



Building Decarbonization and Grid Harmonization in a Clean Utility Future



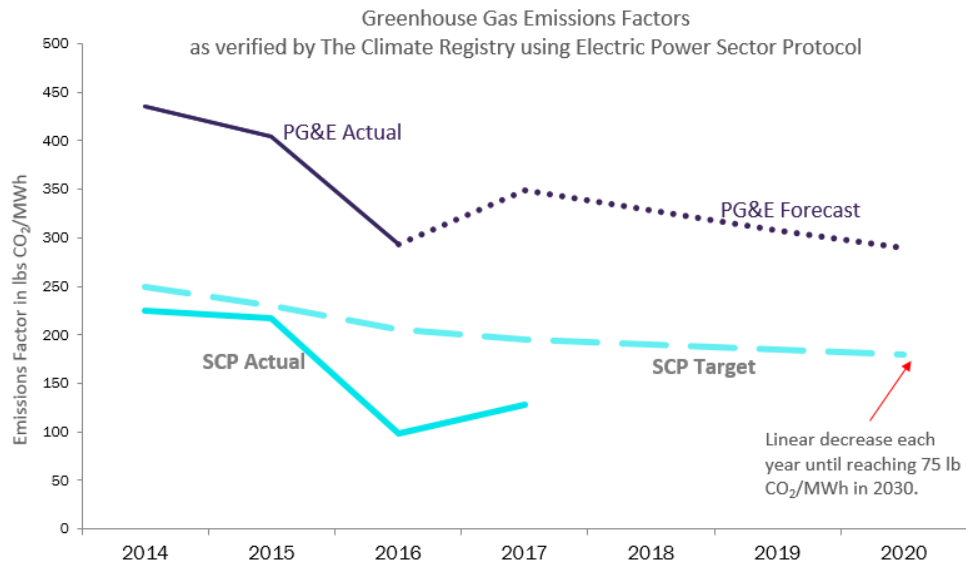
Who is Sonoma Clean Power?

- **Not-for-profit** public agency that started serving customers in 2014.
- First stated mission of the joint power's authority establishing SCP is “**reducing greenhouse gas emissions** in Sonoma County and neighboring regions.”
- Generates electricity for approximately **600,000 customers** in California’s Sonoma and Mendocino counties.
- Pacific Gas & Electric (PG&E) provides distribution of electricity.
- SCP customers pay for, and can participate in, PG&E programs.



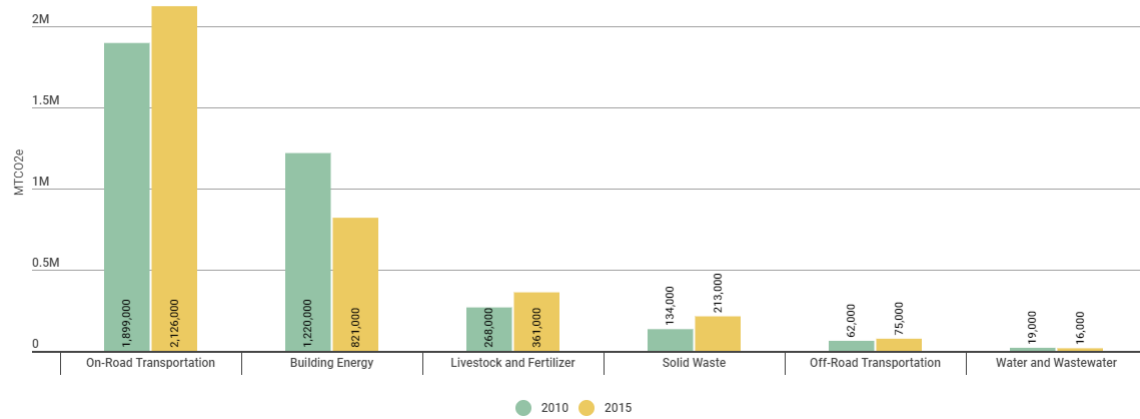
Decarbonization of the Grid

SCP's Emissions and Power Sources



Source: Sonoma Clean Power Integrated Resource Plan (<https://sonomacleanpower.org/uploads/documents/SCP-FINAL-IRP-10-04-18.pdf>)

2010 and 2015 Source-Specific Emissions

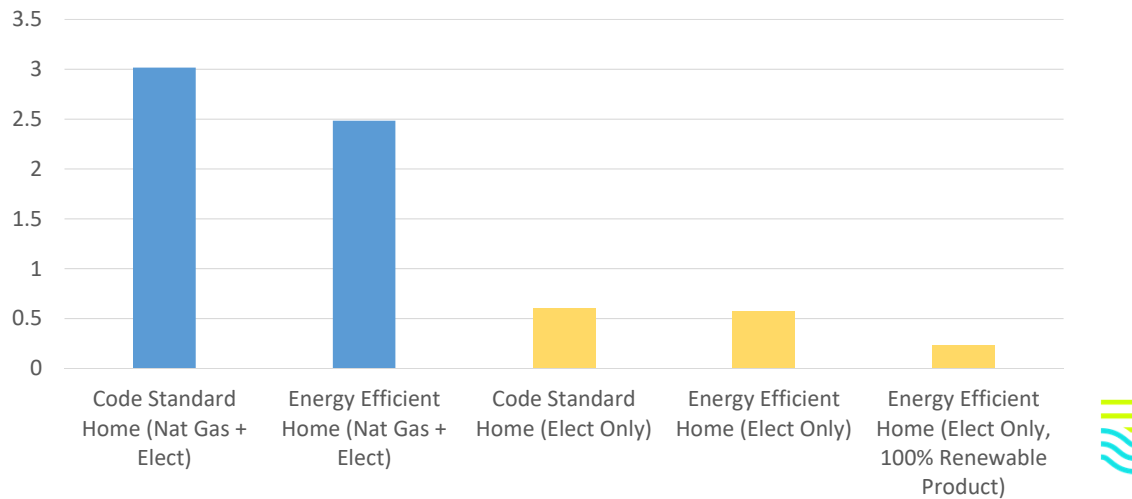


Source: Regional Climate Protection Authority Sonoma County GHG Inventory (<https://rcpa.ca.gov/data-and-reports/sonoma-county-greenhouse-gas-inventory/>)

Decarbonization of the Built Environment

Why Electrify?

Yearly Per Home Emissions (MT CO₂e)



Popular Energy Reach Code Options

Option	Jurisdictions Considering this Option	Anticipated per home costs beyond 2020 Requirements	Anticipated GHG Impacts	Potential Barriers	Timeframe	Applies to
Adoption of 2019 Energy Code (Business as Usual)	-----	\$0	Assuming 500 homes are built over next three years, 500 MT of CO ₂ e annually	None	2019 Code Update Would Go into Effect Jan 1, 2020	All Buildings
All Electric Favored Reach Code	Cloverdale, San Luis Obispo	Unknown range of costs.	Assuming 1/3 of homes choose all-electric option, 900 MT of CO ₂ e annually	Need State approval	Could go into effect as soon as January 1, 2020	New construction single family and low-rise multifamily
All Electric Reach Code	Santa Rosa, Petaluma, Windsor	Savings of \$6,171 (or \$3,361 for multifamily unit) compared to a home using natural gas ¹	Assuming 500 homes are built over next three years, 1,700 MT of CO ₂ e annually	Need State approval	Could go into effect as soon as January 1, 2020	New construction single family and low-rise multifamily
Natural Gas Ban	Berkeley, San Jose	Savings of \$6,171 (or \$3,361 for multifamily unit) compared to a home using natural gas ¹	Assuming 500 homes are built over next three years, 1,700 MT of CO ₂ e annually	Relies on city's police powers	Could go into affect at any time	All buildings

¹ 2019 Energy Efficiency Cost Effectiveness Study, California Codes and Standards

New Construction - Advanced Energy Rebuild

- Up to **\$17,500 in incentives** with one easy online application.
- Goes beyond existing program models by adding in non-standard measures like electric vehicle charging, grid responsiveness, battery storage, and water measures.
- **266 homes** have applied for the program. Approximately **35% of which are all-electric**.
- Projects include **266 EV chargers**, **265 kW of solar** and **254 kWh of battery storage**.
- Energy models for the submitted projects are on average **26% better than current Title 24 code** and are predicted to **save \$650 annually on their utility bills**.



Retrofits- Advanced Energy Center



Additional Resources Offered



Induction Cooktop Check Out

Interested in testing out an Induction Cooktop? Fill out the form below to reserve your cooktop. Cooktops can be picked it up at our office in downtown Santa Rosa, located at 50 Santa Rosa Avenue, on the 5th Floor. Not sure if your pots and pans are Induction ready? Add a pot or pan to your check out to optimize your induction experience.

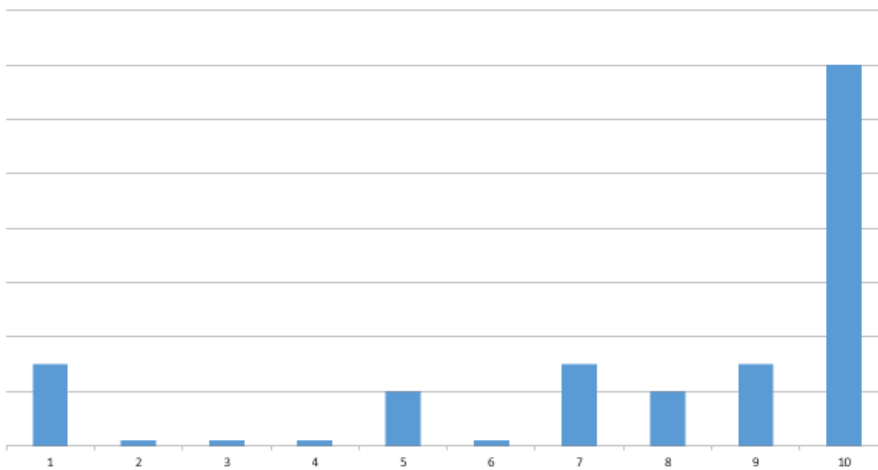
Equipment must be returned within 2 weeks of your check out date. This check out program is available to all Sonoma and Mendocino County residents.

First Name *	Last Name *
<input type="text"/>	<input type="text"/>
Email *	Phone *
<input type="text"/>	<input type="text"/>
Type of Equipment	Preferred Pick Up Date *
<input type="checkbox"/> Frying Pan <input type="checkbox"/> 1.5 qt Sauce Pan w/ lid <input type="checkbox"/> 2 qt Sauce Pan w/ lid <input type="checkbox"/> 5.5 qt Stock Pot w/ lid	<input type="text"/>
<input type="button" value="SUBMIT"/>	



Additional New Construction Resources Offered

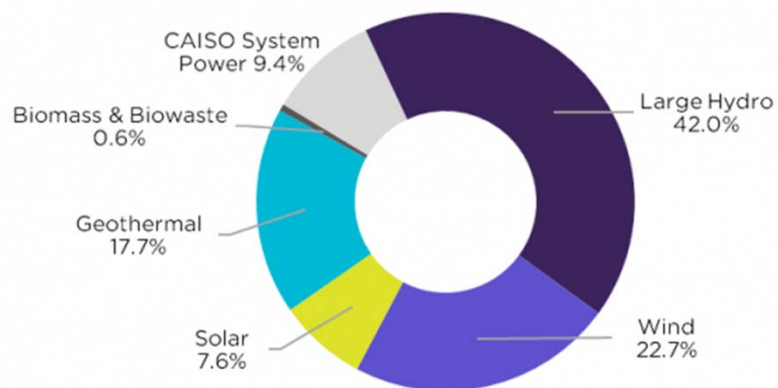
On a scale from 0 to 10, how likely are you to switch to induction cooking?(0 being extremely unlikely and 10 being extremely likely)



Looking Beyond the Building

SCP's Emissions and Power Sources

2018 CleanStart Power Sources

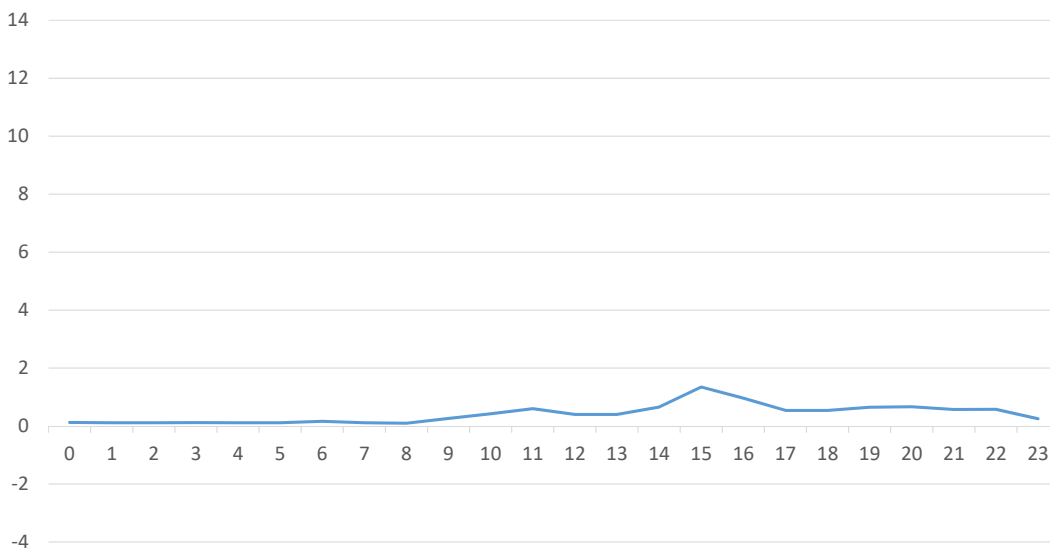


GridSavvy for Load Shaping

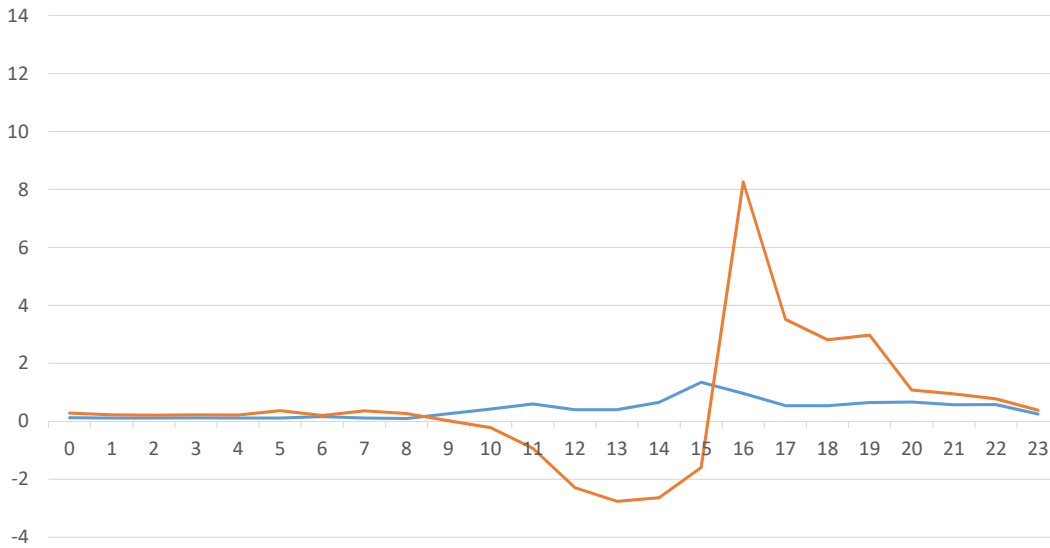
- **Shape Sonoma Clean Power loads** (customer usage) to match supply (procured energy sources).
- Use as a resource to **displace gas powered plants**.
- Get customers excited about demand-response capable technologies, and pay them for their contribution to making a cleaner grid.



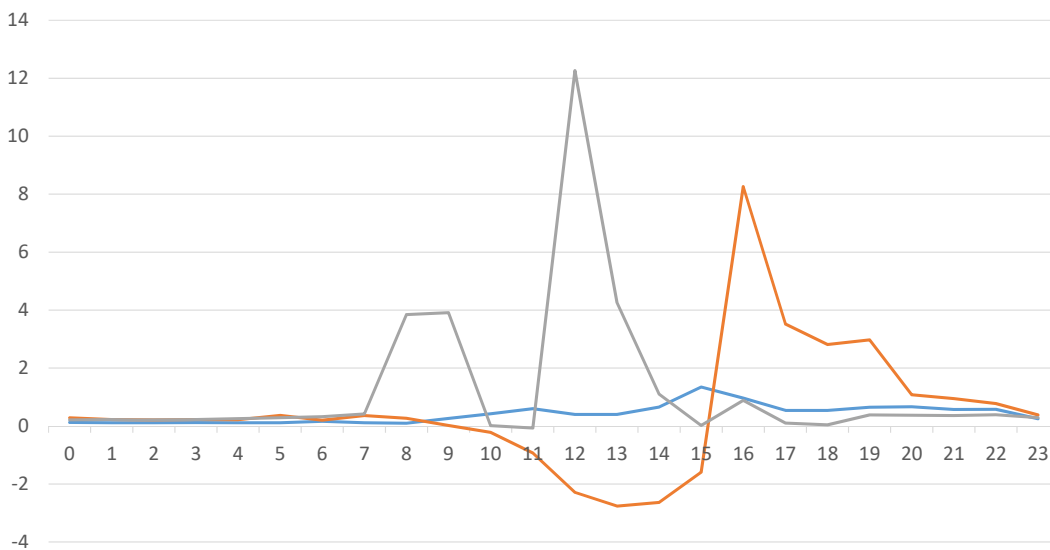
Advanced Energy Rebuild – What's the Impact



Advanced Energy Rebuild – What's the Impact



Advanced Energy Rebuild – What's the Impact



Thank you!



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