
National EV Charging Initiative Phase 3:
Energize!

Complementary Policies Working Group: Workshop #1
July 25, 2023

Agenda

- ◆ Welcome
- ◆ Institutional Context: utilities, energy regulators, legislatures and EVs
- ◆ Where we are today: utility programs and investments
- ◆ Legislation
 - ◆ Recent legislation adopted
 - ◇ Elements needed in Model Bill
- ◆ *What happens next?*



Guiding Principles

Touchpoint for the Energize Agenda



- ◆ There is an urgent need to scale up and broaden access to charging infrastructure to serve light-, medium- and heavy-duty EVs.
- ◆ The private sector should step up with unprecedented investment, augmenting government and utility funding to finance charging infrastructure that serves all communities and vehicle types.
- ◆ Electric utilities, regulators, and stakeholders should work together to accelerate transportation electrification in a manner that supports the electric grid and benefits all utility customers.
- ◆ The provision of fundamental electrical infrastructure necessary to charge EVs should be part of the normal course of utility business.

Phase 3 Objectives



- ◆ Expand membership
 - ◇ Members of participating organizations-- individual companies
 - ◇ Include goods movement: fleet operators, truck OEMs
- ◆ Organize Complementary Policies Working Group
- ◆ Develop policy agenda
- ◆ Build consensus among stakeholders
- ◆ Create 2024 action plan to advocate for model policies in key states

Phase 3 Timeline



- ◆ Pre-launch at Forth Roadmap Conference (May 15)
- ◆ Kick-off Webinar (May 24)
- ◆ Complementary Policies Working Group workshops (June-Aug)
 - ◇ The Provision of Make-Ready Electrical Infrastructure on the Utility Side of the Meter
 - ◇ Utility Transportation Electrification Plans
 - ◇ Rates and Vehicle Grid Integration
 - ◇ Timely Energization and Grid Planning
- ◆ Summit (Sept 19)
 - ◇ Unveil the model bill
 - ◇ Identify target states
- ◆ Socialize and build support at NARUC, NGA, NASEO, etc... (thru Oct)
- ◆ Present advocacy gameplan (Dec)

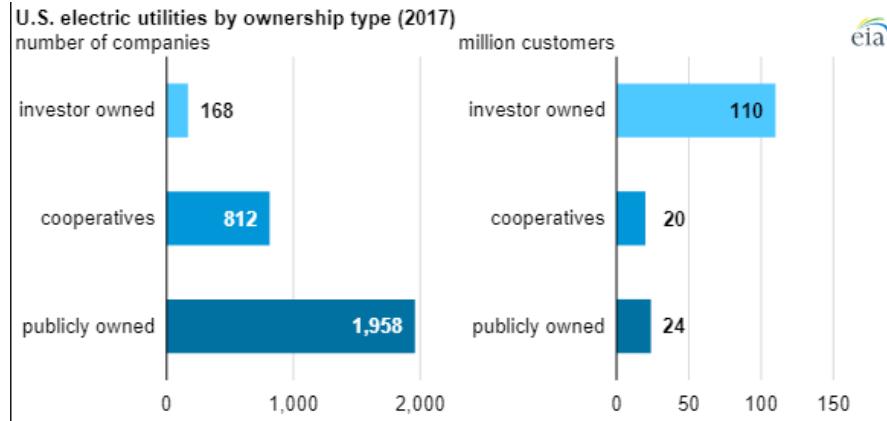


Institutional Context

US electric utilities are local monopolies

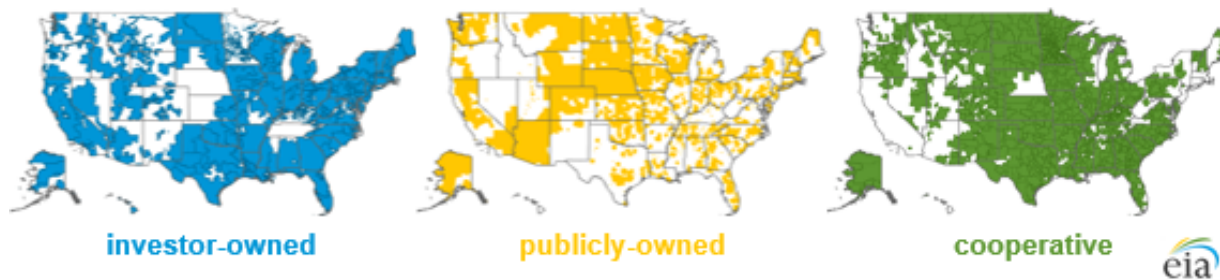
Most utilities are publicly owned, but most customers are served by Investor Owned Utilities

Most of the 3,000+ electric utilities in the US are publicly owned (POUs).

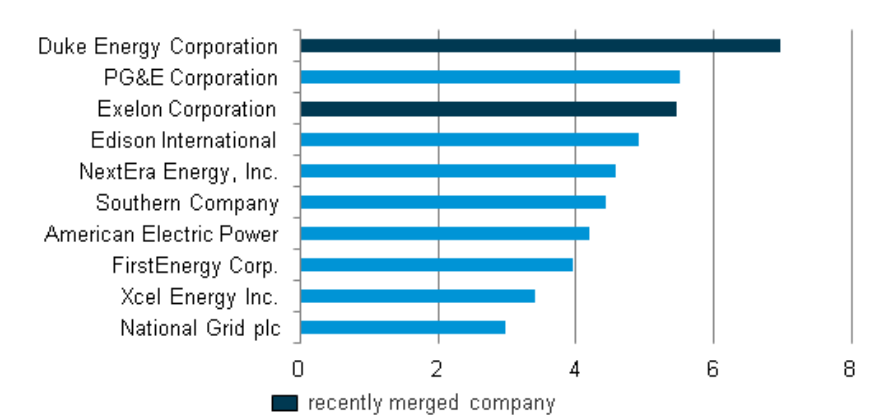


Most electricity customers, especially in urban areas, are served by about 100 large Investor Owned Utilities (IOUs).

Counties served by U.S. utilities, by type of ownership (2017)



Top ten electric utilities, March 2012

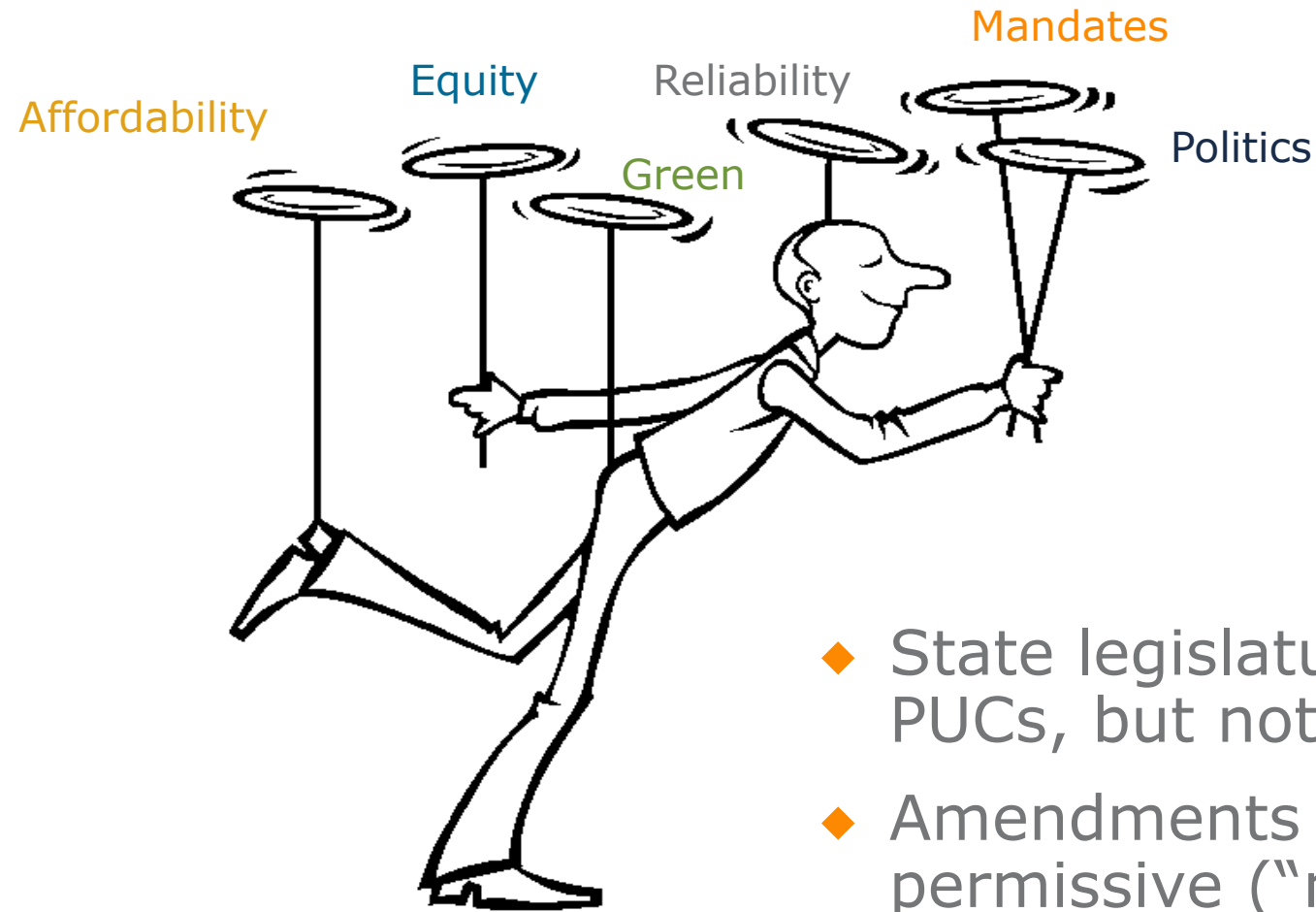


Utility Governance



- ◆ States are the principal IOU regulators
 - ◆ Public Utility/Service Commission (sometimes other names)
 - ◆ Commissioners are appointed in most states, elected in about 15
- ◆ Federal jurisdiction (FERC) is mainly over interstate commerce—energy markets, transmission
- ◆ Federal government tends to be deferential
 - ◇ Example- PURPA amendments re EV rates in IIJA
- ◆ POUs (e.g. Munis, Co-ops) are “self regulating,”
 - ◇ Governing boards may be elected or sometimes part of city government (e.g. LA Dept. of Water and Power)
 - ◇ State and federal government can mainly offer carrots

Legislature-Regulator Nexus



PUC Commissioners and Governing Boards must balance many considerations

- ◆ State legislatures have leverage over IOUs and PUCs, but not POUs and their governing boards
- ◆ Amendments to Public Utility Code can be permissive (“may”) or prescriptive (“shall”)
- ◆ Nobody wants to be seen as the villain who raised consumers’ utility bills

Three bellwether states: three procedural approaches



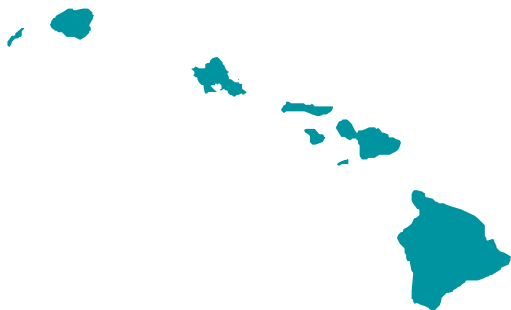
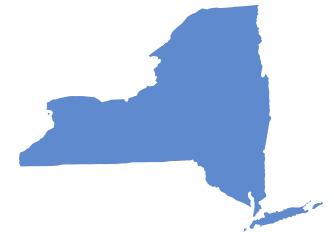
"Let a thousand flowers bloom"

- ◆ Multiple applications to CPUC, many "pilots"
- ◆ \$2.8B in ratepayer funding approved for utility programs
- ◆ After a decade, CPUC is now developing a holistic Transportation Electrification Framework



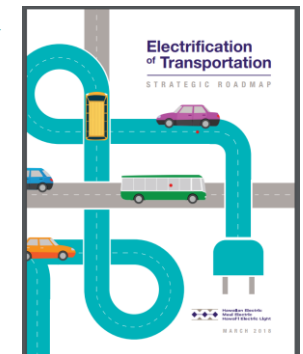
"We're in charge here"

- ◆ Compact stakeholder process informed NYPSC staff white paper
- ◆ July 2020 order provided express direction
- ◆ Approach reflects NY's emphasis on competitive markets



"Consult with stakeholders & make a plan"

- ◆ HPUC directed HECO to file a 10-year comprehensive strategic plan
- ◆ Well received by stakeholders & HPUC but...
- ◆ HPUC continuing to direct HECO

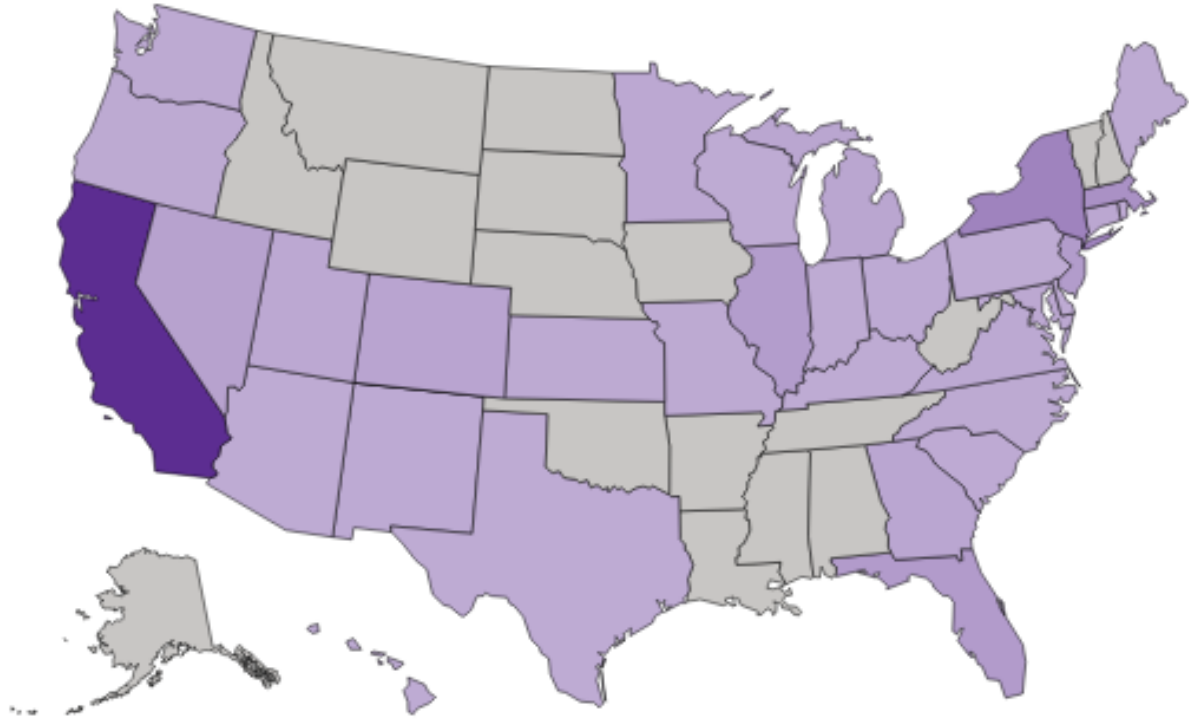


States converging on utility role & priorities



- ◆ Require utilities to develop a comprehensive transportation electrification plan
- ◆ Utility investments at customer site primarily make-ready and charger rebate
- ◆ Most utility owned/operated chargers in equity communities and other-hard-to-serve segments, or sometimes as an option for the host
- ◆ Emerging appreciation of MHDV challenges
- ◆ You're not a utility just 'cuz you charge vehicles

Nearly \$6B approved for utility EV programs



Summary Statistics

\$5.8bn

Investment

35

States

59

Utilities

161

Filings

9,577

DCFC Ports

400K

L2 Charging Stations

25K

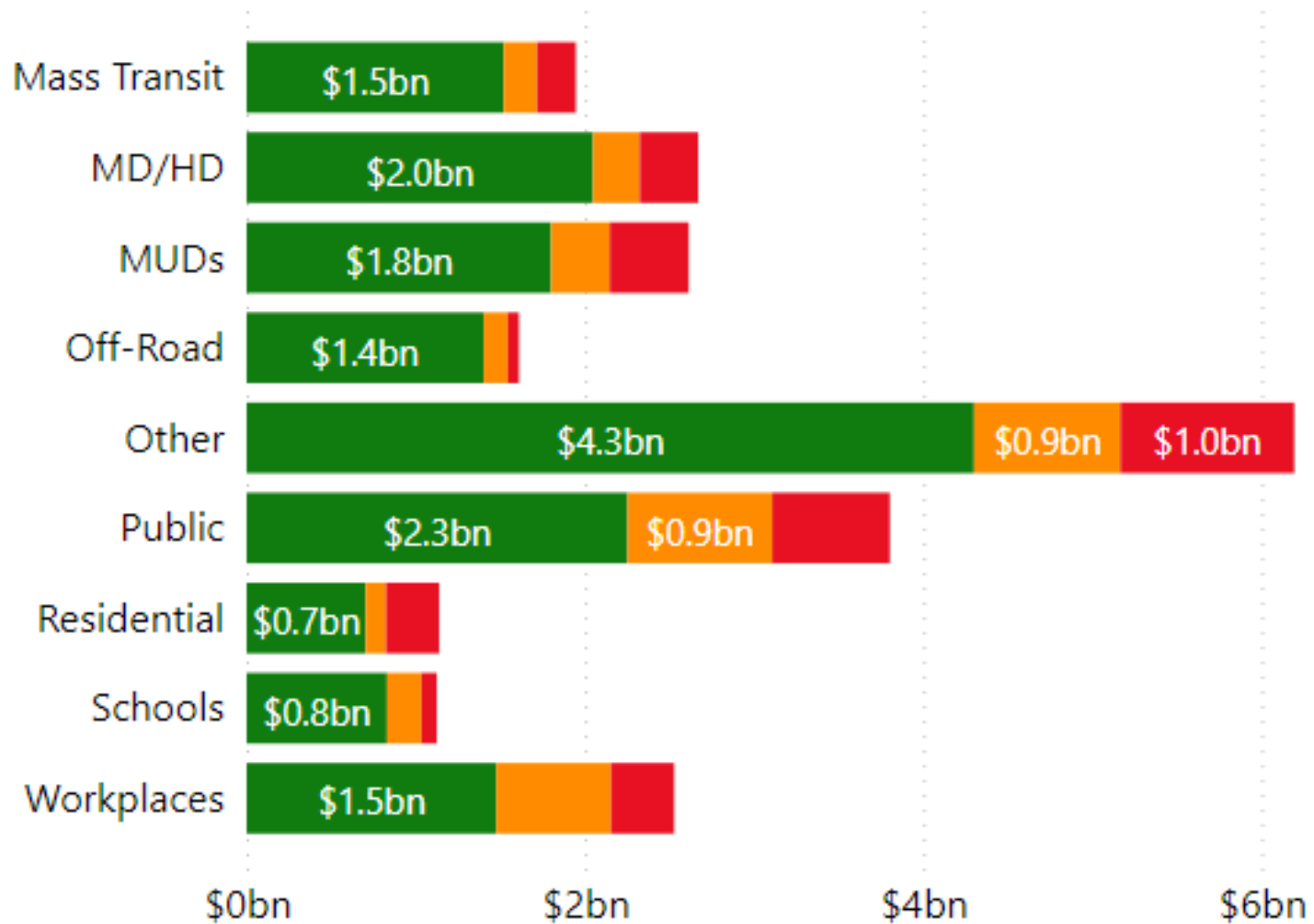
MD/HD Charging Stations

93

Off-Road Charging Stations

Approval by Target Use

Status ● Approved ● Filed ● Denied / Withdrawn



\$1.9 B in Underserved Community Investment



State	Total Investment	Underserved Community Investment
Alaska	\$0	
Arizona	\$1,495,000	
California	\$2,961,111,806	\$1,512,582,704
Colorado	\$115,829,409	\$21,920,500
Connecticut	\$73,657,123	\$970,000
Delaware	\$583,500	\$30,000
District of Columbia	\$4,319,300	
Florida	\$278,200,000	\$1,035,000
Georgia	\$82,500,000	\$5,850,000
Hawaii	\$6,515,000	
Illinois	\$248,044,447	\$115,937,524
Indiana	\$7,000,000	\$690,000
Kansas	\$19,450,000	\$1,600,000
Kentucky	\$500,000	
Maine	\$240,000	

State	Total Investment	Underserved Community Investment
Maryland	\$55,044,767	\$460,727
Massachusetts	\$460,119,465	\$119,370,850
Michigan	\$84,959,333	\$3,486,000
Minnesota	\$46,479,245	
Missouri	\$18,187,500	\$400,000
Nevada	\$165,356,659	
New Jersey	\$265,739,366	\$1,256,250
New Mexico	\$12,855,000	\$2,399,000
New York	\$711,507,097	\$98,096,724
North Carolina	\$24,714,675	
Ohio	\$16,100,000	\$370,000
Oregon	\$19,021,000	\$2,735,900
Pennsylvania	\$7,989,480	\$263,543
Rhode Island	\$11,175,136	
South Carolina	\$8,830,000	
Texas	\$0	
Utah	\$49,500,000	
Virginia	\$39,479,565	\$1,968,421
Washington	\$25,933,875	\$650,000
Wisconsin	\$0	
Total	\$5,822,437,748	\$1,892,073,142

Why do we need legislation?



- ◆ Provide impetus for regulators to authorize level of utility spend needed to support EV adoption consistent with policy goals
 - ◇ Half the \$5.8B of approved investments was approved in CA per SB 350
 - ◇ On a per capita basis-- \$/customer/year, CO and NV are the biggest
- ◆ Some state energy regulators need legislative cover
- ◆ Some ... genuinely lack jurisdiction or may otherwise be “handcuffed.”
- ◆ Some ... want express authority before they act
- ◆ Some ... won’t act without direction

Draft Model Legislation



Model State Policies to Stretch Federal Investments



Make-Ready Infrastructure Rules



Utility Programs & Investments



Rates Designed for EV Charging



Getting it Built & Energized

A series of bills have defined IOUs' role in supporting TE



- ◆ IOU role in supporting TE:
 - ◆ California ([SB 350](#), 2015)
 - ◆ Oregon ([SB 1547](#), 2016)
 - ◆ Colorado ([SB 77](#), 2019)
 - ◆ New Mexico ([HB 521](#), 2019)
 - ◆ Nevada ([SB 448](#), 2021)
 - ◆ Illinois ([SB2408](#), 2021)
- ◆ Most require utility to develop and regularly submit a plan, and require regulators to approve if it meets certain criteria

New Mexico House Bill 521

Senator Pat Woods - (R)



District: 7

County: Curry, Quay & Union

Service: Senator since 2012

Occupation:

Email: pat.woods@nmlegis.gov

Extra Information:

Representative Angelica Rubio - (D)



District: 35

County: Doña Ana

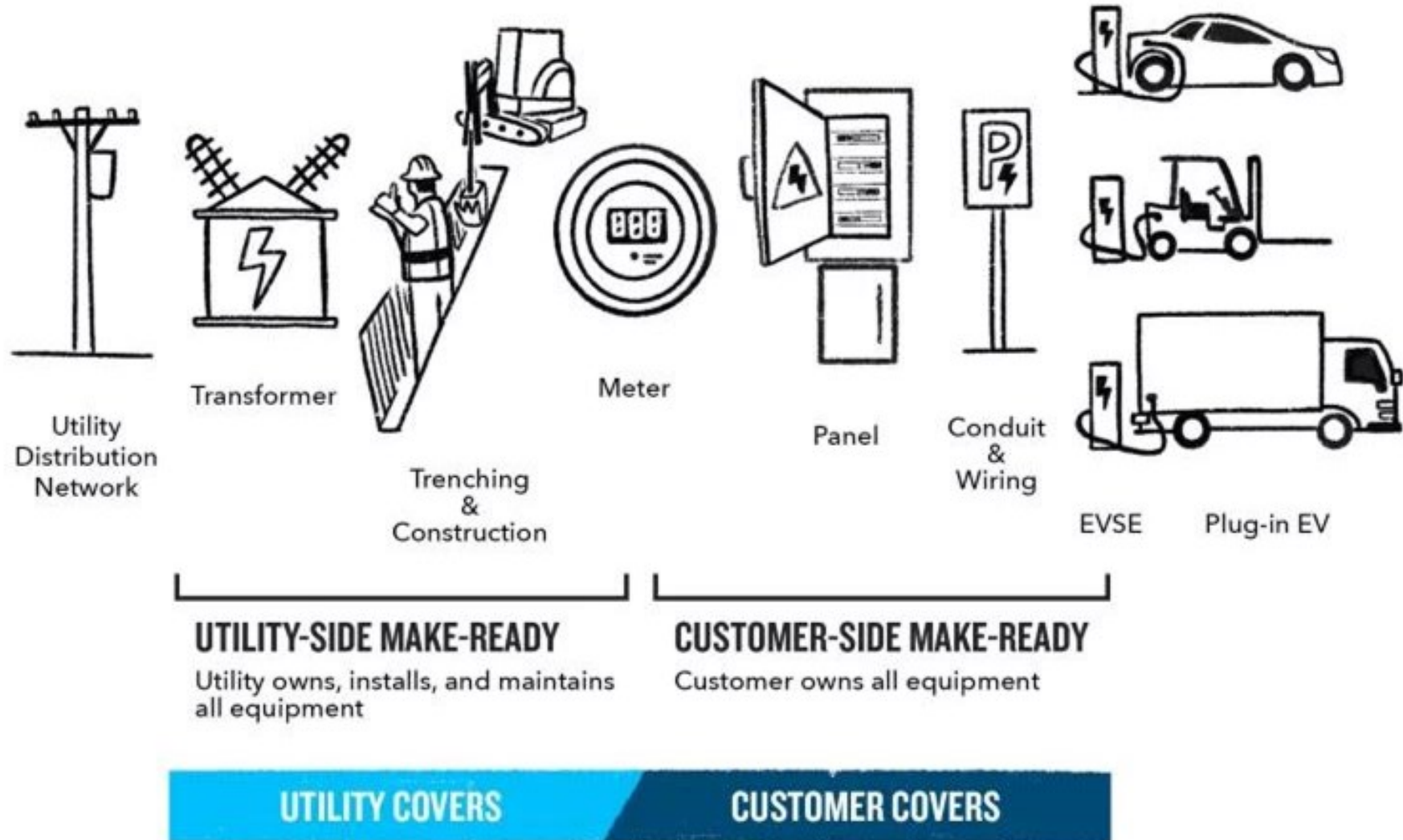
Service: Representative since 2017

Occupation: Nonprofit Consultant

Email: angelica.rubio@nmlegis.gov

Extra Information:

California Assembly Bill 841



Next Steps



- ◆ Complementary Policies Working Group Meeting #2
 - ◇ EV Rates
 - ◇ Getting it Energized
- ◆ Summit: Sept. 19th
- ◆ Develop collateral
 - ◇ Gather and curate existing materials
 - ◇ New white paper on Energizing and Getting it Built