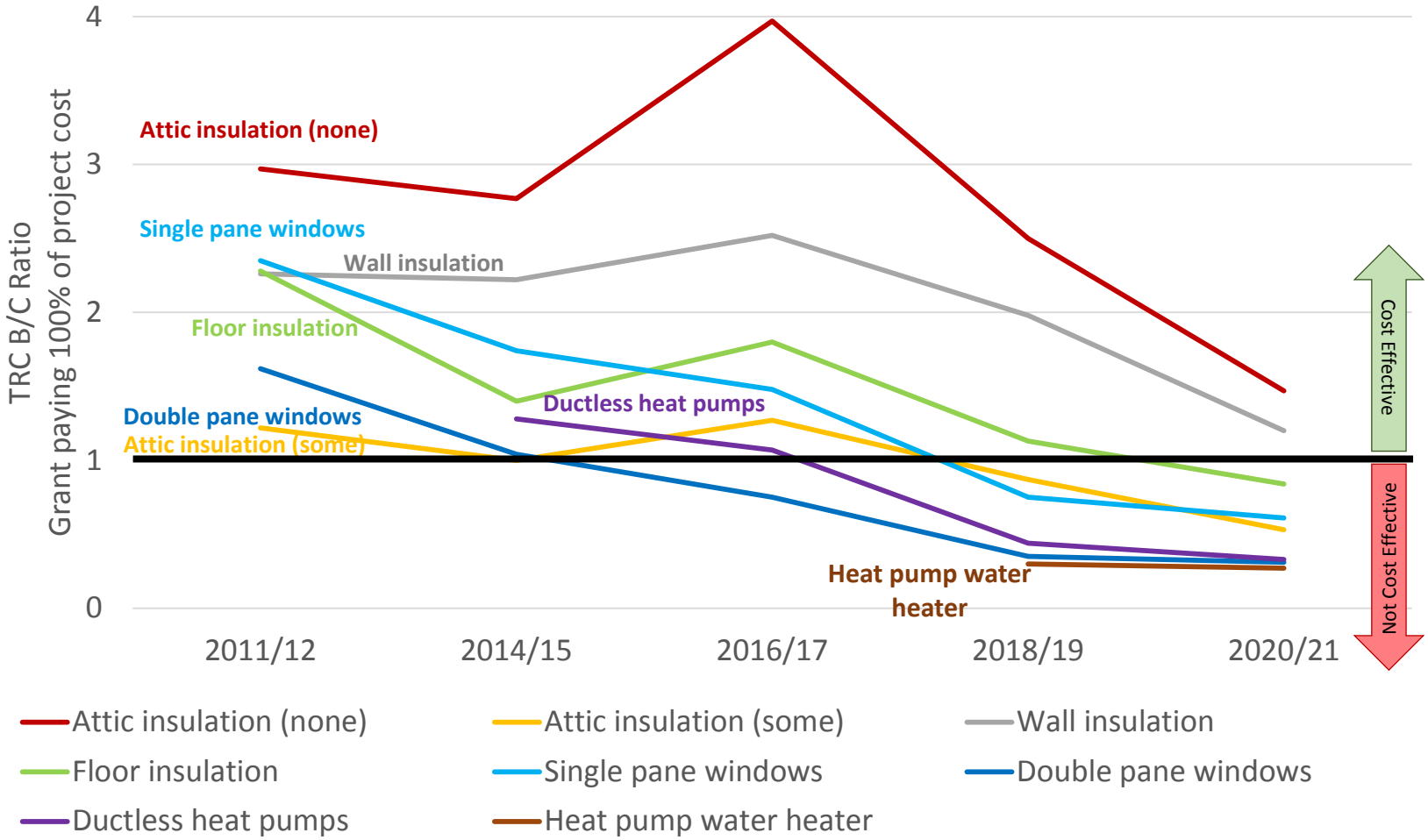
LI will not be cost effective under the current approach

Because of lower wholesale prices and lower savings most measures are not cost effective if Tacoam Power pays 100% of the project cost



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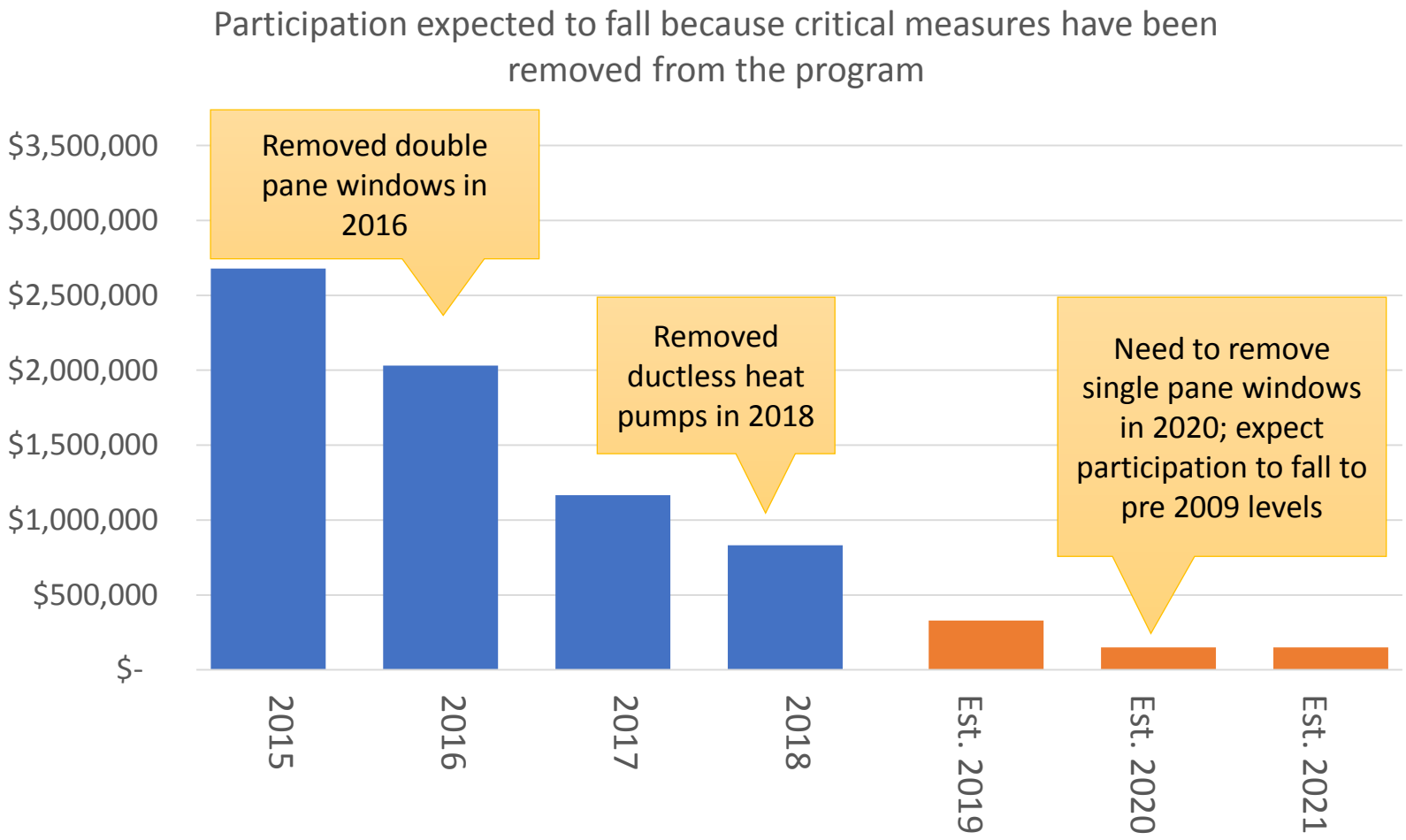
Under our current approach we expect significantly lower participation from an insulation only program



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We explored three options to increase participation

1. Do low-income even though not cost effective
2. Supply low-income agencies with grant funds
3. Offer deferred loans and partial grants

We're pursing the deferred loan option

Tacoma Power offers a grant and deferred loan that cover 100% of project cost; we lien property to ensure repayment

Customer enjoys energy savings when equipment is installed; loan payments are deferred

Customer repays the loan using equity from their home; loan is paid back when the home sells or is occupied by somebody else

- **Full insulation package**
- **Single pane windows**
- **Double pane windows**
- **Ductless heat pumps**
- **One-off custom projects**

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Deferred loan program details

How much will Option 3 cost?

- Estimate additional outlay of $6M over 10 years
- Will need ~ $4 million to stabilize loan fund
- May inhibit other uses of the loan fund

How long until loans repaid?

- Half of loans paid off in under 5 years
- 20% of loans issued 1995-2009 are still open
- The oldest loan was issued in 1995

What about default?

- Lien on property with ability to disconnect power
- Low default rate; 1 of 410 have defaulted
- Likely to see more defaults as older loans mature

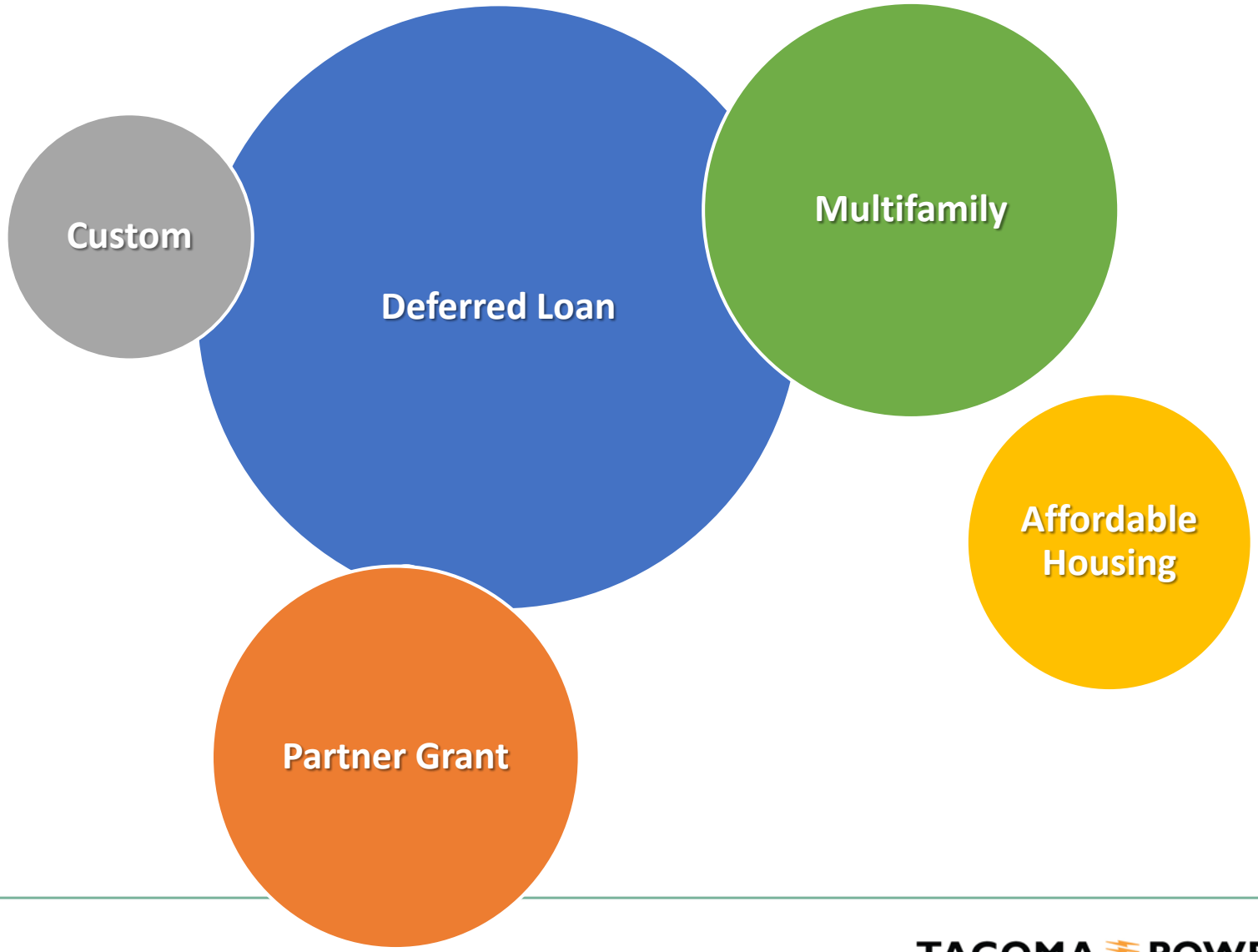
Questions raised by our Public Utility Board

1. Will the loan trap customers into a bad financial arrangement? ***No. All measures offer a positive return for the customer over the life of the measure. The customer is better off installing all conservation measures offered.***

2. What about a real estate market crash or lack of equity? ***Possibly. However, most qualifying customers have been in their homes for a significant period of time.***

3. Can we be smart on our investment? ***We can try. It's difficult to say "no" to a customer because their home is in terrible shape and we're not likely to recoup our investment.***

Deferred loan is part of our low-income program



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Thanks

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