


Embracing and Thriving in a Distributed Energy Future



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The Big Picture

Challenges

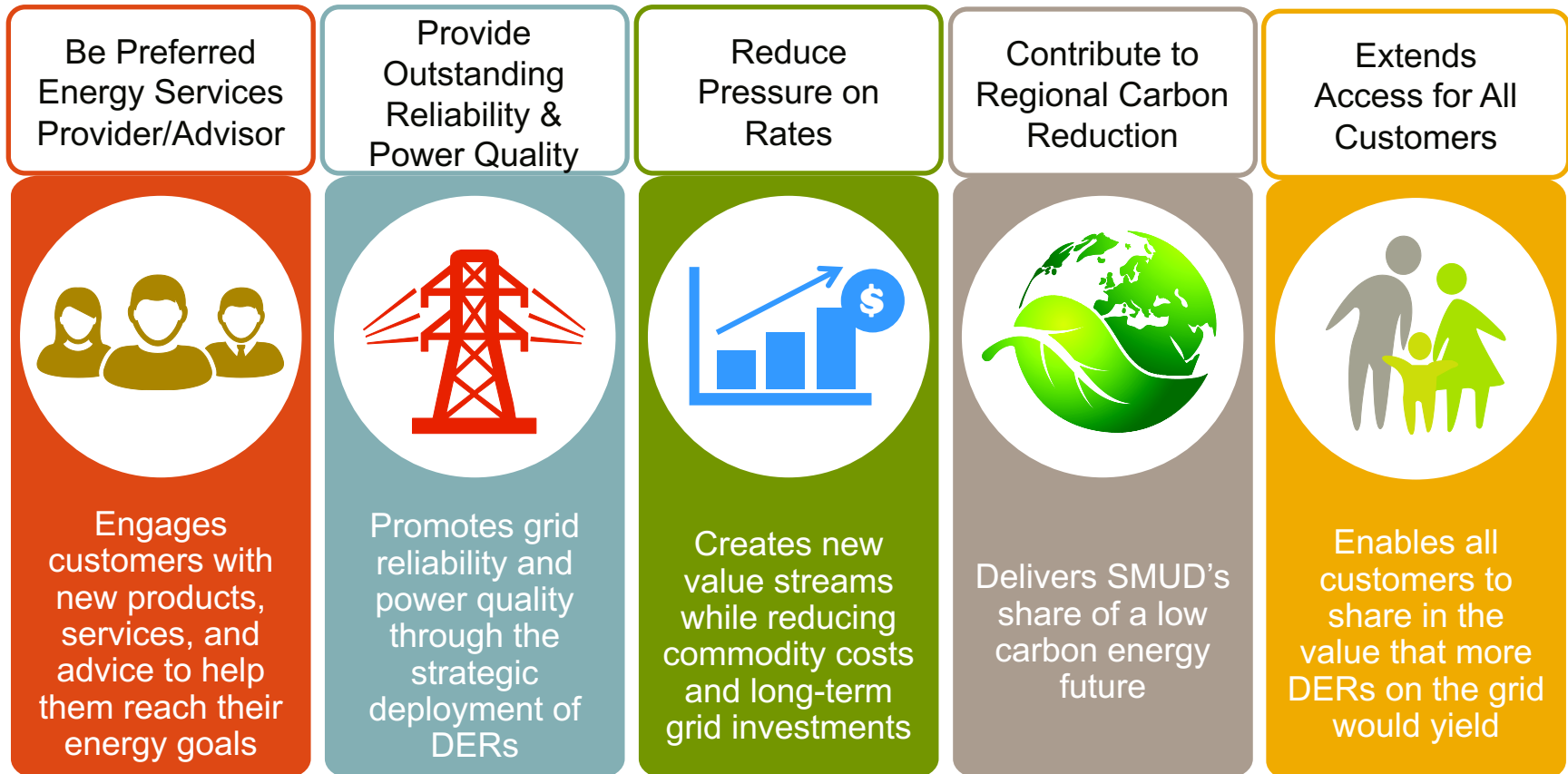
- Flat or declining load growth
- Uncertainty regarding future business model and revenue generation
- Advancements in emerging technologies that are becoming exceedingly more price competitive
- Increasing regulatory pressure for a distributed, efficient energy future
- Rising customer expectations and competition threatening customer relationship

Opportunities

- Building and transportation electrification that grow load while decarbonizing the energy system
- Business Model innovation to create new revenue opportunities
- New cost-effective technologies to enable the transactive grid of the future
- Use regulatory support for DERs to improve grid reliability at lower cost
- Strengthen our customer relationships by advising and providing them with intelligent solutions

DER Strategic Outcomes

The DER Strategy paves the way forward for SMUD to successfully deliver future value to our customers and community, in alignment with our corporate values and business model.



Focal Points for DER Strategy



SolarShares for
Homes &
Businesses

2 programs
launched, 3 offerings
under development

Scaling from 11 MW
in 2016 to goal of
100 MW by 2020



Free fuel for 2 years
Promotion

Workplace &
Multifamily Charger
Incentive offerings

DCFC 'Safety Net'
Network Incentives



Fuel Switching Pilots
for:

Heat Pump Water
Heaters

All Electric New
Homes, and
Commercial Building
retrofits

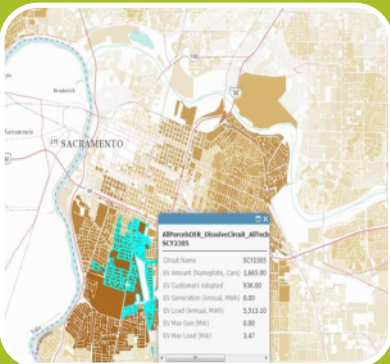
Pay for Performance
Efficiency Programs

Integrating with the Grid



Distribution Management System (DMS) & Distributed Energy Resource Management System (DERMS)

- Operations Visibility, forecasting, and dispatch of DERs to enhance grid reliability under high levels of DER adoption



DER Planning Tool – Customer Adoption Model

- Forecasted Customer-level adoption of combinations of DERS under various potential future rate structures
- Allow tighter planning for optimizing capital investments and getting rate structures and location-based incentives right