



CMUA Energy Leaders Survey 2018

Investing Today for a Stronger
California Tomorrow

MARCH 2018





Introduction

California's publicly owned utilities (POUs) are investing broadly and planning for the future to maintain reliable and affordable electric service for their communities, while taking action to support the state's move toward carbon-free power. These are the results from the 2018 California Municipal Utilities Association's inaugural Energy Leaders Survey.

The survey finds California POUs continue to be more responsive to their local communities than other power providers, and are focused on implementing new technologies enabling a sustainable and efficient electric grid while providing a high level of customer service.

The CMUA Energy Leaders Survey shows how:

- 1. Controlling Costs and Electric Reliability Remain Top POU Priorities**
- 2. POUs Are Investing in New Technologies for Greater Sustainability and Efficiency**
- 3. California POUs Favor Diversified Energy Generation to Achieve a Carbon-Free Power Supply**
- 4. Streamlined Laws and Regulations Would Benefit POUs, and Californians in General**
- 5. POUs Continue to Bring High Quality Service to Local Communities and Customers**

Publicly owned utilities in California are not-for-profit and managed by locally elected and appointed governing boards accountable to customers. On average, POU customers in California pay 15 percent less for electricity than people served by private, investor-owned utilities (IOUs), and also get highly reliable service, with outages two-thirds shorter than the IOUs.

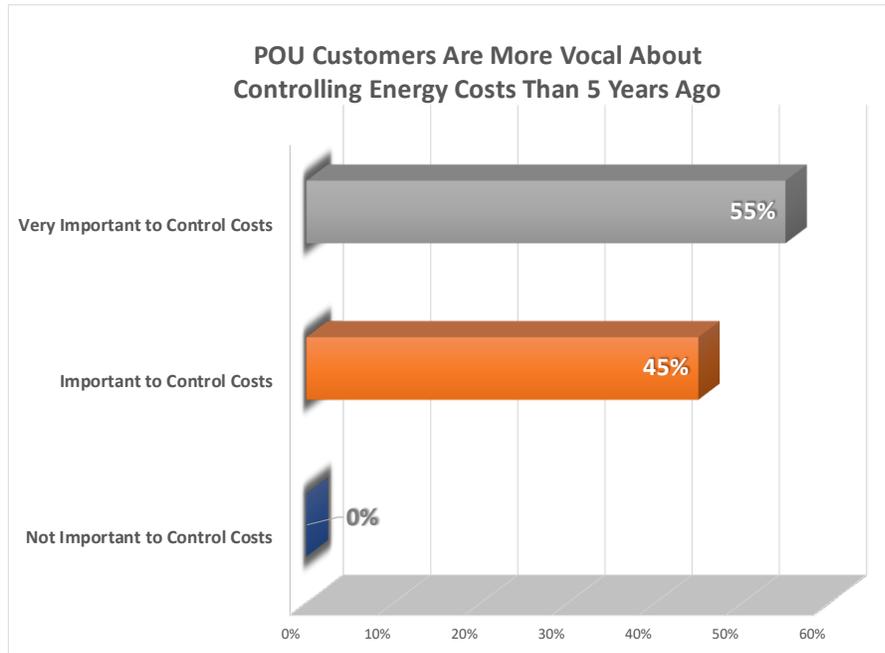
"Our survey confirms what we've long known: California POUs are innovate and lead the way in providing reliable, affordable and sustainable electric service amid transformational change across the state and within our industry as a whole," said CMUA Executive Director Barry Moline. "It's particularly relevant today because utilities say their customers are more concerned about energy costs and keeping the lights on than they were just a few years ago."

The Energy Leaders Survey polled senior-level executives, including general managers and utility directors, who every day are operating utilities reliably, affordably and sustainably, while planning for the future. Together, they oversee power supply, distribution, customer service, resource planning, environmental protection, emergency response, regulatory compliance, legislative engagement and public information.

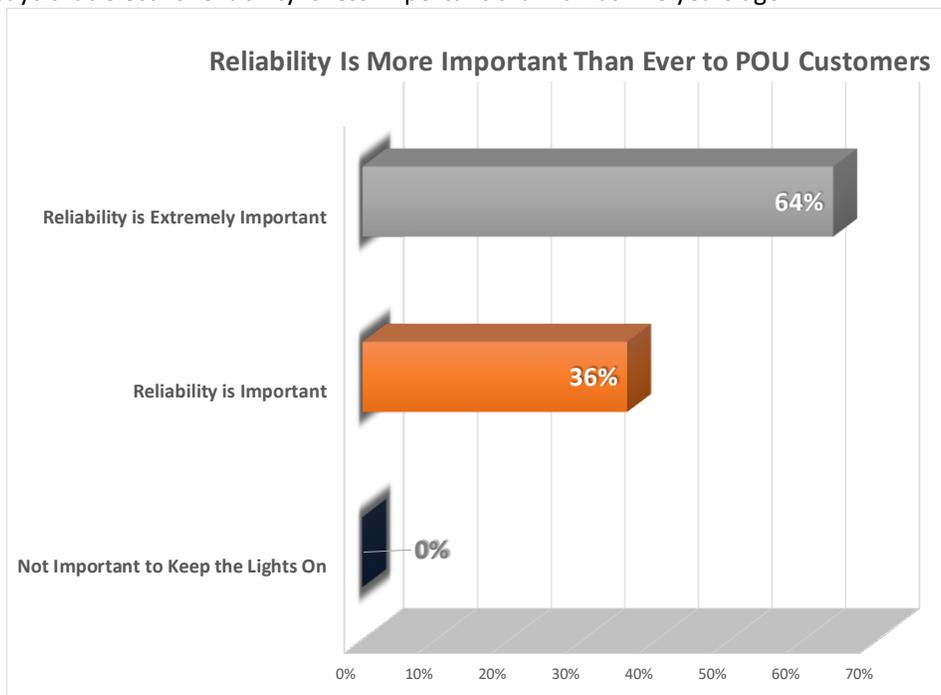
The California Municipal Utilities Association (CMUA), serves more than 40 electric and 40 water agencies statewide. The association represents the common interests of California's publicly owned utilities by providing information, advocacy and connections within the industry. Today, CMUA members collectively provide electricity to 3.2 million California customer connections, about 22 percent of electricity delivered in the state.

Conclusion #1: Controlling Costs and Electric Reliability Remain Top POU Priorities

- Controlling customer costs is important. Among the survey respondents, 55% report Californians are significantly more vocal about energy costs compared to five years ago, and 45% say it's about the same. No one says that Californians care less about energy costs.

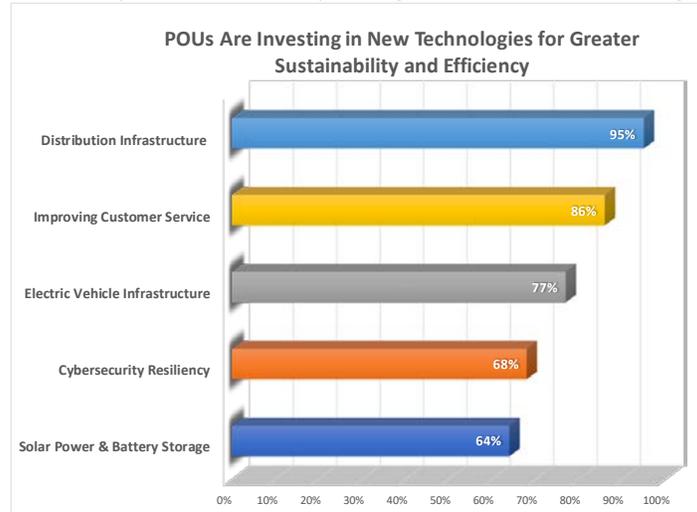


- Keeping the lights on — electric reliability — is important to a majority of Californians: 64% say that electric reliability is much more important than it was five years ago, and only 36% say it's about the same priority. No one says that electric reliability is less important than it was five years ago.



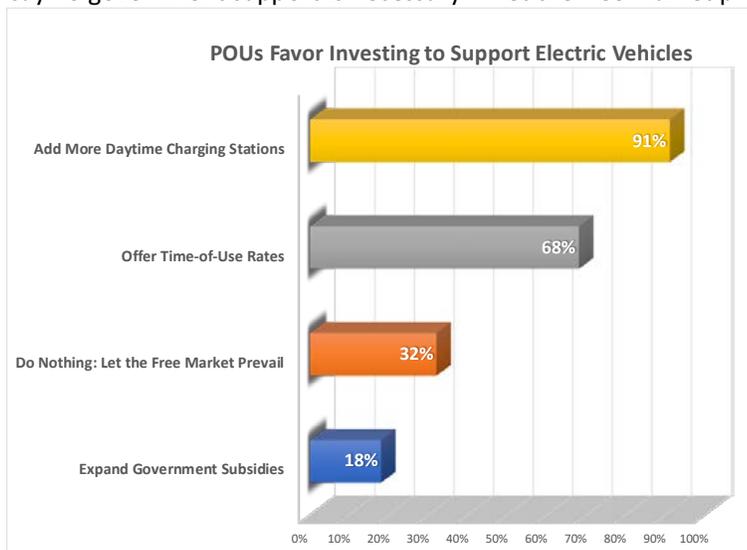
Conclusion #2: POU's Are Investing in New Technologies for Greater Sustainability and Efficiency

- 95% of POU's are investing in new distribution infrastructure to deliver electric power more efficiently.
- 86% are improving their customer service experience.
- More than three-fourths (77%), are investing in electric vehicle infrastructure and other forms of transportation electrification.
- Cybersecurity remains a top issue, with 68% spending to protect and secure their information systems.
- Other top investments: solar power and battery storage (64%) and other storage technologies.



POU leaders think growing the electric vehicle market in California is an important investment for sustainability. But where to focus the attention? Here's what the leaders say:

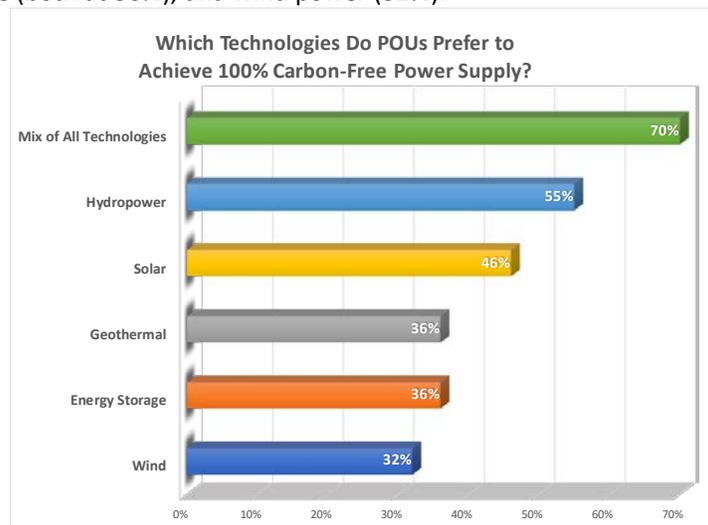
- 91% say California should add more daytime charging stations in public places, businesses and workplaces, primarily to absorb the high production of solar energy during the daytime.
- Improving in-home charging infrastructure is also a priority, with 73% saying it's an important focus.
- Along with in-home charging, 68% believe enacting time-of-use rates for electric vehicle charging is vital. This would encourage Californians to charge their cars off-peak when the cost of electricity is cheapest.
- Interestingly, only 18% support expanding government subsidies to lower the purchase price of electric cars, while 32% say no government support is necessary — let the free market prevail.



Conclusion #3: California POU's Favor Diversified Energy Generation to Achieve a Carbon-Free Power Supply

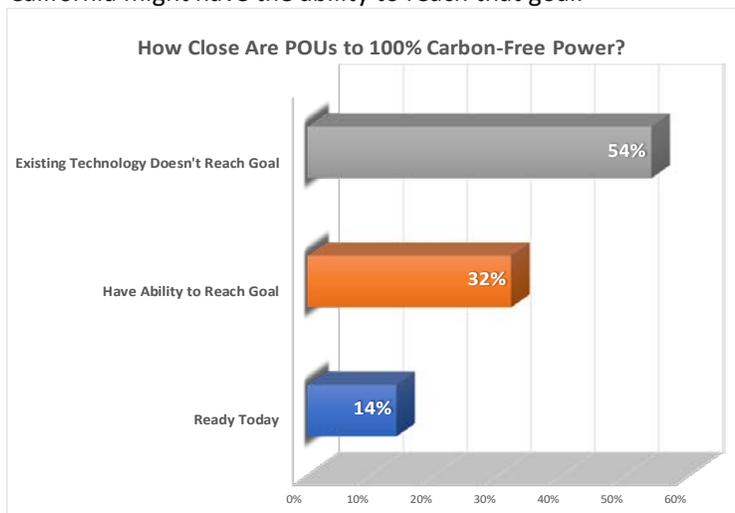
There's a lot of talk these days about achieving a 100% carbon-free power supply. POU leaders think the following are the most promising technologies to focus on.

- 70% say a mix of all carbon-free resources is needed, recognizing it's vital to develop many technologies because they have different energy production profiles, various costs, are in different stages of development, and may be geographically constrained.
- Hydropower is the primary technology POU leaders suggest expanding, with 55% saying it's the No. 1 carbon-free technology. Hydropower is popular because it's both reliable and environmentally beneficial.
- After hydropower, POU leaders say the most promising carbon-free technologies are solar (46%), geothermal and energy storage (both at 36%), and wind power (32%).



Lawmakers are examining a bill to move California toward 100% carbon-free power. How close are we today?

- Just 14% of POU's say they are ready today to produce 100% carbon-free power. These are utilities producing all their electricity with hydropower.
- 54% say the technology doesn't exist today to economically transition to 100% carbon-free power supply, while 32% say California might have the ability to reach that goal.



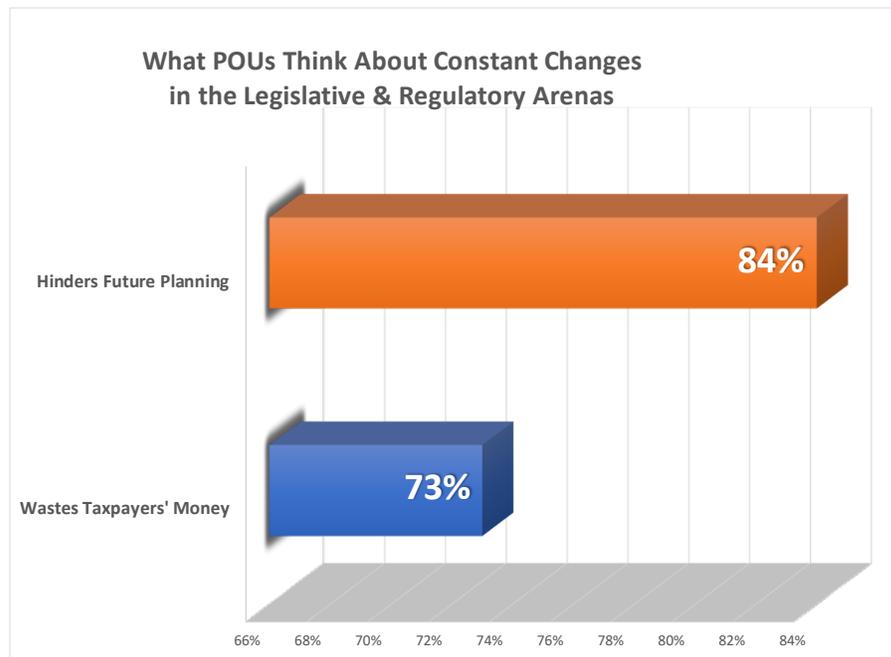
Conclusion #4: Streamlined Laws and Regulations Would Benefit POU, and Californians in General

POU leaders have an opinion on the multitude of laws and regulations that require significant overlapping and duplicative reporting to state government agencies.

- 73% say this duplicative reporting reduces their utility’s efficiency and wastes taxpayer money.

POU leaders have an opinion on “regulatory uncertainty,” the constant changing of laws, regulations targets and goals requiring new investments – when current ones are not yet paid off – that raises consumers’ energy bills.

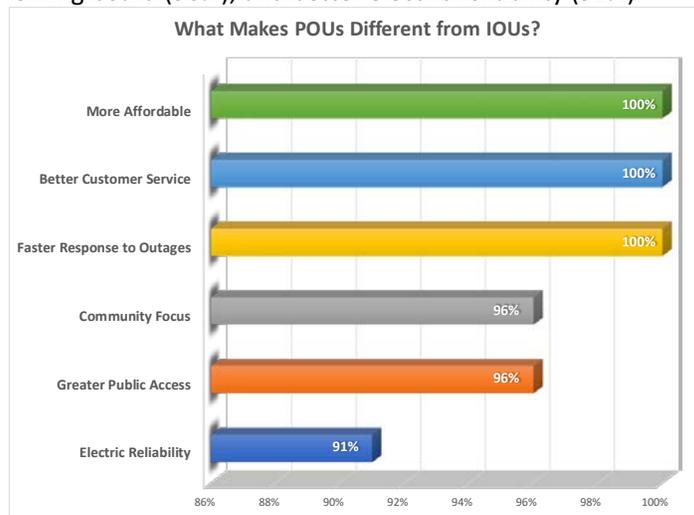
- 84% say constantly changing rules hinders their organization’s ability to plan for the future and control costs.



Conclusion #5: POU's Continue to Bring High Quality Service to Local Communities and Customers

POU leaders say that certain characteristics of publicly owned utilities differentiate them from private, investor-owned utilities.

- 100% say that POU's are more affordable (lower costs), have faster responsiveness to outages (because they're local), and have better local, in-person customer service.
- Other advantages POU leaders say sets them apart include a focus on the local community (96%), greater access to a local governing board (96%), and better electric reliability (91%).



POU leaders say they are taking action to engage customers and improve the customer experience. Here's what they're doing:

- 100% are improving their online bill experience to allow for faster, convenient bill information and payment.
- More than 95% are investing in rebates on energy efficiency devices, which are important to help save energy and money for homeowners, renters and businesses.
- Communicating with customers is vital, with 90% saying they are improving their website and social media engagement for their customers.
- Over 85% host community events and staff booths to provide information about the wise use of energy.

