REDDING
ELECTRIC UTILITY

SHIFTING PERSPECTIVES:

Guiding the Future of Customer Programs

Demand-Side Management
INTEGRATED RESOURCE PLAN

Step #1
Develop Guiding Principles

Offer measures where program participants save money

Ensure funds are not transferred from non-participants to participants via rate increases

Focus on programs that cost-effectively reduce carbon emissions

Step #2
Identify Key Assumptions and Cost-Effectiveness Tests

- RIM – Utility lifecycle net revenue impacts
- PCT – Measure benefits to a customer over the lifecycle of a measure
- CIT – Ratio of lifecycle rate impacts to the lifecycle GHG emissions reduction to a measure

TEST COMPONENT	PCT, $	UCT, $	RIM, $	TRC, $	CIT, $/MT GHG
GHG Emissions Reduction					X
Electric Energy and Capacity Avoided Costs		X	X	X	X
Other Fuel Savings (natural gas, fuel oil, propane, etc.)				X	
Non-Energy Benefits (e.g., water, O&M costs, etc.)				X	
Environmental and Health Benefits					
Incremental Costs for Measure and Installation	X			X	
Program Administrator Overhead Costs		X	X	X	X
Incentive Payments Paid by Utility	X	X	X		X
Customer Bill Impact	X				
Utility Revenue Impact			X		X

Demand-Side Management
INTEGRATED RESOURCE PLAN

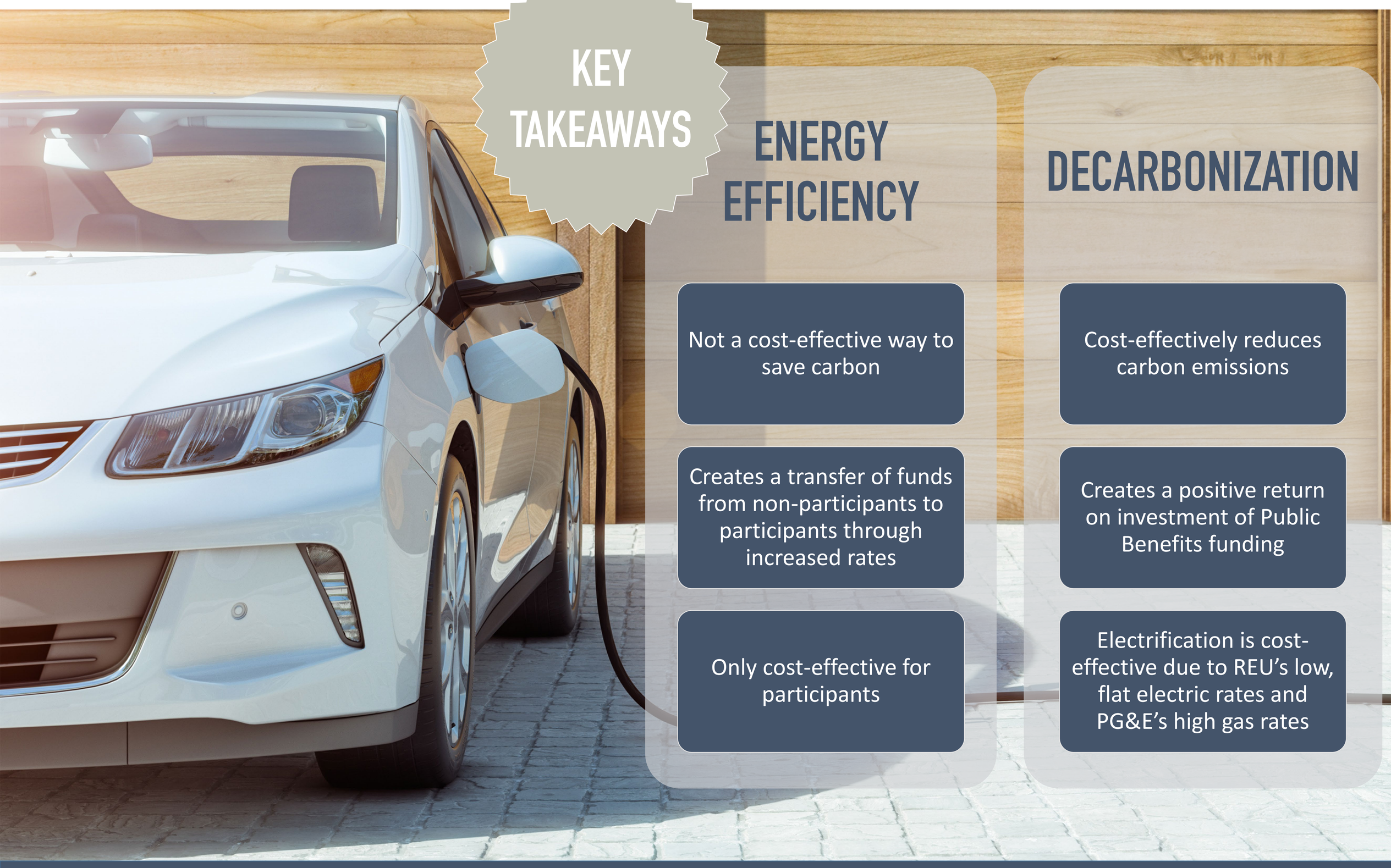
RESULTS

Step #3
Characterize DSM Program Measures

Step #4
Perform Analysis to Identify Preferred Portfolio

Program (FY19)	Program Cost	Lifecycle Net Revenue Impacts	Lifecycle Carbon Savings, Tons	PCT	RIM	CIT, $/Ton
Energy Efficiency Rebates	$950,000	($3,590,000)	8,300	$4,090,000	($4,540,000)	($550)
Shade Trees	$80,000	($110,000)	200	$160,000	($180,000)	($900)
Low Income Direct Install	$500,000	($180,000)	1,200	$460,000	($690,000)	($580)
Residential Energy Discount	$3,010,000	$0	0	$2,930,000	($3,010,000)	N/A
Public Streetlights	$210,000	$90,000	500	$0	($110,000)	($220)
Building Electrification	$1,970,000	$3,530,000	20,800	$6,860,000	$1,560,000	$80
Transportation Electrification	$500,000	$970,000	7,600	$1,290,000	$480,000	$60

Step #5
Request Council approval of DSM-IRP allowing the transition to electrification programs



KEY TAKEAWAYS

ENERGY EFFICIENCY

- Not a cost-effective way to save carbon
- Creates a transfer of funds from non-participants to participants through increased rates
- Only cost-effective for participants

DECARBONIZATION

- Cost-effectively reduces carbon emissions
- Creates a positive return on investment of Public Benefits funding
- Electrification is cost-effective due to REU's low, flat electric rates and PG&E's high gas rates

Questions?
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