## **CHAPTER 7: ENERGY CONSERVATION**

State law requires that Housing Elements identify opportunities for energy conservation. New residential development is an opportunity to address statewide and local energy efficiency goals. Integrating energy conservation standards into new housing can reduce energy costs for buildings in the long run and also reduce the City's housing stock's impact on the environment. The use of green building strategies can reduce energy usage through energy and water efficient design practices and appliances. Encouraging or requiring new development to source energy from renewable sources is another strategy for creating greener, more energy-efficient buildings.

## Energy Conservation Initiatives

New homes and residential additions are subject to the California Building Code, which includes stringent energy efficiency requirements under Title 24, Part 6: California Energy Code, 2022 and Title 24, Part 11: California Green Building Standards Code, 2022. In December 2022, the Calistoga City Council directed City staff to formulate recommendations for Municipal Code (Title 15) amendments in 2023 related to enhanced energy "reach" codes aimed at reducing greenhouse gas emissions.

Landscaping projects that are 500 square feet or larger are required to conform to the state's water-efficiency landscape standards, which also minimizes the amount of energy required for water transport and irrigation.

The City has not adopted any restrictions on the design or placement of photovoltaic energy systems (i.e., solar panels) on residential property in order to encourage their installation. Additionally, as per Assembly Bill 178, residential construction built between January 1, 2020 and January 1, 2023 that is intended to repair or replace a residential building destroyed as the result of a disaster is only required to comply with photovoltaic requirements in effect at the time of the original building's construction. The replacement or repaired building is not required to comply with any additional or conflicting photovoltaic requirements at the time of replacement.

Opportunities for improving energy conservation in the design of residential development include ensuring the consistency of tentative tract maps with Section 66473.1 of the Subdivision Map Act, which requires the designs of subdivisions to provide for future passive or natural heating or cooling opportunities. The City also requires the planting of trees along streets and in parking lots to reduce heat island effects.

To encourage energy efficiency improvements to the City's existing housing stock, the City has joined the California FIRST and California Home Energy Renovation Opportunity (HERO) Programs that allow residential property owners to finance the installation of energy- and water-efficient improvements, and renewable energy systems. Both programs are Property-Assessed Clean Energy (PACE) Programs, which allows the property owners to pay the loans back as a line item on their property tax bill.

Additionally, the HOME grant that the city received for owner-occupied residential rehabilitation will require each of the rehabilitated homes to be upgraded to meet the current state energy code.

Calistoga joined Marin Clean Energy's (MCE) Community Choice Aggregate program in 2018. Through this program, PG&E customers in Calistoga have the option of purchasing their electricity from renewable energy sources. PG&E customers are automatically enrolled in MCE's Light Green 60% Renewable Energy service, which provides customers with 100 percent carbon-free energy, including 60 percent from renewable energy sources.

The City has initiated an extensive water conservation effort that will have the added benefit of reducing the energy used for water transport. The program offers rebates for residential toilet and washer replacement with water-efficient models and turf replacement with low-water use landscaping or artificial turf. Free residential water audits of both homes and landscaping are offered and kits containing water conservation devices, such as low-flow shower heads and faucet aerators, are distributed.