WHERE DOES OUR ELECTRICITY COME FROM?

LARGE HYDROELECTRIC	BIOMASS AND BIOWASTE	SOLAR	WIND	ELIGIBLE HYDROELECTRIC	UNSPECIFIED POWER
19.8%	9.1%	24.6%	2.5%	1.2%	42.8%

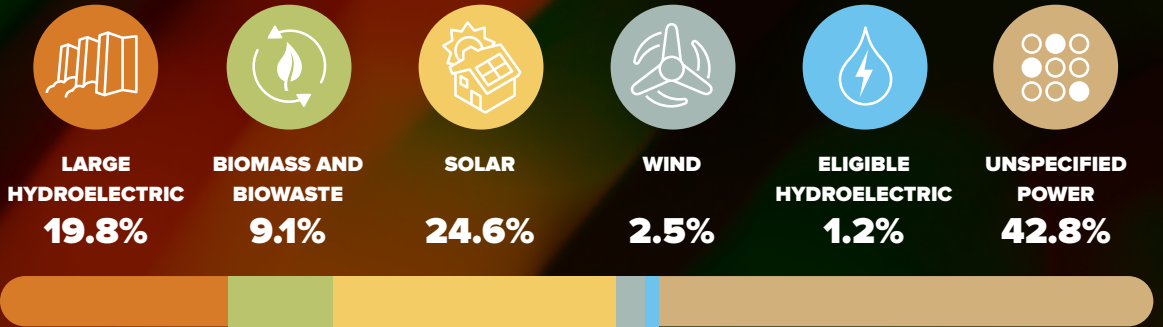## 100% CARBON NEUTRAL ELECTRICITY SINCE 2013

Like a nutrition facts label that shows the ingredients in food, the Power Content Label shows the sources of electricity purchased by City of Palo Alto Utilities to power local homes and businesses.

Carbon neutral electricity comes from a variety of sources, including renewable resources like solar, wind and small hydroelectric plants. Large hydroelectric sources are also carbon-free, but the state of California doesn't consider them renewable.

Since 2016 the City of Palo Alto Utilities has had long-term contracts with California-based renewable energy providers to provide 100% carbon neutral power to the community. In 2020, as the value of in-state renewable energy rose, CPAU began taking a regional approach to purchasing power, selling its higher-priced renewable energy and buying the most cost-efficient renewable energy from outside the state. This program generates earnings (totaling $1.8 million in 2022) which are being invested in local decarbonization efforts necessary to meet our ambitious climate goals. Although the power sourced out-of-state remains carbon neutral, it's not recognized as renewable by the state and is labeled as "unspecified."

Palo Alto is reducing greenhouse gas emissions to 80% below 1990 levels by 2030

POWER SOURCES IN 2022 CPAU power sources include five solar PV projects, one wind project, five landfill gas-fired projects, the Calaveras hydroelectric project, and the Western Area Power Administration (Western) contract, which is sourced from Central Valley Project hydroelectric facilities. All of these resources are located in California. Power supply percentages vary annually based on the available output from our contracted generators. In 2022, CPAU's hydroelectric generation was significantly lower than long-term average levels due to extremely dry weather conditions, so CPAU needed to purchase additional renewable generation from other utilities in the western US.

PaloAltoGreen's[a] Prospective Product Content Label[b] for 2023 Consists of 100% Wind Energy[c]

[a] PaloAltoGreen is a voluntary renewable energy program from City of Palo Alto Utilities that matches up to 100% of your estimated monthly electricity usage with Green-e® certified Renewable Energy Credits (RECs) from new renewable energy resources, specifically from generation facilities that first began commercial operation in the last 15 years.

[b] Prospective Product Content Label: These figures reflect the renewables that we have contracted to provide. Actual figures may vary according to resource availability. We will annually report to you before October 1st of next year in the form of a Historical Product Content Label the actual resource mix of the electricity you purchased.

[c] Sourced from wind energy RECs located in the western U.S. (CA, OR, WA, ID, NV, UT, AZ, MT, WY, CO, or NM) or Canada (BC or AB).

PaloAltoGreen™

PaloAltoGreen is Green-e® Energy certified and meets the environmental and consumer-protection standards set forth by the nonprofit Center for Resource Solutions.

Green-e Energy CERTIFIED

For more information on Green-e® Certified Energy, call 1-888-63-GREEN or visit **green-e.org**

PaloAltoGreen 2022 Historical Product Content Label (reflected in the "Palo Alto Green" column of the table on page 2): These figures reflect the power delivered to PaloAltoGreen's customers in 2022. 'Other' and 'Unspecified Power' sourced from wind energy facilities in Colorado and Montana.

Find more details at cityofpaloalto.org/PowerContentLabel and cityofpaloalto.org/CarbonNeutral

2022 POWER CONTENT LABEL

City of Palo Alto Utilities

cityofpaloalto.org/PowerContentLabel

Greenhouse Gas Emissions Intensity (lbs CO$_2$e/MWh)

Palo Alto Green	CPAU Standard Rate	2022 CA Utility Average
944	416	422

Chart legend:
- Palo Alto Green (blue)
- CPAU Standard Rate (green)
- 2022 CA Utility Average (red)

Energy Resources	Palo Alto Green	CPAU Standard Rate	2022 CA Power Mix
Eligible Renewable[1]	**0.0%**	**37.5%**	**35.8%**
Biomass & Biowaste	0.0%	9.1%	2.1%
Geothermal	0.0%	0.0%	4.7%
Eligible Hydroelectric	0.0%	1.2%	1.1%
Solar	0.0%	24.6%	17.0%
Wind	0.0%	2.5%	10.8%
Coal	**0.0%**	**0.0%**	**2.1%**
Large Hydroelectric	**0.0%**	**19.8%**	**9.2%**
Natural Gas	**0.0%**	**0.0%**	**36.4%**
Nuclear	**0.0%**	**0.0%**	**9.2%**
Other	**0.0%**	**0.0%**	**0.1%**
Unspecified Power[2]	**100.0%**	**42.8%**	**7.1%**
TOTAL	**100.0%**	**100.0%**	**100.0%**

Percentage of Retail Sales Covered by Retired Unbundled RECs[3]:

	Palo Alto Green	CPAU Standard Rate	
	35%	50%	

[1]The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

[2]Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

[3]Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:

City of Palo Alto Utilities
(650) 329-2161

For general information about the Power Content Label, visit:

https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program