

# DEEPENING SOLAR INVESTMENT THROUGH BENEFICIAL ELECTRIFICATION

CARL LINVILL, REGULATORY ASSISTANCE PROJECT ON BEHALF OF SOLSMART

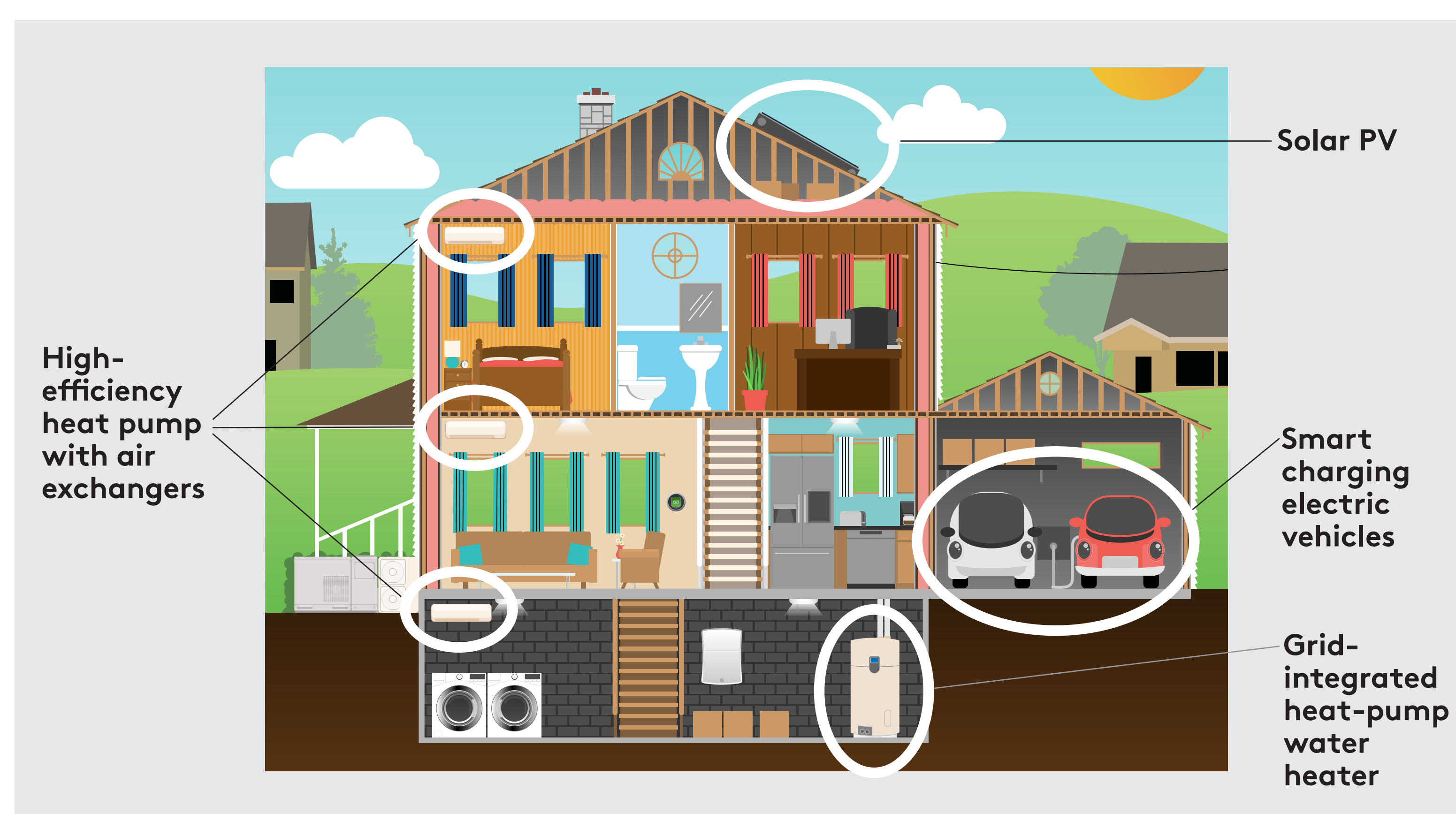


## What makes electrification *beneficial* for communities?

Electrification is beneficial if it meets one or more of the following conditions without adversely affecting the other two:

- Saves consumers money over the long run;
- Enables better grid management; and
- Reduces negative environmental impacts.

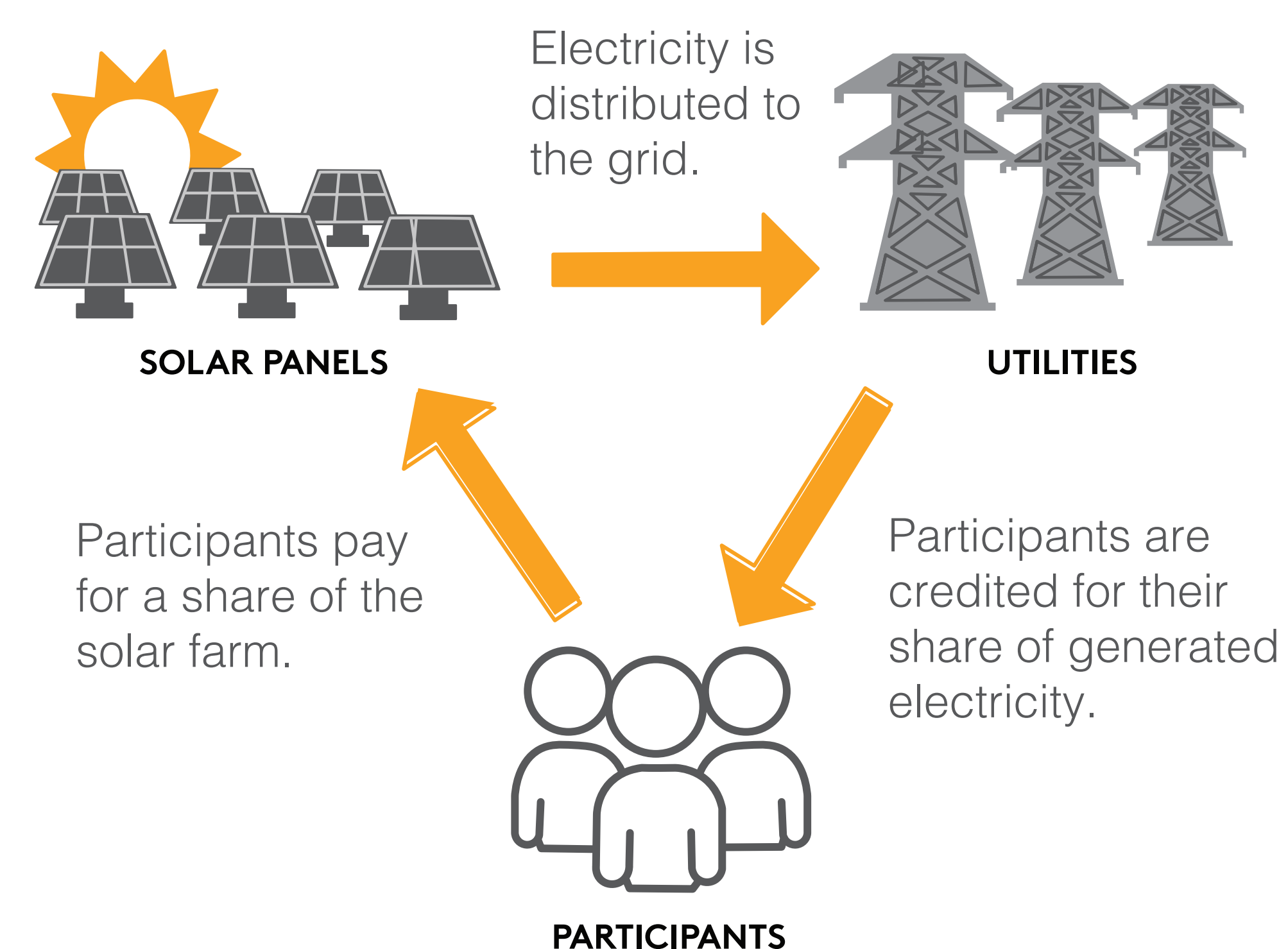
*The following case studies detail utility and community programs that meet all three conditions listed above, making them clear examples of beneficial electrification.*



### Steele-Waseca Cooperative Electric's Sunna Project

Owatonna, MN

- In Owatonna, Steele-Waseca Cooperative Electric (SWCE), serving about 10,000 customers, developed the Sunna Project, a 250-panel community solar garden.
- Usually, customers would pay \$1,225 per panel. SWCE only charged \$170 for the first panel if they participated in its grid-integrated water heater (GIWH) program, with SWCE providing free GIWHs to participants.
- The GIWH program allows SWCE to control when the water heaters draw power from the grid, enabling the utility to turn off the water heaters during peak hours.



Courtesy of Smart Electric Power Alliance (SEPA).

### Green Mountain Power's eHome Initiative

Rutland, VT

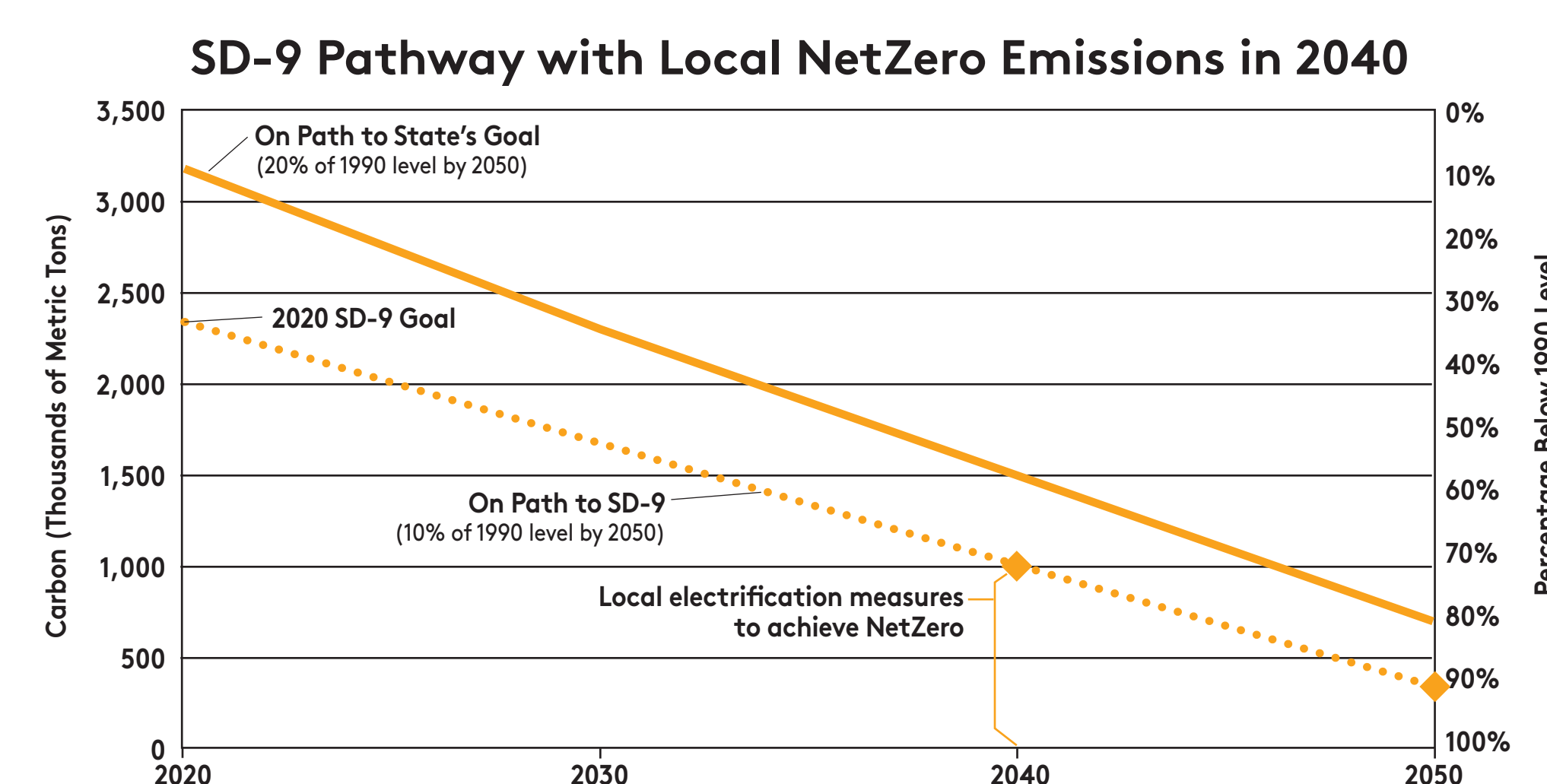
- In Rutland, Green Mountain Power (GMP) launched a comprehensive home energy makeover program, the eHome Initiative.
- GMP sends energy experts to visit interested customers' homes and determined the services and products needed, such as solar panels, cold-climate heat pumps, heat pump water heaters, weatherization services, and more.



### SMUD's 2040 Zero Emissions Goal

Sacramento, CA

- Sacramento Municipal Utility District (SMUD), serving more than 1.5 million customers, aims to achieve net zero greenhouse gas emissions by 2040. Increasing solar energy consumption is one way that SMUD reduces emissions.
- SMUD predicts that completely decarbonizing the power sector will be cost-prohibitive until after 2040. SMUD is reducing emissions outside the power sector by electrifying new loads in the building and transport sectors. SMUD's time-of-day pricing encourages consumers to charge EVs and other electric loads during the solar day, allowing better grid management and maximizing the increasing number of solar energy resources.



Courtesy of Sacramento Municipal Utility District.

**About SolSmart:** SolSmart is a national designation and technical assistance program that recognizes leading solar communities and empowers additional communities to expand their local solar markets. Funded by the U.S. Department of Energy Solar Energy Technologies Office, SolSmart strives to cut red tape, drive greater solar deployment, and make it possible for even more American homes and businesses to access solar energy to meet their electricity needs. Learn more at [SolSmart.org](https://www.solsmart.org).



**About Regulatory Assistance Project:** The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future. Learn more at [raponline.org](https://www.raponline.org).

