



Sunset over the Congena solar array in Tucson, Arizona. (David Sanders, Tucson Electric Power)

LET'S TALK RATIONALLY ABOUT A GREENER ENERGY FUTURE

Delivering on aspirational decarbonization goals

By Judith Schwartz, To the Point



There is no question that we are at an inflection point for a clean-energy transition. The public's enthusiasm has been captured. We've seen the emergence of passionate young activists and aggressive carbon reduction goals and mandates adopted by governments, legislatures, commissions, municipalities and corporations. How

can utilities deliver on a low-carbon vision at a sustainable cost, while maintaining reliability in the face of extreme weather conditions?

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The role of aspirational targets

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San Jose Clean Energy Community Advisory Commission

Equitable pathways to a clean energy future

December 10, 2019



to the point



Green2Growth Community Summit

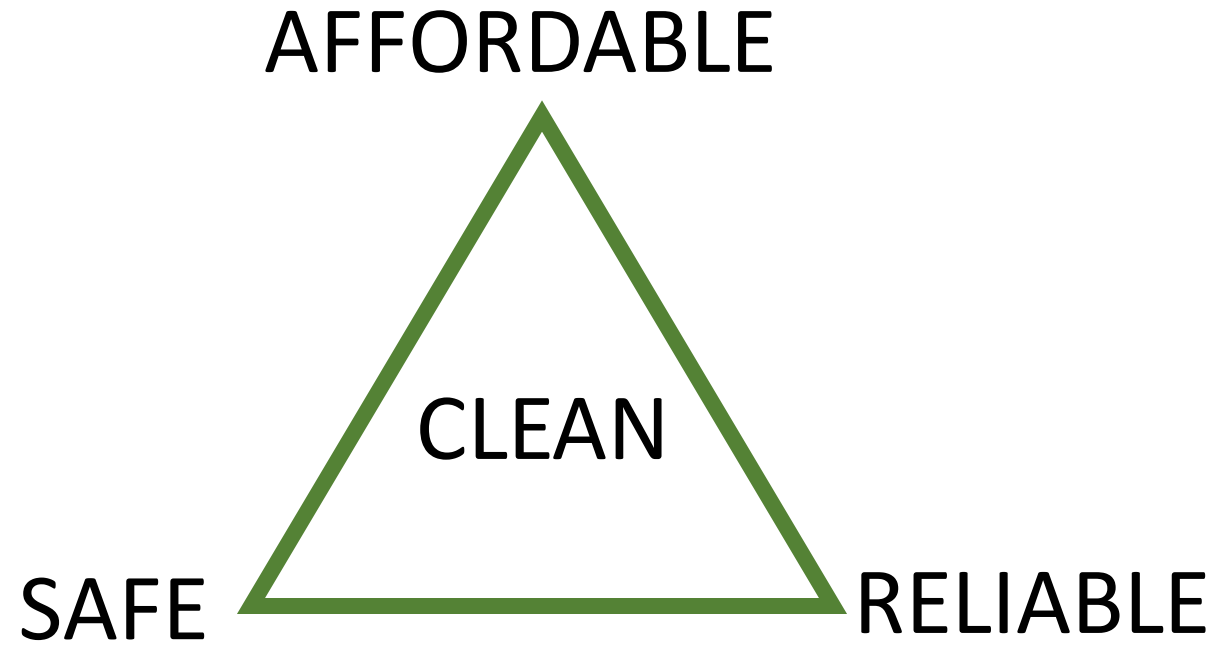


Judith Schwartz, To the Point is an entrepreneur, marketing strategist, and communications professional on the forefront of sustainability, Smart Grid, clean energy, customer choice, stakeholder engagement and low income (LI) consumer programs.

- Former Commissioner on Palo Alto Utility Advisory Commission (four years)
- 20 years in tech sector introducing disruptive technologies (Apple, SGI, Sun, Novell, Logitech)
- 11 years consulting in utility sector (DOE, IEEE, SECC)
- 2018 Led LI Community Solar Working Group (LIEIF)
- 40 years in personal and professional partnership with Ph.D. nuclear engineer who has worked in nuclear, co-generation, solar, storage

Agenda

1. 100% climate goals
2. Compact for universal service?
3. Equitable path forward
 - Hourly carbon accounting
 - Hybrid generation and storage
 - Decarbonize gas supply
4. Implications for City of San Jose



California's Fuel Supply Mix Today



Imports: Natural Gas and Coal



Natural Gas



Large Hydro



Nuclear



Biogas and fuel cells



Biomass



Small hydro



Wind and Solar



Geothermal



Generator



Microgrid/solar/fuel cells



Rooftop solar



Solar Canopies



Community Solar/microgrid

100% Carbon Neutral (\$\$\$ REC's & Offsets)



Imports: Natural Gas and Coal



Natural Gas



Large Hydro



Nuclear



Biogas and fuel cells



Biomass



Small hydro



Wind and Solar



Geothermal



Generator



Microgrid/solar/fuel cells



Rooftop solar



Solar Canopies



Community Solar/microgrid

100% Renewables (California RPS)



Imports: Natural Gas and Coal



Natural Gas



Large Hydro



Nuclear



Biogas and fuel cells



Biomass



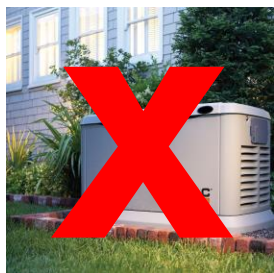
Small hydro



Wind and Solar



Geothermal



Generator



Microgrid/solar/fuel cells



Rooftop solar



Solar Canopies



Community Solar/microgrid

100% Zero Carbon



Imports: Natural Gas and Coal



Natural Gas



Large Hydro



Nuclear



Biogas



Hydrogen (green gas)



Biomass



Small hydro



Wind and Solar



Geothermal



Generator



Microgrid/solar/~~fuel cells~~



Rooftop solar



Solar Canopies



Community Solar/microgrid

Tesla
Power Everything

Prosumer Vision




Convert Sunlight
into Energy


Store Energy
with Powerwall

24/7
Access Backup
Power Anytime

[ORDER NOW](#)



Green Privilege

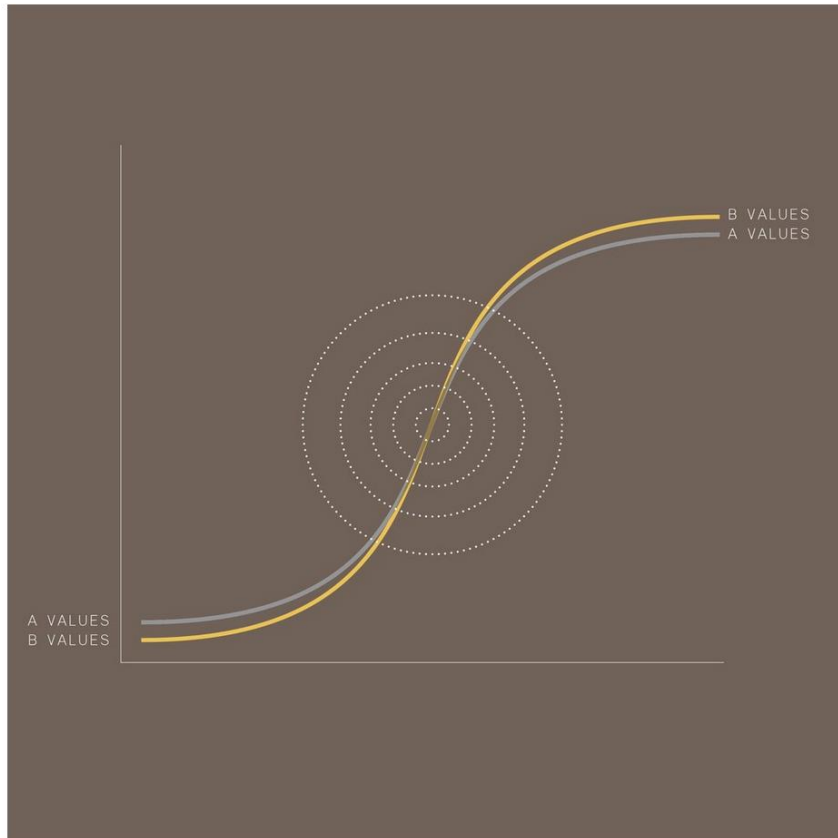
- Energy efficient residence
- Access to solar (rooftop or community solar subscription)
- Walk or cycle to work, school, leisure activities
- Access to EV and/or public transportation
- Net zero lifestyle is an option
- Organic food available from garden, farmers market, local suppliers
- Native, drought-tolerant plants in garden



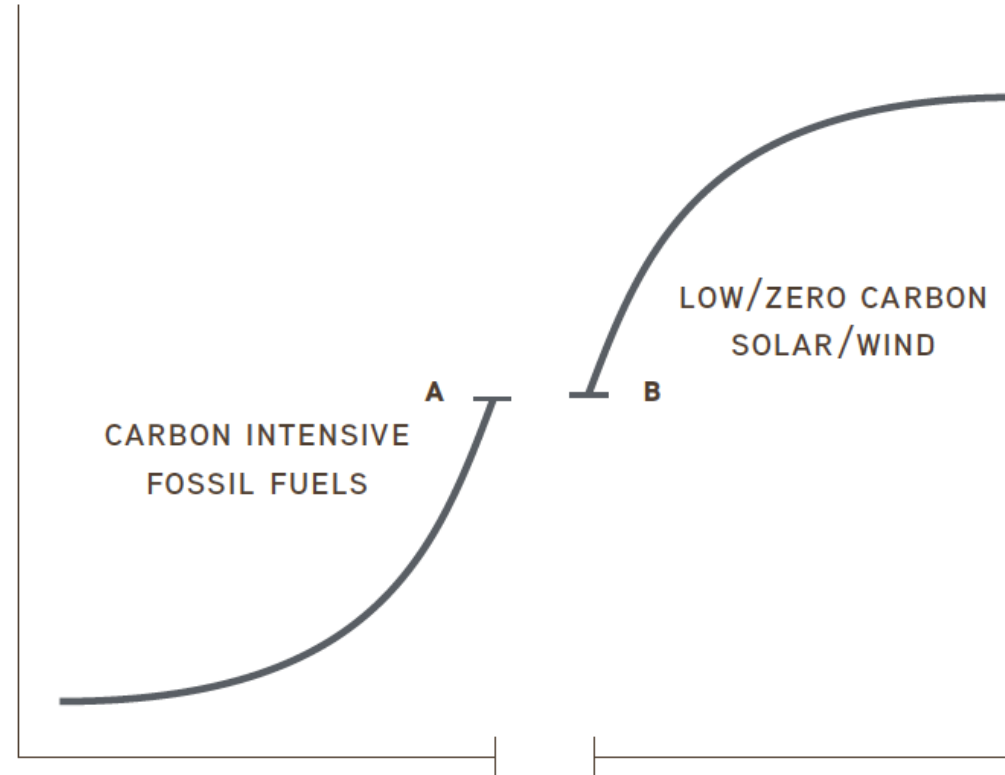
What about our social compact for universal service?

- Substandard housing increases energy burden. Roofs cannot support solar
- Many consumers do not have cash flow for community solar subscriptions
- Long commutes in older vehicles and less efficient public transportation
- Subsistence lifestyle in food deserts
- Mobile homes not eligible for weatherization subsidies
- Landlords may not invest in EE measures, electrification, charging stations
- Cross subsidies for solar NEM, last to be reliant on natural gas

We are at an inflection point



Energy Transitions



<https://www.anewrealitybook.com/>

So how do we make a clean, **equitable** transition?

Hourly Carbon Accounting

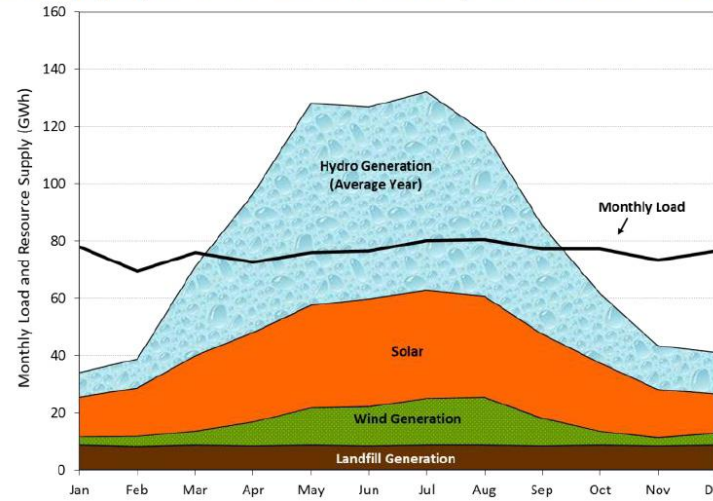
Palo Alto is 100% Carbon Neutral only on annual basis

Natural gas and imports make up short fall

CPAU Load & Resource Balance

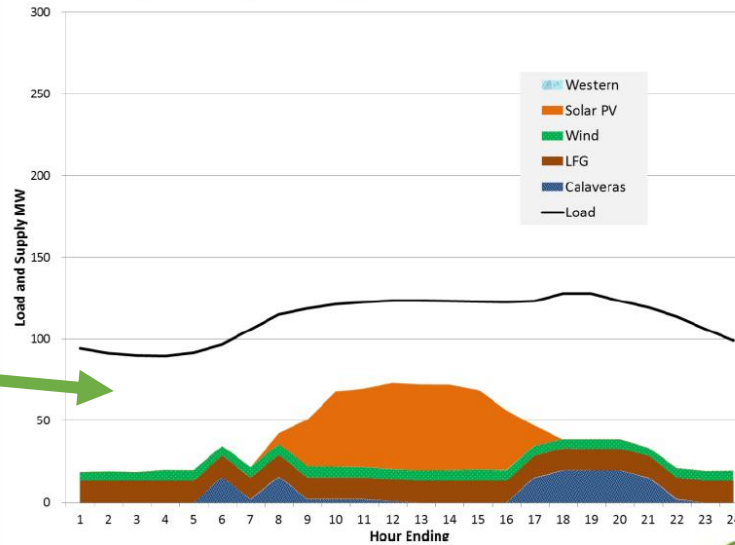
- Palo Alto's electric supply resources vary both hourly and seasonally

Monthly Totals →

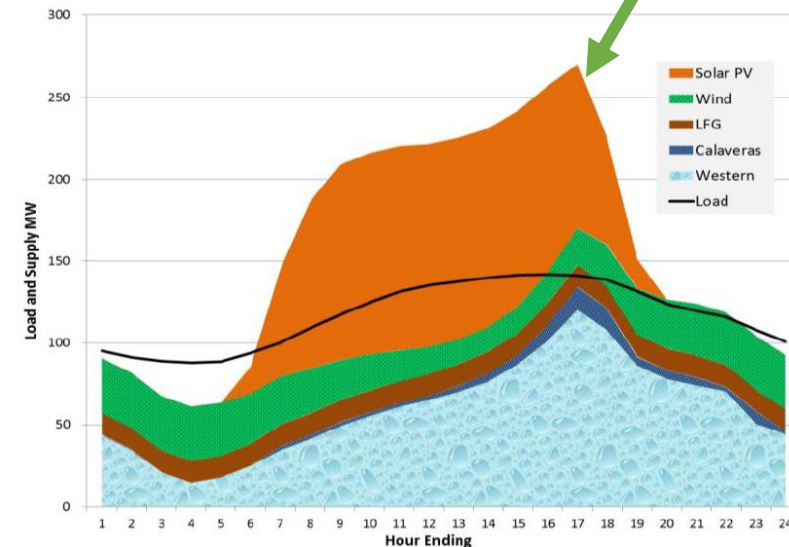


Overgeneration must be curtailed or sold (merchant risk)

January (Average day)

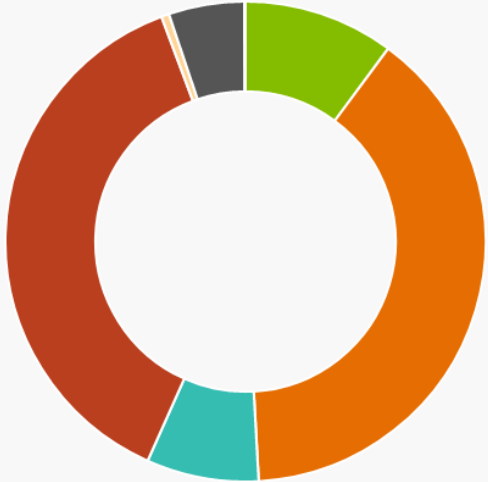


July (Average day)



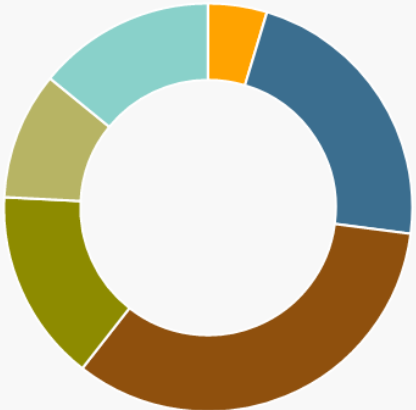
Resources Supplying Electrons on Grid

Current supply AS OF 07:00



- **Renewables**
10.1% (2,229 MW)
- **Natural gas**
39.0% (8,583 MW)
- **Large hydro**
7.6% (1,663 MW)
- **Imports**
37.6% (8,283 MW)
- **Batteries**
0.5% (114 MW)
- **Nuclear**
5.1% (1,121 MW)
- **Coal**
0.1% (16 MW)
- **Other**
0.0% (0 MW)

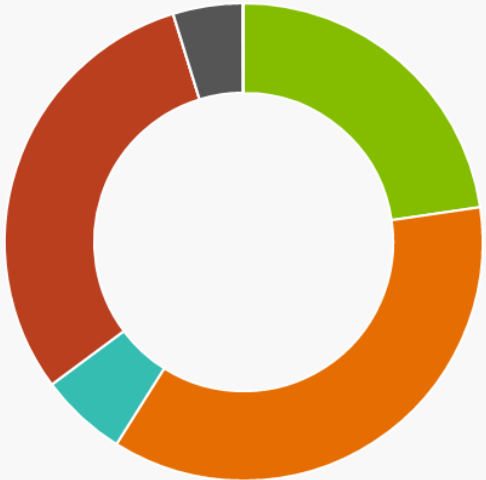
Current renewables AS OF 07:00



- **Solar**
4.7% (104 MW)
- **Wind**
22.4% (499 MW)
- **Geothermal**
33.5% (747 MW)
- **Biomass**
15.3% (340 MW)
- **Biogas**
10.1% (225 MW)
- **Small hydro**
14.1% (314 MW)

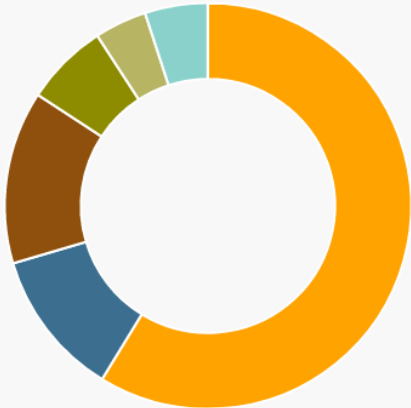
Morning Ramp Reliant on Fossil Fuels

Current supply AS OF 09:25



- **Renewables**
22.7% (5,401 MW)
- **Natural gas**
36.2% (8,631 MW)
- **Large hydro**
5.9% (1,405 MW)
- **Imports**
30.4% (7,240 MW)
- **Batteries (charging)**
0.0% (-22 MW)
- **Nuclear**
4.7% (1,121 MW)
- **Coal**
0.1% (15 MW)
- **Other**
0.0% (0 MW)

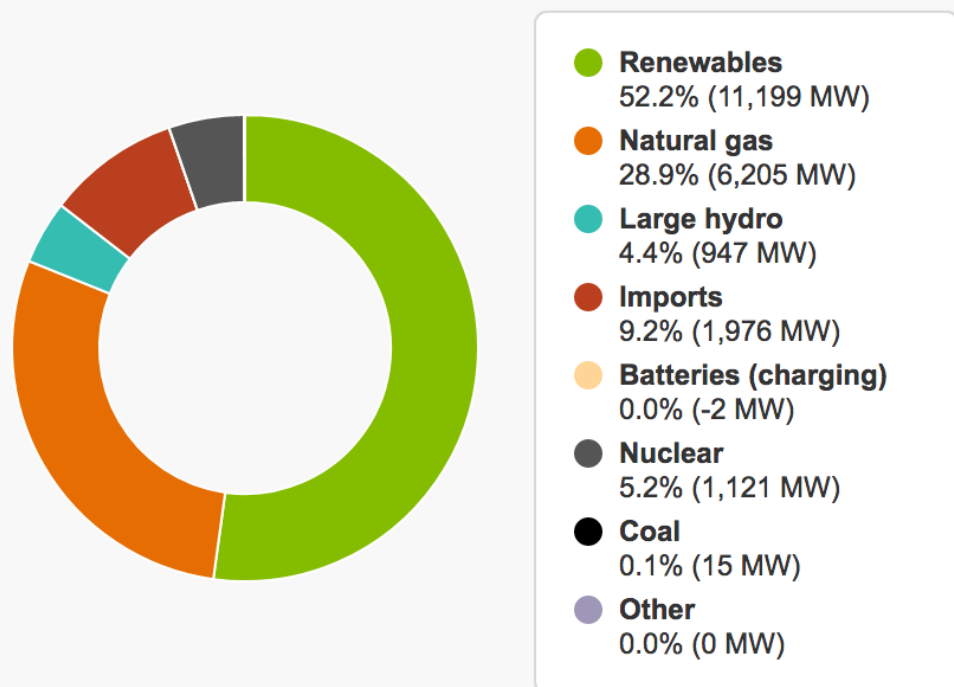
Current renewables AS OF 09:25



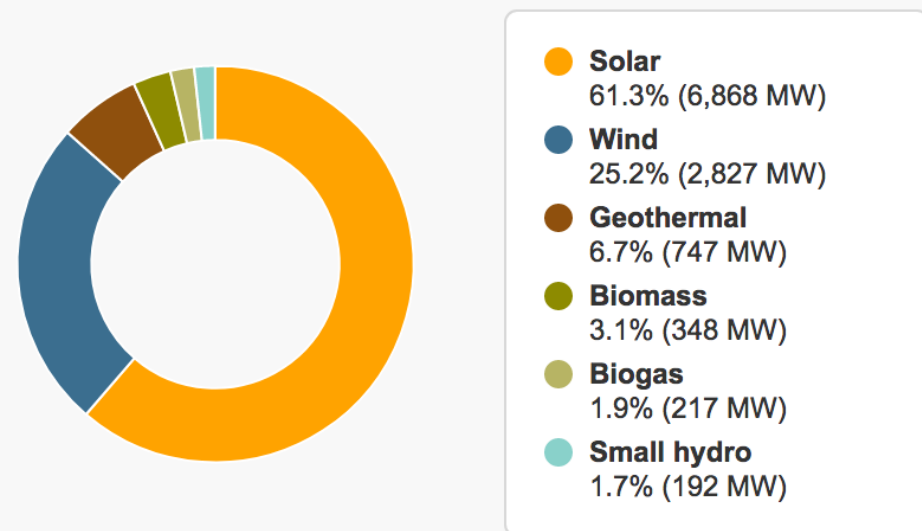
- **Solar**
58.7% (3,172 MW)
- **Wind**
11.7% (632 MW)
- **Geothermal**
13.8% (745 MW)
- **Biomass**
6.6% (357 MW)
- **Biogas**
4.2% (225 MW)
- **Small hydro**
5.0% (270 MW)

Seasonality Impacts Renewables

Current supply AS OF 10:10

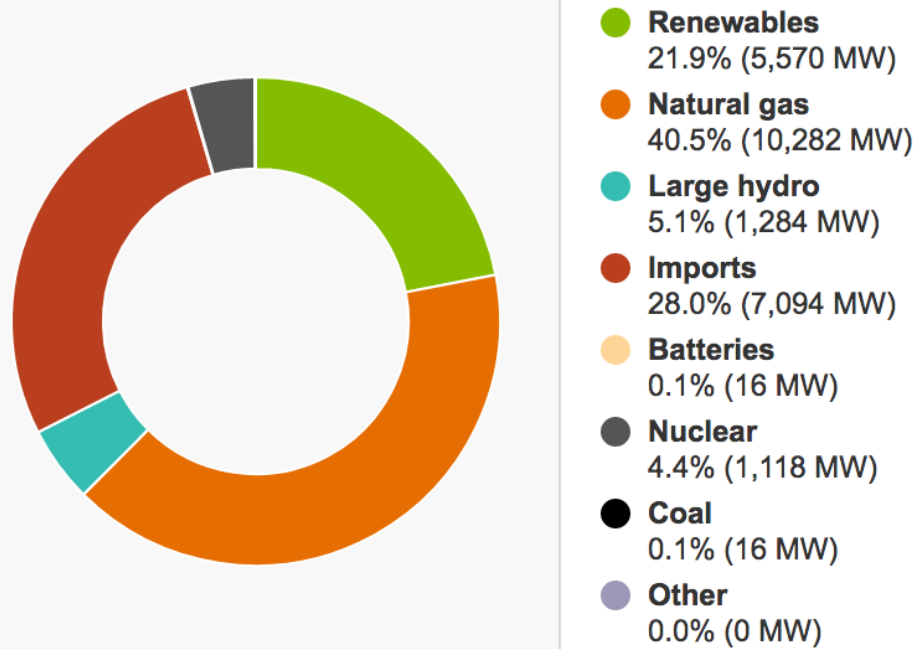


Current renewables AS OF 10:10

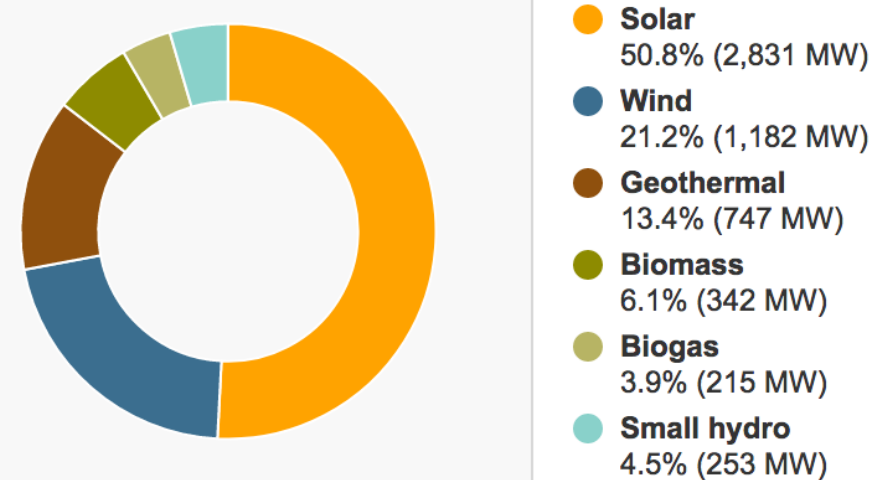


Daily Weather Affects Fuel Mix

Current supply AS OF 14:25



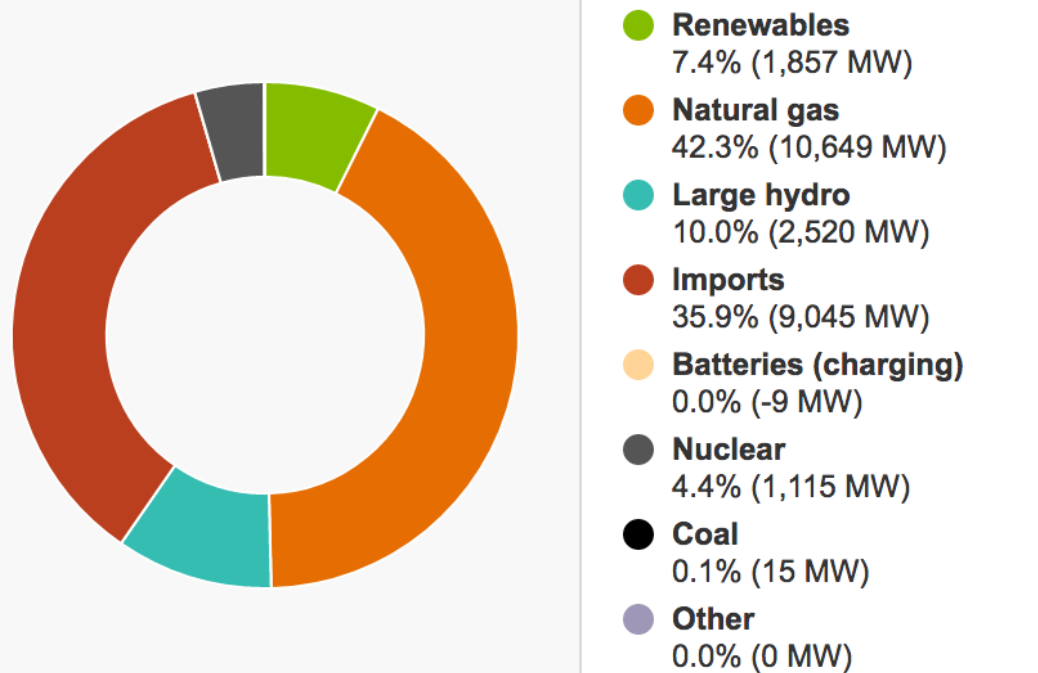
Current renewables AS OF 14:25



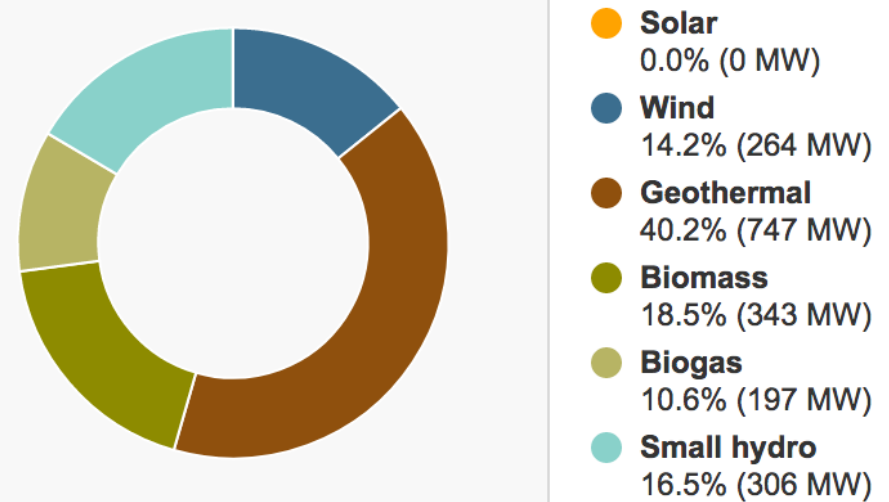
CAISO November 27, 2:27 PM (rainy day)

Overnight Supply Does Not Include Solar

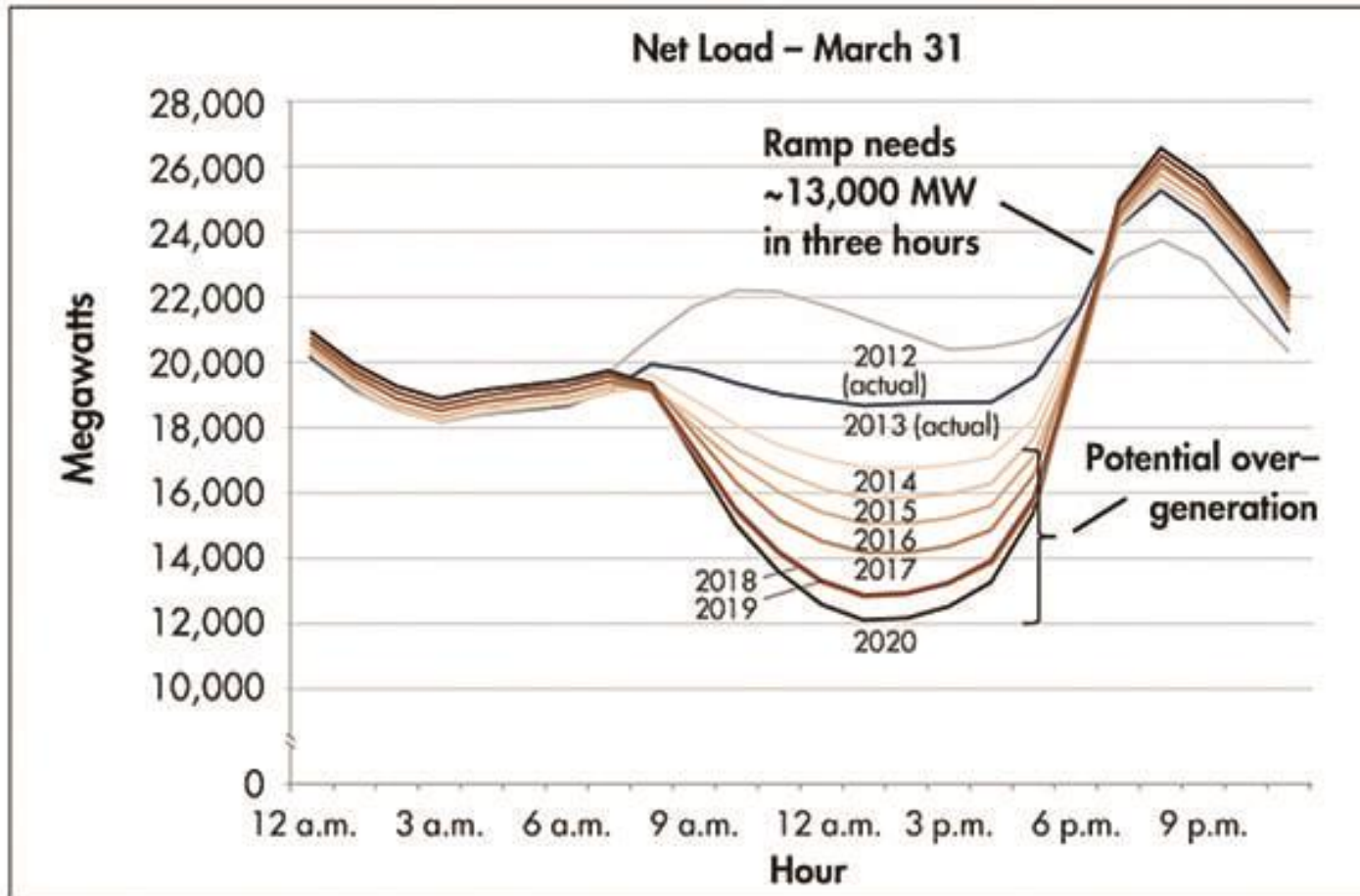
Current supply AS OF 21:30



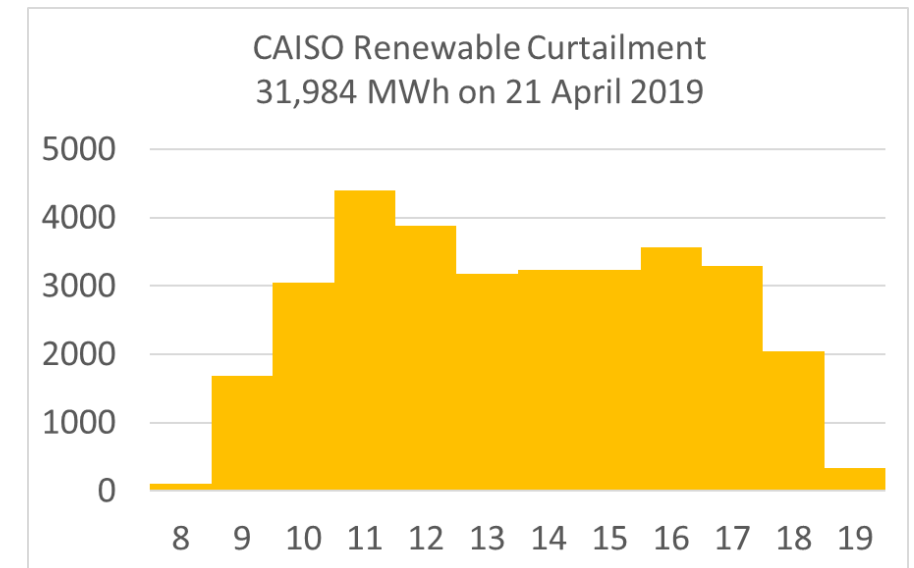
Current renewables AS OF 21:30



Duck Curve



Daytime
Over-generation =
Curtailment

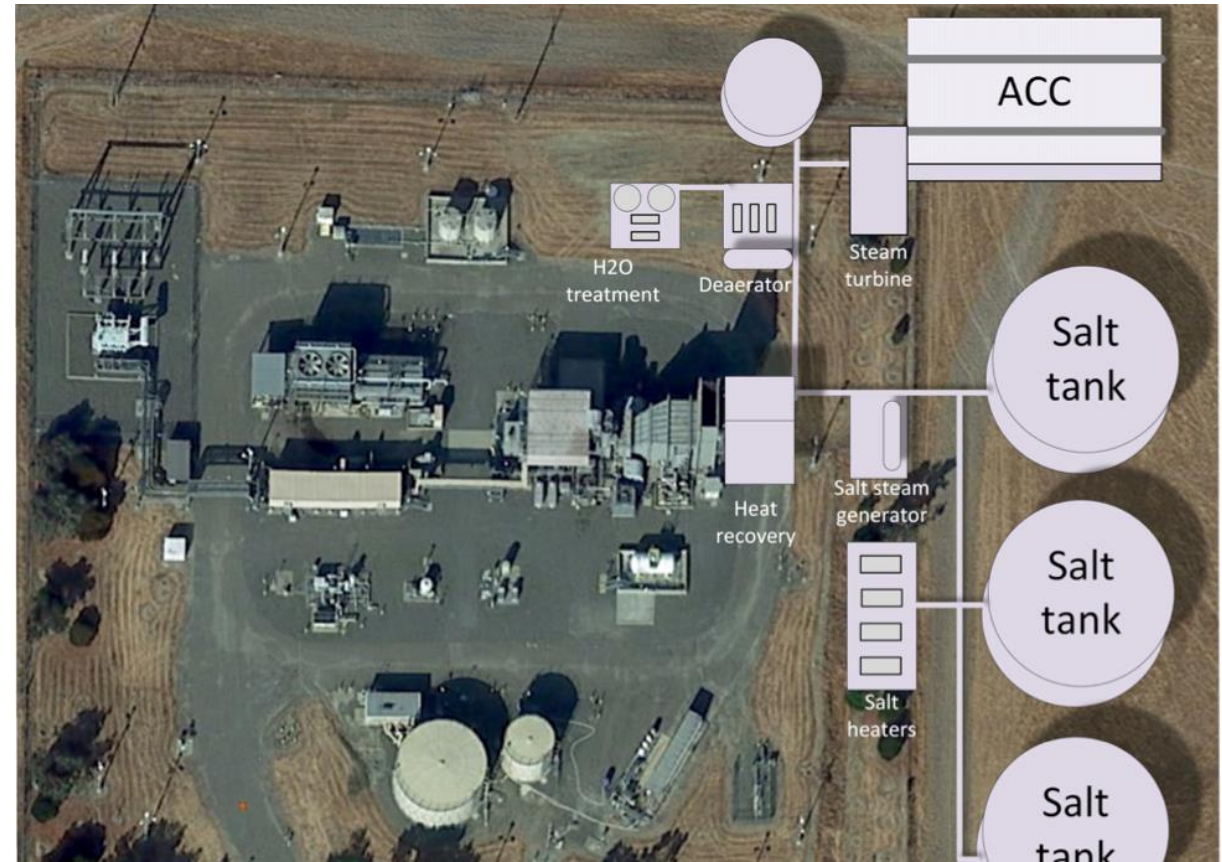


More Solar Can Result in More Curtailment

“ Just purchasing more solar energy in a grid that already has lots of solar generation will not result in zero emissions.

SALLY BENSON

Director, Precourt Institute for Energy and Professor of Energy Resources Engineering



Hybridize Thermal Generation and Storage

Source: Pintail Power

- Transform existing gas power plants into flexible, dispatchable storage
- Reduce carbon impact immediately by 50%
- Increase utilization of renewables while avoiding curtailment
- Provider buffer for privately-owned DERS contributing to supply



Hydrogen Plant



Gas network map of Palo Alto

Decarbonize gas supply

- Reduce carbon content further with lower carbon fuels
- Hydrogen and renewable bio fuels are being commercialized
- Easier than replacing existing infrastructure

Key Takeaways

1. 100% aspirational climate goals are not interchangeable
 - Lack of reliability and economic sustainability of suppliers can interrupt service
 - Choice and incentives work better than coercion
2. Green privilege strategies overlook compact of universal service
3. Accurate hourly carbon accounting is needed for good decisions
 - Supply must always match load (Time-Coincident)
 - Duck Curve + curtailment of solar overgeneration solved by long-duration storage
4. Hybrid generation and storage can cut carbon and retain reliability
5. Decarbonizing gas supply can lower carbon further
6. Discuss implications for City of San Jose ownership of a utility

What will it mean to own your own utility?

- Full responsibility to keep lights and heat on 24 x 7, safely and affordably
- Staffing of unionized employees (hard to recruit, manage and train)
- 30-40% of SJ residents are income qualified for discount rates
- Many have chronic difficulty paying bills (payment and arrearage plans)
- Unless SJ owns generation within city limits, still dependent on PG&E for transmission and delivery of electricity and gas (legacy support?)
- Islanded electric microgrids have demonstrated success for emergency centers, not day-to-day operations of large service territories to all
- CCAs have responsibility for power purchase agreements and sales, not full customer service, distribution and transmission, billing, EE and arrearage programs, connection and disconnection of meters

WE

Western Energy®

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Western Energy Institute

Chelan PUD's
Proposals to
Reinvigorate
Hydropower

BC Hydro
Sites a
Substation in
Downtown
Vancouver

Pathways to
Delivering
on Carbon-
Free Goals

Operations
Security
in Utilities:
Assessing
Your Risk

WEI 2020 THEME ANNOUNCED

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TACOMA POWER USES ADVANCED ANALYTICS TO OPTIMIZE FISH PASSAGE

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Sunset over the Congenra solar array in Tucson, Arizona. (David Sanders, Tucson Electric Power)

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The role of aspirational targets

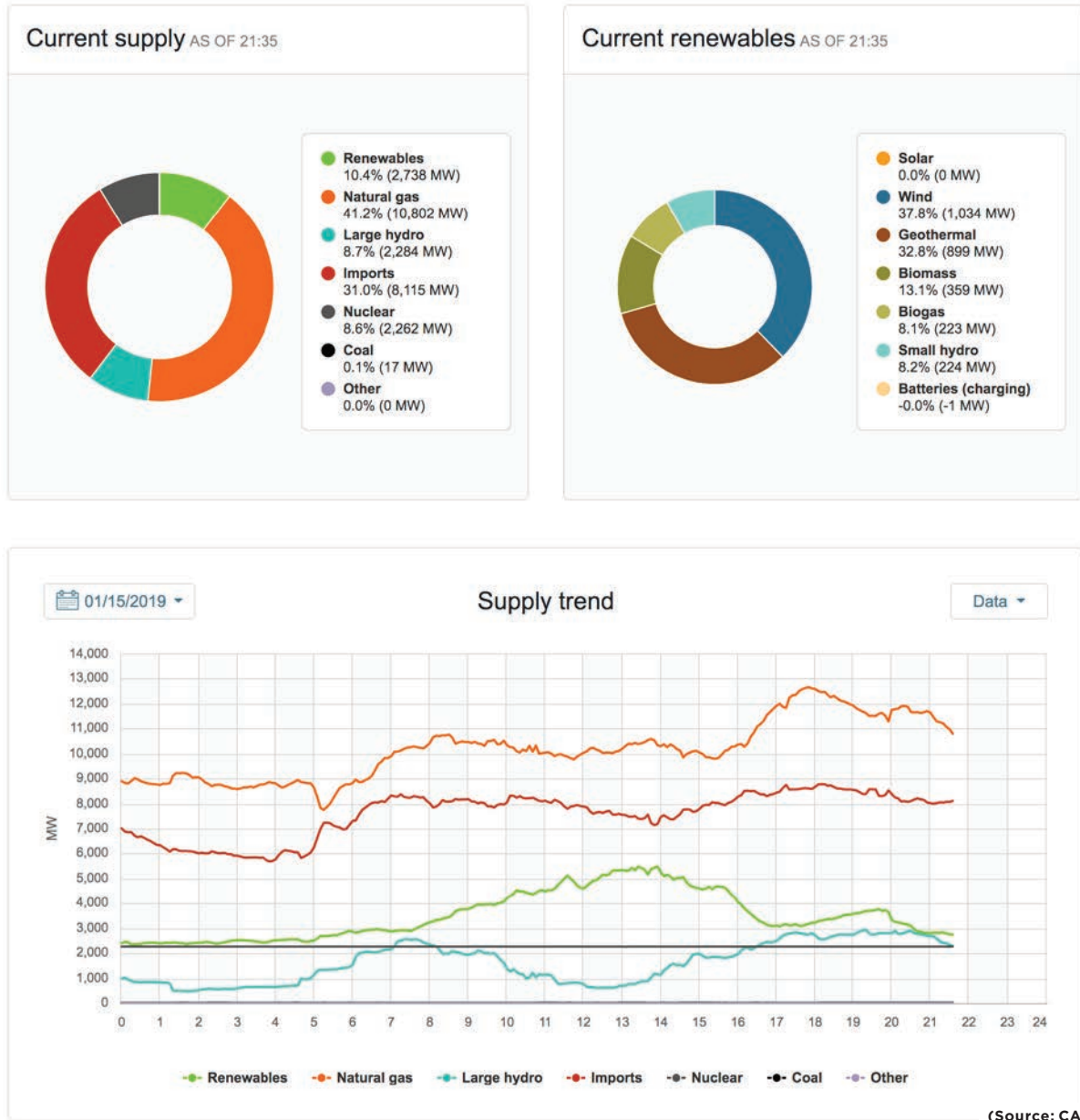
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California ISO Today's Outlook: Supply (as of 21:35 1/15/19)



seasonally, so energy providers must still procure electricity, which may not be carbon-free, to keep the lights on at night and in the early morning hours. Claims of carbon neutrality rely on the purchase of renewable energy credits or offsets (which may help displace coal or natural gas in other locations) instead of actual carbon reduction at all hours.

100% renewables requires electricity and heat to come only from solar, wind, geothermal and hydro. Renewables also include biofuels and landfill gas, which are not carbon-free. In California, large hydro and nuclear are not included in renewable portfolio standards (RPS), which is counter-productive if the primary goal is reducing carbon.

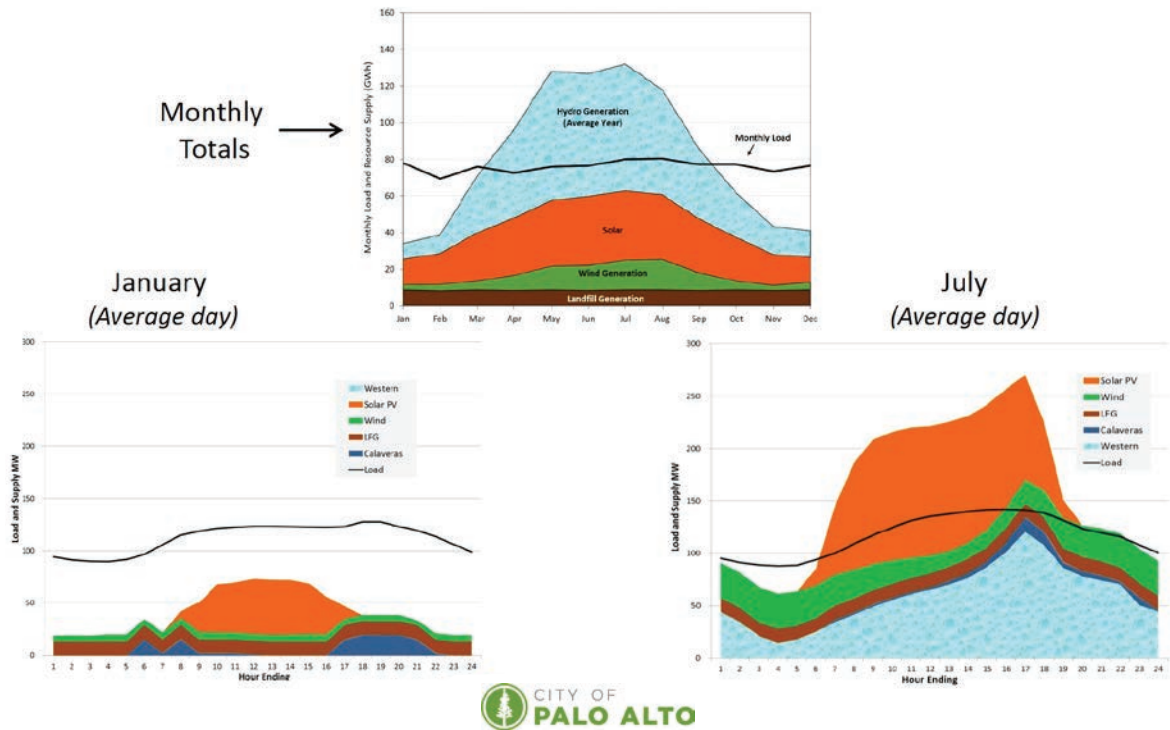
100% zero carbon or carbon-free requires electricity to come only from nuclear, hydro, solar, wind and geothermal

resources. These may not always be the least-expensive resources available, which is an important consideration for regulators, utilities and customers.

Match coincident supply and demand

Aggressive carbon reduction targets rarely reflect the physical constraint of keeping the grid in balance. Electric power must be produced and consumed simultaneously. Increasing amounts of renewables create new challenges, such as the management of distributed resources controlled by independent private owners, the overgeneration of wind or solar during certain hours, the use of fast-balancing assets to offset intermittent output (when clouds appear or winds shift) and fast ramps. A prime example is the Duck Curve, which occurs when solar production falls off and demand dramatically increases as

CPAU Load & Resource Balance Palo Alto's electric supply resources vary both hourly and seasonally



(Source: City of Palo Alto)

people come home from work and turn on air conditioning, appliances and charge EVs. Conversely, charging EVs when solar production is at peak, has the potential to provide storage and avoid curtailing excess solar.

Winter nights are particularly challenging for zero-carbon resources other than nuclear, geothermal and hydro. According to the California Independent System Operator (CAISO), natural gas and imports (mostly thermal) provide 72% of overnight supply. If all building heating is electrified, it will push the percentage even higher.

California reached its 30% RPS target in 2018, ahead of the 2020 schedule, and has now mandated 60% renewable generation by 2030. Yet the state already experiences frequent solar curtailment (shutting down generation) and negatively priced energy in the Day Ahead Market. The impact on carbon has been modest because these renewables have only recently offset the loss of the San Onofre Nuclear Generating Station and forced the less-efficient operation of fossil fuel plants.

The price of aspirational goals

The Green New Deal proposed in Congress calls for a “10-year mobilization” to make the U.S. carbon-neutral. The New York Times reports, “it would require shifting completely away from fossil fuels and supplying 100% of the country’s electricity from carbon-free energy sources” (again conflating two distinct targets). Reservations are not restricted to political opponents. One can share climate concerns yet still be sensitive to the societal impacts of a transformative vision.

Even if commercially available technology existed to make a full transition over the next decade, stranding so many still-functional assets would be financially ruinous to those who underwrite capital-intensive infrastructure. Profit-free cost-of-service fees would raise utility bills substantially. Anyone who has worked in the ecosystem of regulated utilities knows that while regulators can certainly incentivize the sector to modernize faster, it is not practical to meet accepted levels of reliable, safe

and affordable electricity, and provide universal service for all in such a tight timeframe.

Ecotopian vision reinforces inequity

A popular vision of the future assumes self-sufficient “prosumers” who produce energy via solar on the roofs of all-electric homes and share battery storage with neighbors. They walk, cycle and rideshare in EVs to go about their days. This well-intentioned model leaves behind most low-and moderate-income (LMI) families who can’t afford to participate. This also includes many renters or those keeping carbon footprints small with modest, well-shaded homes and no air conditioning.

Short-duration batteries can help with peak shaving and load shifting to take advantage of time-varying retail rates, but most residential battery installations can’t charge EVs and keep homes running all night. In most service territories, overnight charging and heating is reliant on thermal (natural gas) electric generation, so the carbon is just emitted elsewhere.

Even when private solar arrays produce the total amount of energy consumed by the household daily, grid-connected prosumers still rely on utility infrastructure to provide electrical service 24/7. This leads to unintended inequities:

- Net meter payments at retail prices are subsidized by LMI customers and nonsolar residents;
- Higher bills typically associated with all-electric homes strain those already struggling with their energy burden;
- Most disadvantaged residents do not have adequate cash flow to participate in rooftop or community solar programs with seasonal or deferred payback benefits;
- LMI residents are more likely to own older, less-efficient vehicles and endure long commutes; and
- If nighttime capacity costs are not recovered, the burden of socializing legacy resources will fall disproportionately on those least able to afford it.

Four pathways towards a more-practical and equitable transition

I. Improve energy literacy education

Policymakers may be unaware of all the practical implications of goals and mandates. The utility sector should act quickly to engage stakeholders, offer alternative paths to accomplishing substantial carbon reduction, and work collaboratively with schools and universities. Only then can those responding to concerns of impending climate crisis understand why the transition demands deliberate progress.

Effective education, outreach and analysis must include in-depth, factual discussions of trade-offs with resiliency, cost and safety.

- What happens during extreme weather events or extended emergencies if everything is electrified, household batteries are depleted and EVs can't be recharged for evacuation?

- If utilities preemptively shut down service in order to meet safety concerns and reduce the potential for wildfires, will more consumers adopt fuel-burning backup generators?
- Will Americans accept more-modest lifestyles where we embrace smaller, more energy-efficient homes and avoid rebuilding in areas prone to flooding and wildfires?
- Are we considering the total carbon lifecycle impacts of creating and recycling solar panels and batteries and their performance in extreme conditions?

2. Adopt transparent, precise and meaningful carbon accounting

An early claimant of 100% carbon neutrality on an annualized basis, the City of Palo Alto, California, operates its own electric, water, natural gas, wastewater and fiber utilities (CPAU). Its city council adopted carbon-reduction goals exceeding the state of California's already-ambitious targets. Palo Alto has no dispatchable generation within city limits and relies on Pacific Gas & Electric Company for transmission and real-time delivery of supply. CPAU renewable supply purchases are not coincident with the city's load at every hour of the day, especially during winter months. CPAU sells excess hydro and solar and buys market power (offset by RECs) to maintain its carbon-neutral status, often misunderstood by residents to mean zero carbon. As noted by a recent Stanford University study, "Considering only annual or country level carbon intensity data will lead to erroneous carbon accounting and, ultimately, inefficient investment."

CPAU staff are proposing a more-accurate, daily/hourly accounting methodology to communicate what is really happening so that individual customers can make informed decisions. Palo Alto has the opportunity to demonstrate true leadership with a more-accurate and replicable low-carbon model. Cities and companies

that achieve 100% goals through accounting mechanisms may help the environment on a short-term basis. However, to truly impact global carbon levels and maintain systemwide reliability, innovators must embrace diversified, low-carbon portfolios that consider environmental attributes of location and time.

3. Embrace hybridization to use less gas

Hybridization as a fast, reliable path to decarbonization applies to transportation and long-duration storage. Plug-in hybrid vehicles allow all-electric operation when possible, reduce the overall carbon impact of the vehicle and avoid range limitations when charging stations are unavailable. During emergency conditions, when direct solar charging capacity would be limited, evacuations and deliveries can continue.

Low-cost, long-duration hybrid storage integrates renewables with low-carbon flexible capacity to decarbonize power generation. Hybrid storage cuts fuel consumption in half compared to simple cycle combustion turbines. This directly reduces GHG emissions from gas generation used to back up renewables, minimizes curtailment to enhance renewable profitability and can be dispatched throughout the night, while adding low-carbon capacity to meet peak demand. With CO₂ emissions from gas generation expected to exceed 3 gigatons per year by 2030, cutting fuel consumption in half by using long-duration, GWh-scale storage would have a significant impact, especially in places like California with a large, installed base of gas generation and an increasing abundance of excess renewable energy.

Hybrid storage enables utilities to continue to generate power during extended weather events, keep water pumping and treatment stations operational, and reduce the need to rely on consumers to shift load on peak days. Yet, overall carbon impact is reduced.



Plug-in hybrid electric vehicles at the Energy Systems Integration Facility in Colorado. (Dennis Schroeder, NREL, 28217)

4. Decarbonize further with less carbon-intensive gas resources

Rather than take on the Herculean task of retrofitting thermal infrastructure in millions of homes, businesses and the power sector, a more cost-effective decarbonization approach is to reduce the carbon intensity of gas supplies. The renewable fuels movement is actively developing and testing alternatives such as hydrogen, biomethane and biomass to provide lower-carbon replacements delivered via the existing natural gas network and energy suppliers. As these fuels become competitively priced, they can be substituted for natural gas, thereby preserving jobs, energy independence and reliability.

Why we can't just leap into a zero carbon universe

Any real solution to reduce carbon in our electricity supply is dependent on the fundamental principle of coincident demand and supply. To maintain safe, reliable and affordable electricity for everyone, decarbonization deadlines must be realistic about the proportion of thermal resources to be replaced. All the carbon taxes, cap and trade programs, market designs, renewable energy credits, and tax incentives in the world cannot reduce carbon and deliver electricity around the clock without well-managed utilities to facilitate integration of distributed energy resources. We need well-informed environmental advocates and

leaders bringing passion and talents to the energy sector so their vision can be realized reliably and sustainably.

JUDITH SCHWARTZ is president of To the Point, a human-centered design consultancy focused on consumers' engagement with sustainability issues, the Smart Grid, alternative energy, dynamic pricing, low-income programs and the digital home. She consults to utilities, national organizations and research companies, and is a former commissioner on the Palo Alto Utility Advisory Commission.

San Jose Clean Energy Advisory Commission Process Ad-Hoc Committee Report

December 10, 2019

Gerald Gottheil

Reza Sadeghian

Richard Zahner

Status

- 12 issues and possible solutions/next steps identified
- Ad Hoc committee requests approval from the Commission to proceed to investigate further and/or implement solutions as appropriate

Item 1: Process and procedural questions slow meetings, impede ability to work

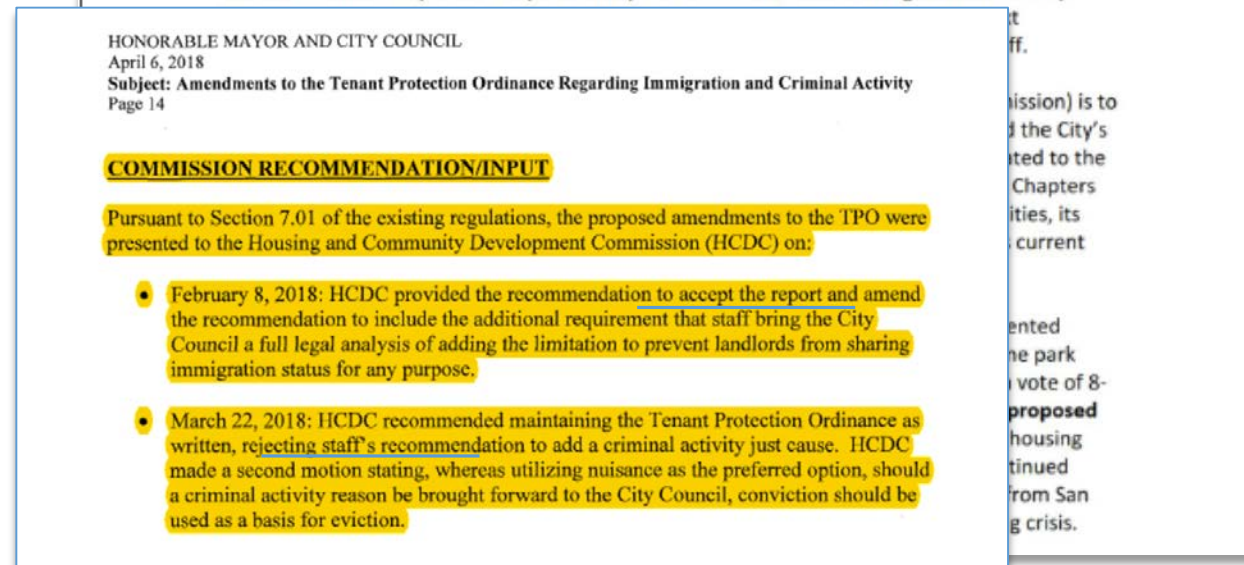
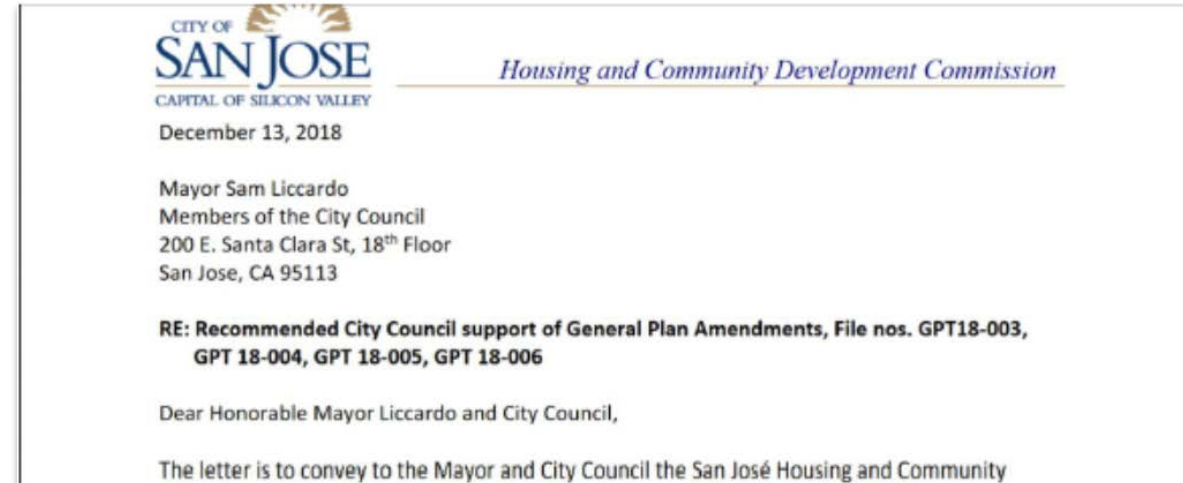
- Since we do not have decision authority, investigate exemption from, or greater flexibility within, Brown requirements
- Develop guide on how to agendize items, include lead times and interactions needed with other commissions, staff and/or council
 - Flowchart of actions to get items on agenda
 - Schedule of other relevant meetings (T&E, Council)

Item 2: Commissioners' expertise not being used effectively

- Associate areas of expertise or interests with each commissioner
- Technical or specialized agenda items could be referred to Commission's internal expert for review and report back
- Invite commissioners to present in their areas to the full commission
- Invite external experts to present to the Commission
- Increase communication to the public, aim for greater community attendance

Item 3: Providing substantive, professional comment to Council

- Develop form/template for CECAC letters
- Create digital letterhead for memos (as provided in Policy 0-4)
- Sections/subheads could include: recommendation, background, pros and cons, impact summary, action/vote count
- Expand content contributed to Staff memos, where appropriate



Item 4: Minutes do not reflect work done in meetings, have little informational value

- Investigate detailed minutes with City Clerk
- Commissioners could volunteer to provide summary for an issue/discussion, to be approved with minutes at next meeting
- “No action” items could also be recorded
- Added detail in minutes would follow (match) the agenda items
- Result would be more meaningful to community, potential commissioners, council members, and provide source documents for the annual report (see Item #11)

Item 5: Better communication with Council could improve effectiveness

- Engage our council liaison for communications with the Council and in developing the work plan as described in Section IV-b of Policy 0-4
- Consider asking for new liaison to be matched with member who has the most interest and bandwidth

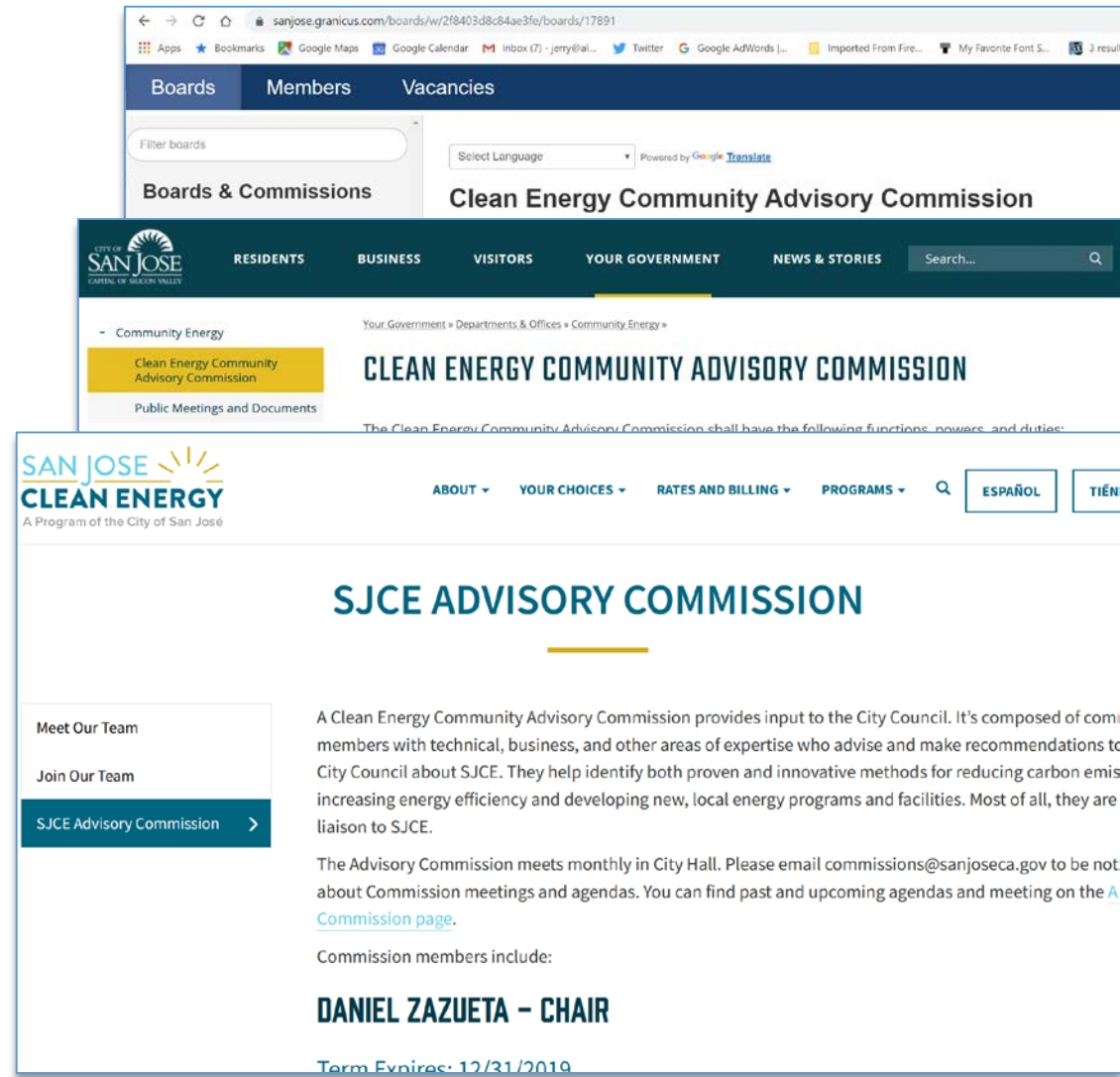


Item 6: How can we increase our awareness and impact?

- Developing simple procedures can make us more efficient
- Better communications can increase awareness and credibility
 - More detailed, substantive, and professional memos to Council (Item 3)
 - A comprehensive, easy to read annual report (Item 11)
 - Improved relationship with liaison to aid communication to Council (Item 5)
 - Web presence that better communicates CECAC work
 - Community liaison activities
- Other?

Item 7: On line information is disjoint across multiple web pages, impossible for public to follow

- Information disjoint across SJ site, SJCE site, SJ Granicus, SJ Doc Center (different location since the new SJ site rolled out?)
- Information missing, very difficult to find for Commissioners, Council, Community
- Agendas, minutes, handouts, work plan, bylaws, mission (varies across locations), members/bios
- Consolidate and point to locations
 - Add/update information as needed
 - Catalog information for easier look-up



Item 8: Members do not always receive information on topics prior to meeting

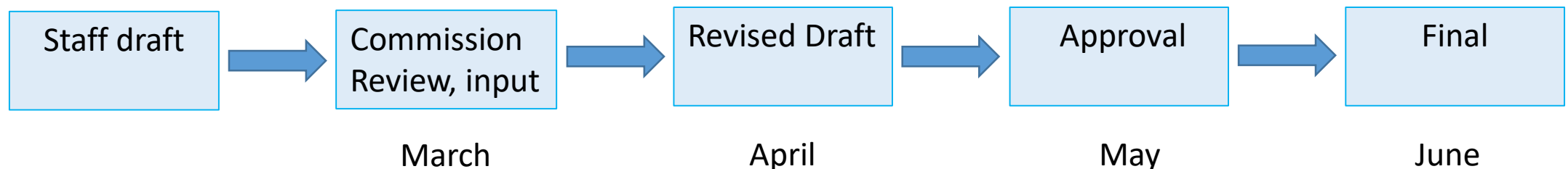
- Adopt guidelines for pre-read materials; revise bylaws accordingly
- Where possible, information read in advance instead of presented during meeting
- Commission can vote to accept information not submitted in advance
- Include action expected from Commission for each agenda item

(For example only)

Type of information	When required
Minutes, discussion summaries	At least 3 days prior to meeting
Reports and presentations	7 days
Updates	0-3 days

Item 9: Process needed to insure annual report is on time, complete, has CECAC input and review

- Annual report is required by City policy and documents CECAC work for community, staff and council
- Develop a process and schedule for input, development, and review of a professional, credible, readable report
- Detailed minutes (see Item #4) can provide source documents for the annual report (Housing Commission has used this process –sample available)



Item 10: Difficulty of communication outside of meetings reduces efficiency of the commission

- Use Google Docs for draft documents:
 - It can be open to the public (view only) and a link on our web page
 - Only Commissioners will have editing rights
 - Commissioners get email notifications when documents are loaded/changed
 - Google Docs offers version control

Item 11: How do we get new commissioners up to speed quickly?

- Prepare a new commissioner onboarding package
 - Key documents
 - Webs sites
 - Links
 - Procedures
 - other

Item 12: Meeting times are inconsistent, can run long

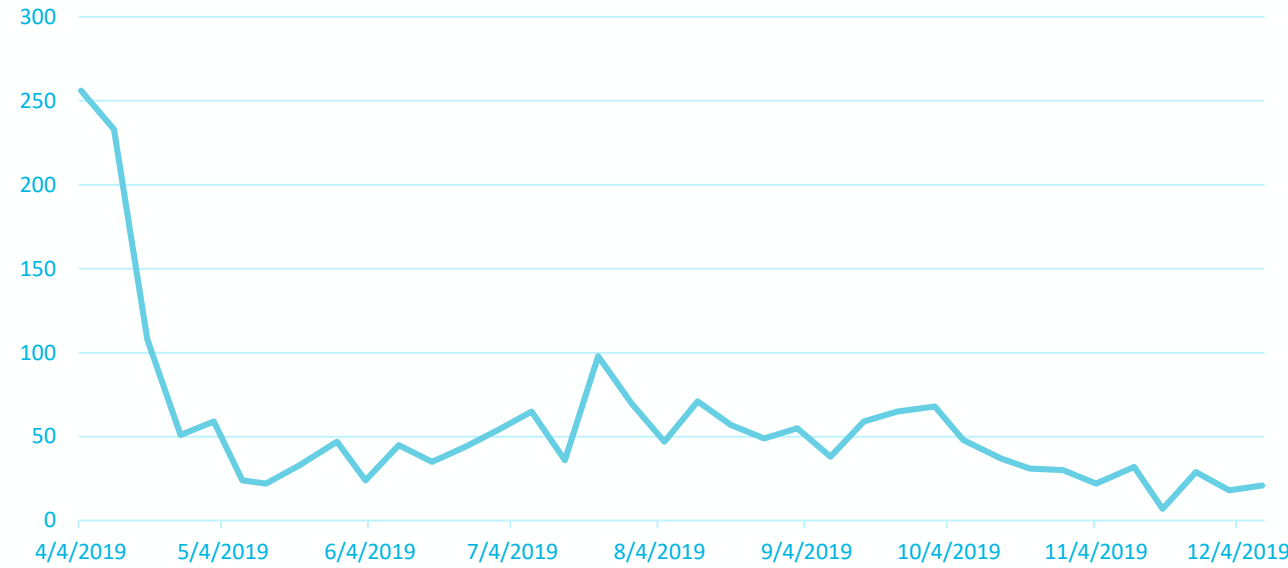
- Make it a practice to put times next to each agenda item
- Limit meeting to 2 hours
- Limit public comment to 2 minutes at beginning of meeting
- Adopt a set time (e.g., 1st Tues of each month) with rare exceptions

ENROLLMENT

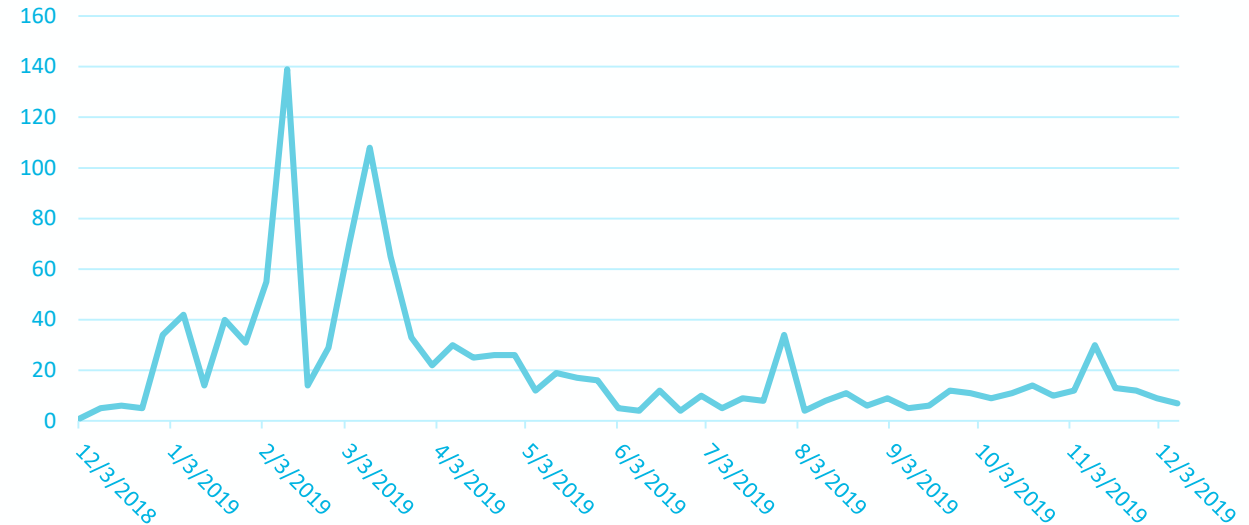
As of:			
12/9/2019			
<u>Opt-out</u>		% of TOTAL	Since last week
# of accounts :	5,370	1.61%	21
<u>Opt-up</u>			
# of accounts :	1,211	0.37%	7

<u>Rate</u>	<u># of Opt-outs</u>
RES	21
Small COM	-
Large COM	-

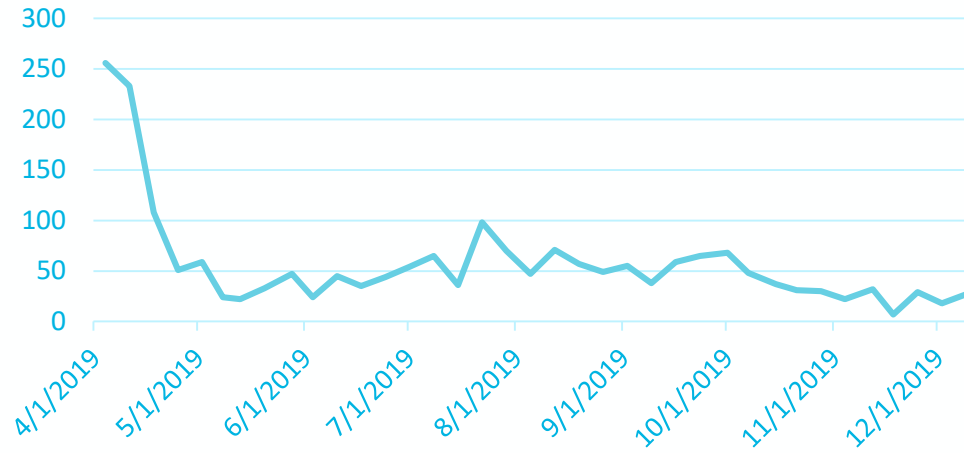
SJCE Opt Outs Per Week



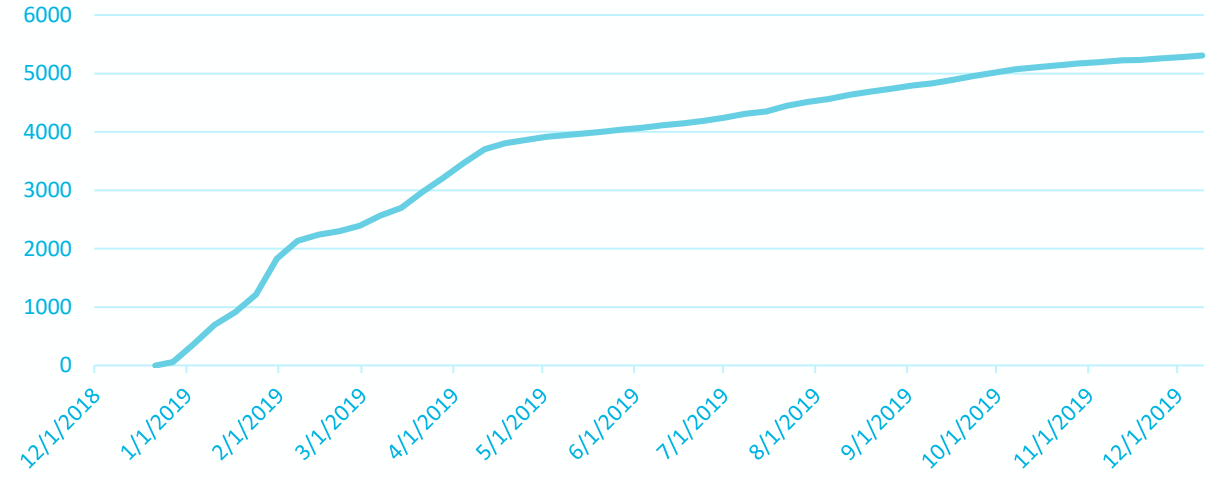
TotalGreen Enrollment per week



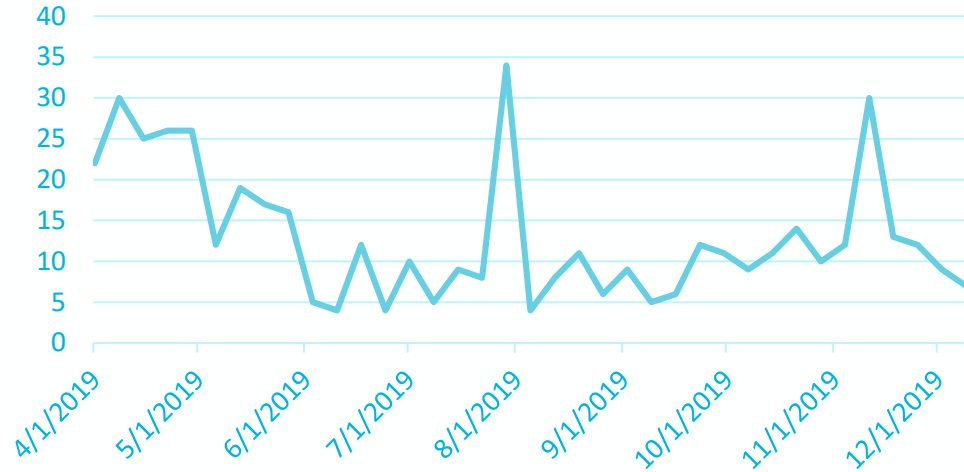
SJCE Opt Outs Per Week



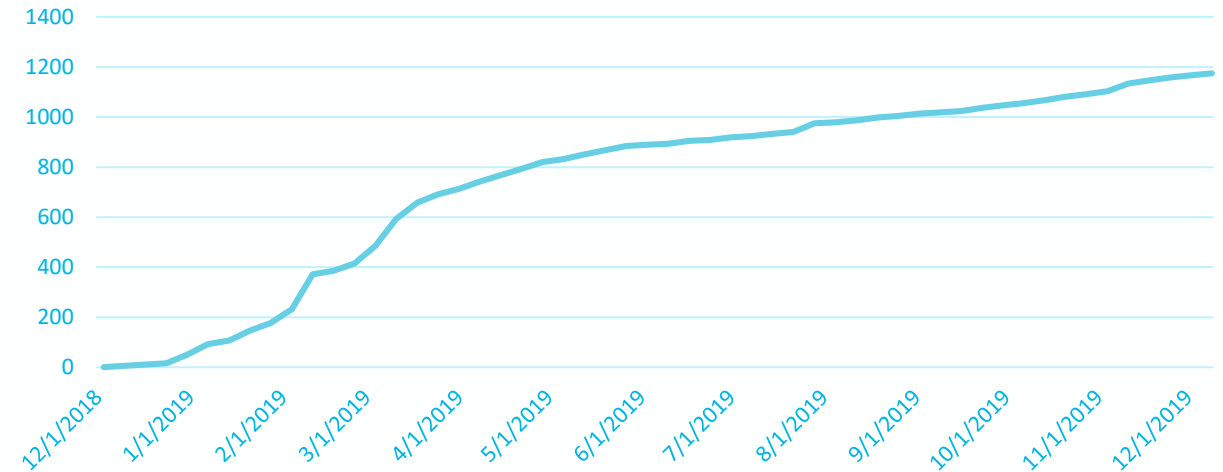
SJCE Total Opt Outs



SJCE Opt Ups per Week



SJCE Total Opt Ups



THIS MONTH'S OUTREACH EVENTS

- Dec. 2 – **Presentation to Welch Park Neighborhood Association** / *Spanish speakers, D5*
- Dec. 3 – **Bilingual Storytime** at Joyce Ellington library / *Spanish speakers, D3*
- Dec. 3 – **Presentation at Manufacturing Sustainably: A Guide for Manufacturers** / *Manufacturers*
- Dec. 5 – **Tabling at Climate Smart Youth Leaders Student Showcase & Celebration** at East Side Union HS District / *D4, D5, D7*
- Dec. 10 – **Presentation at Adult ESL Class** at Latinoamericana Library / *Spanish speakers, D3*
- Dec. 11 – **Tabling at Día de la Virgen** at Guadalupe Church / *Spanish speakers, D3*
- Dec. 14 – **Panel discussion with Silicon Valley Democratic Socialists of America**
- Dec. 15 – **Presentation at Guadalupe Church** / *Spanish speakers, D3*

UPCOMING OUTREACH EVENTS

- Jan. 18 – **Presentation to Penitencia Neighborhood Association** / *D4*
- Jan. 21 – **Presentation to Santee Neighborhood Association** / *Spanish speakers, D7*
- Jan. 27 – **Presentation to Tropicana-Lanai Neighborhood Association** / *Spanish speakers, D7*
- Feb. 5 – **Presentation to Mt. Pleasant Neighborhood Association** / *D5*
- Feb. 24– **Presentation to Roundtable Neighborhood Association** / *Spanish speakers, D2*

OTHER

- SJCE website: <https://www.sanjosecleanenergy.org/news/upcoming-san-jose-clean-energy-community-events> *or*
<https://teamup.com/ksemh3rvxychpi9gik>
- Documents: <https://www.sanjoseca.gov/your-government/department-directory/community-energy/public-meetings-and-documents>
- Survey ongoing
 - English: <https://www.surveymonkey.com/r/2T5J96X>
 - Spanish: <https://www.surveymonkey.com/r/2M2BLJB>
 - Vietnamese: <https://www.surveymonkey.com/r/2MT75RR>

LOOKING AHEAD

Calendars

Dec 1 - 28, 2019

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
49	Dec 1, 2019	2	3	4	5	6	7
		6:30pm Welch Park Neigh	12:15pm Bilingual Story Time 3pm Bilingual Story Time @ 5:30pm Manufacturing Su		5pm Climate Smart Youth Le		
50	8	9	10	11	12	13	14
					4pm Día de la Virgen @ Gua		1pm Silicon Valley Democ
51	15	16	17	18	19	20	21
	12pm Guadalupe Church pr 2pm Guadalupe Church pre						