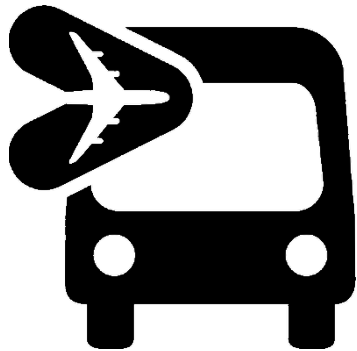


SB 350 and Utility Proposals for Transportation Electrification

Summary of process, proposals, and future direction



Airport Shuttle Bus Workgroup Meeting
June 30, 2017

SB 350 Statutory Requirements

Doubling of
Electric & Natural
Gas **Energy**
Efficiency Savings

Increase
Renewable Energy
requirements from
33% by 2020 to **50%**
by 2030

Widespread
Transportation
Electrification

- Requires resource optimization and an Integrated Resource Planning (IRP) process
- Expresses intent for regional expansion of the CAISO
- Consider disadvantaged communities in CPUC decision-making process



ARB Transportation Electrification Workgroup Meetings

- Three meetings in April, October 2016 and April 2017 in coordination with CPUC, PG&E, SCE, SDG&E, SMUD and LADWP
- Transit, airport, and truck fleet participation
- Key issues/requests
 - Remove uncertainty on infrastructure costs
 - Address demand charges
 - Fleets need to focus on core business not electricity management
 - Remove planning barriers
- Send clear market signal to vehicle manufacturers



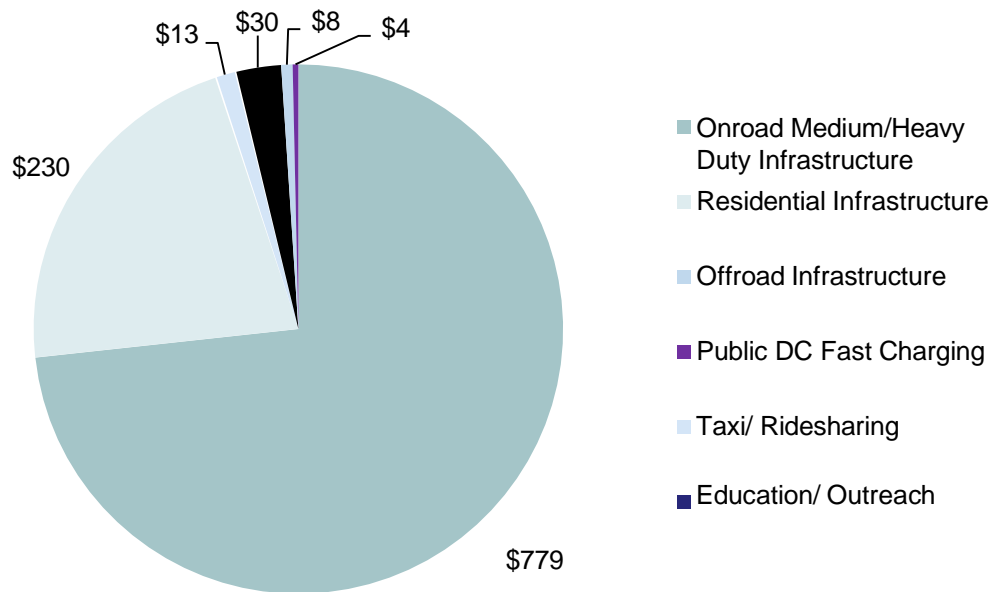
Transportation Electrification Applications

- PG&E, SCE, and SDG&E filed applications by 1/20/17
- Bear Valley Electric Service, PacifiCorp, and Liberty to file by 6/30/17
- Priority review and standard review projects
 - Priority review: non-controversial, 1-year investments; \$20M per utility, <\$4M per project
 - Standard review for everything else
- Address priority projects and programs
 - Rate design
 - Expand focus to include MD/HD, transit, ports, etc.
 - Leverage results of previous pilots
- Align with local, regional, state transportation and electrification planning and investments
- Publicly-Owned Utilities (POUs) filing under CEC in 2018

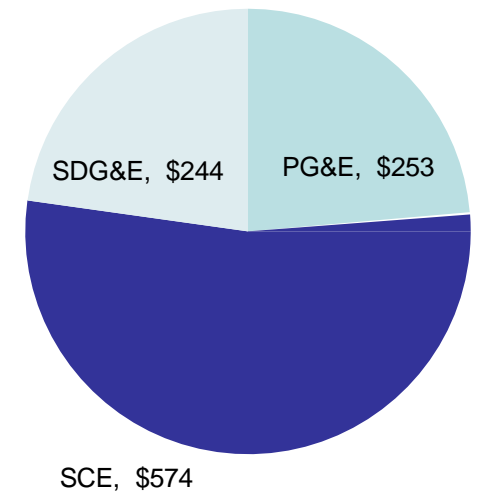


Investor Owned Utility Applications \$1 Billion of Investments Proposed

Funding by Project Type



Funding Proposed



Potential to offset most heavy duty infrastructure costs, establish new EV rates, on-site battery storage, and improve grid reliability



	Onroad Medium/Heavy Duty Infrastructure	Residential Infrastructure	Offroad Infrastructure	Public DC Fast Charging	Taxi/ Ridesharing	Education/ Outreach	6
	~\$779 M	~\$230 M	~\$13 M	~\$30 M	~\$7.5 M	~\$3.6 M	
SDG&E	Fleet Delivery Services \$3.7 M	Residential Charging Infrastructure \$226 M	Airport Ground Support Equipment \$2.8 M	Electrify Local Highways \$4 M	Taxi/Shuttle/ Rideshare \$3.5 M	Car Dealer Incentives \$1.8 M	Total SDG&E Request: \$244 M
	Commercial Grid Integration Rate	Residential Grid Integration Rate	MD/HD and Forklift Port Electrification \$2.4 M	Public Charging Grid Integration Rate			
SCE	Transit Bus Make- Ready & Rebate \$4 M	Residential Make- Ready Rebate \$4 M	Port of Long Beach Gantry Crane \$4 M	Urban DC Fast Charger Clusters \$4 M	EV Driver Rideshare Reward \$4 M		Total SCE Request: \$574 M
	MD/HD Charging Infrastructure \$554 M		Port of Long Beach ITS Terminal Yard Tractor \$0.5 M				
	Commercial EV Rate Design						
PG&E	MD/HD Fleet \$3.4 M		Idle-Reduction Technology \$3.4 M	Fast Charge Infrastructure \$22 M		Home Charger Information \$1.8 M	Total PG&E Request: \$253 M
	Electric School Bus Renewables Integration \$3.4 M						
	FleetReady Make- Ready Infrastructure \$210 M	PG&E also proposed conducting a request for third-party EV innovators to design a project or program to spend the remainder of its priority review budget (\$6.6 M)					

Priority Review

Standard Review

Rate Design Proposals

Schedule and Opportunities for Engagement

- Priority review projects approval — October 2017
- Standard review projects approval — April 2018
- POU Integrated Resource Plan adoption — January 1, 2019
- **Standard review projects workshop — July 11, 2017**
- Intervenor testimony on MD/HD infrastructure — August 1, 2017



More Information

California Public Utilities Commission (IOUs)

<http://www.cpuc.ca.gov/sb350/>

<http://www.cpuc.ca.gov/sb350te/>

California Energy Commission (POUs)

<http://www.energy.ca.gov/sb350/>

http://www.energy.ca.gov/2017_energy_policy/documents/

California Air Resources Board (TE Meetings)

<https://arb.ca.gov/msprog/ict/meeting.htm>

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