

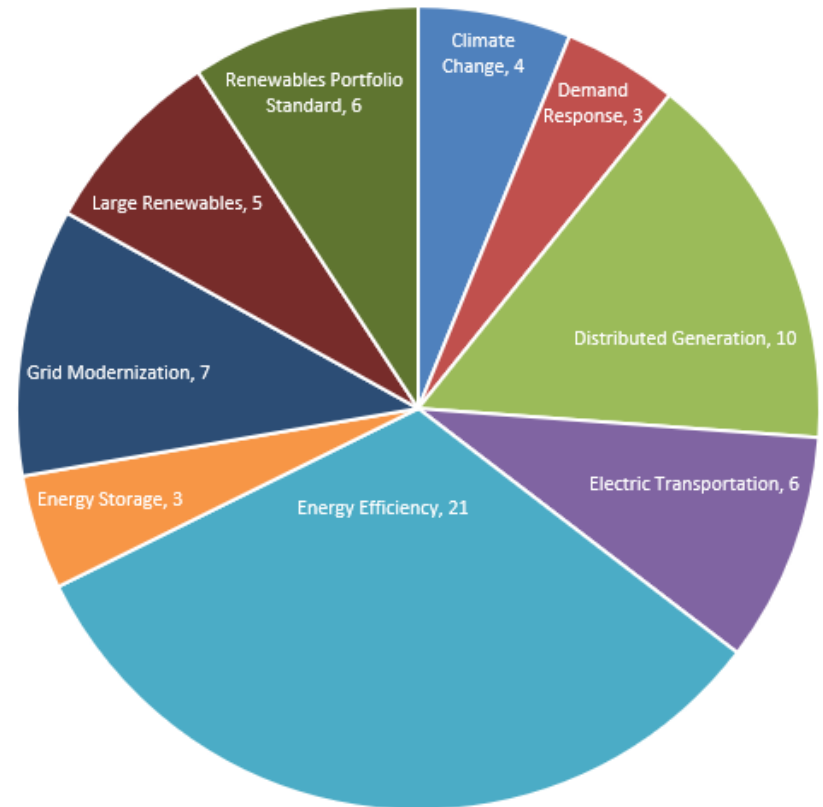
# Exhibit to Agenda Item #3a

Board Policy Committee and Special SMUD Board of Directors Meeting  
Wednesday, September 19, 2018, scheduled to begin at 5:30 p.m.  
Customer Service Center, Rubicon Room

# SD-10 Research & Development

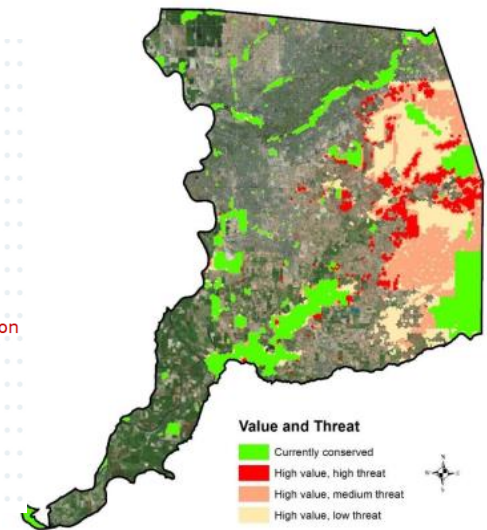
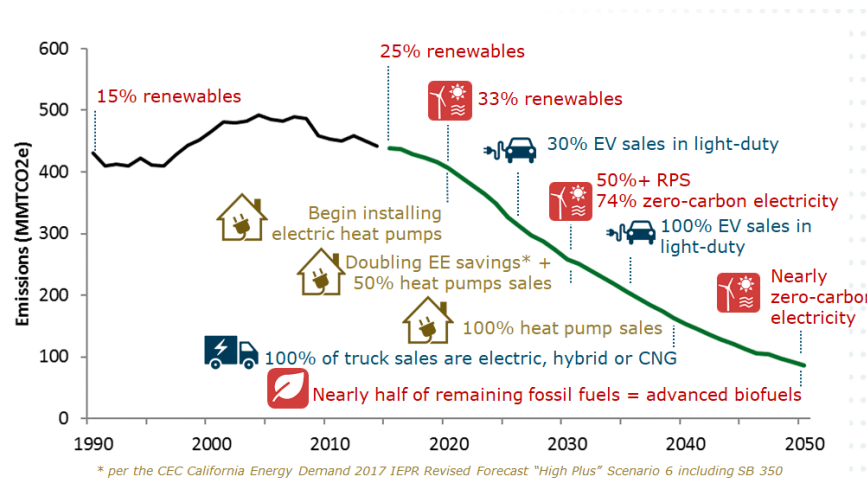
To assure SMUD's long-term competitiveness and its ability to deliver innovative products and services, SMUD shall invest in research and development projects that support its core and key values, based on an analysis of the projects relative risks and their potential benefits to SMUD customers.

ESR&D Total Projects: 65



# Climate Change

- SMUD Living Future Project Accelerator supporting All-Electric policies
- E3 Pathways & Scenario Analysis of accelerated carbon reduction targets for IRP
- Landscape Carbon Storage Assessment Completed



# Demand Response & Storage

- GridRabbit Demo
- Modeling of TES dispatch
- Stem Energy Storage
- AB 2514 Program Launch

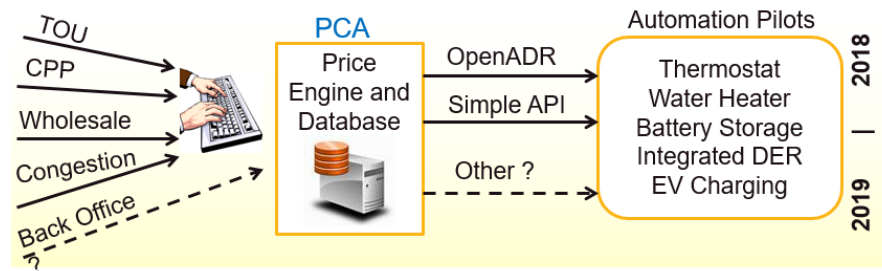


# Electric Transportation & Grid Modernization

- School Buses
- EV Charging Strategies for Fleets and Workplace Programs
- Uber-SMUD EV Champion's Initiative

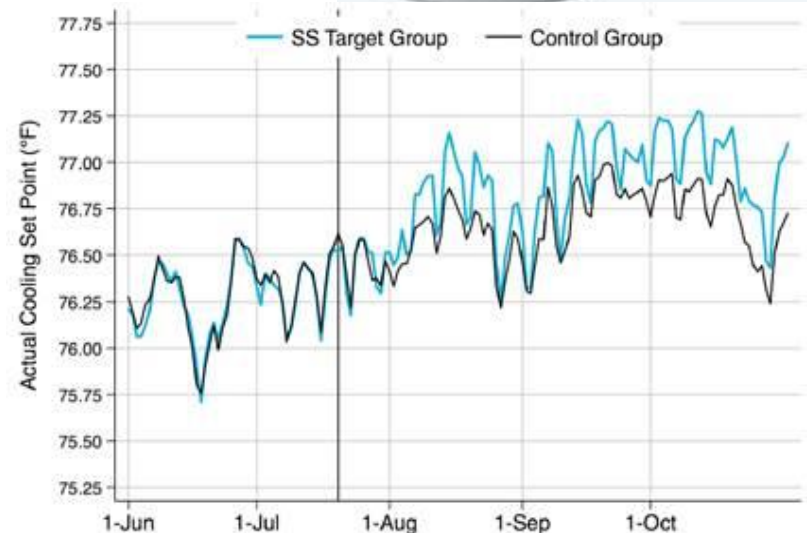
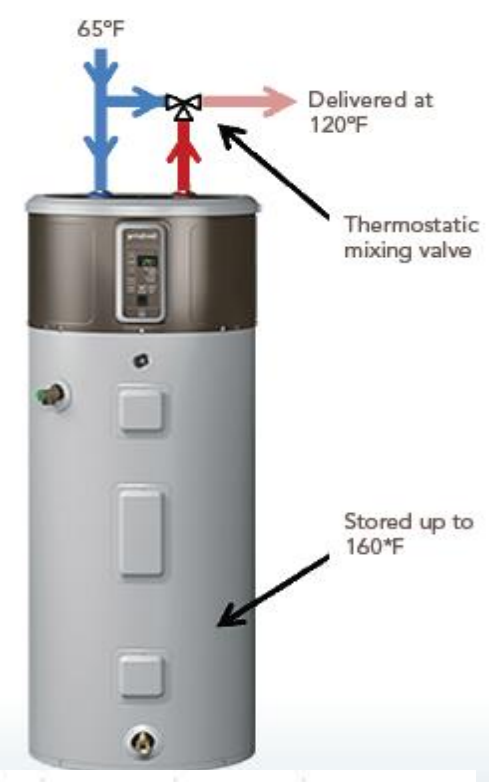


- 69 kV line sensors
- Development of Price Communication Application to automate DER response to changing prices



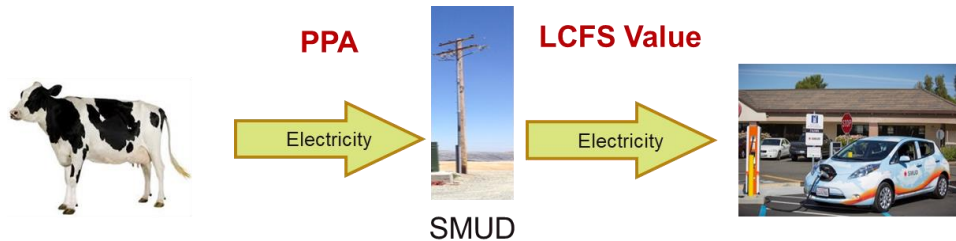
# Energy Efficiency

- Cannabis
- Circadian Lighting
- Optimization for TOD
  - Heat pump water heaters
  - Smart thermostats



# Renewables & Distributed Generation

- LCFS Cow Power to EV Charging Pathway
- PV Carport Feasibility Study
- Renewable Natural Gas from Biomass



# Request the Board accept the SD-10 Monitoring Report.