CITY OF SONORA ENERGY ACTION PLAN

PREPARED BY SIERRA BUSINESS COUNCIL



Case Study - LEED Certified Building

Briar Patch Co-op

Local Sustainable Food and Grocery Store

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"The key thing about it, the fundamental thing is -- we are a cooperative. It's not owned by foreign shareholders. It's actually owned by our community. They point the direction of the co-op and speak to sustainability as the key experience they want to get out of their shopping. It has allowed us to make that our focus, instead of creating money for shareholders."

- Chris Maher, Manager

Briar Patch is a community food cooperative committed to providing quality local, sustainable and organic food and groceries. They have been operating for over 40 years (1976) and have since expanded their store five times while remaining a valued community business.

In 2007, Briar Patch moved their business into a LEED Certified building in Grass Valley. At the time of construction, the building was the first commercial LEED Certified building in Nevada County and used 25% less energy than contemporary 2007 buildings.

In 2016, Briar Patch built an additional parking lot to accommodate a growing customer base, and integrated a solar array as a shade structure for the lot. The solar array supports 700 panels and the energy generated directly supplies the store. According to manager Chris Maher, the solar electricity generated by the panels offsets 65-75% of the store's annual electricity demands, generating over 2,000 kilowatts per day. All labor was contracted locally in the construction of the solar array, and at the time of completion it was the biggest solar array in the area.

In 2017, Briar Patch participated in the Take Charge Tour in May where curious visitors and community members stopped at various establishments--both homes and businesses--that have been built or renovated to meet optimal environmental sustainability standards. In 2017 Briar Patch also replaced all overhead exterior watering with drip irrigation, which will save 250,000 gallons of water annually. They self-financed the upgrade of the last 3 remaining inefficient refrigeration pieces to energy-efficient units and installed additional LED lighting and computerized refrigeration systems. They have also partnered with Energy Smart Grocer to monitor the effectiveness of their recent upgrades, and participate in Co+Efficient, a program of the National Co+Operative Grocers, which helps food co-ops measure and manage their sustainability impacts.



Notable sustainability measures built into construction include:

Lighting: Natural outside light reduces inside lighting needs. Nearly all lights in the store are upgraded to efficient LEDs. Timers and motion sensors turn on lights only when needed, mitigating energy waste.



Sustainable Flooring: Flooring consists of durable, sustainable fly ash concrete and recycled laminate wood and carpet.



Heating and Cooling: The HVAC system recaptures heat from the refrigeration units for store heating and draws 30% fresh air from outside. A combination of water and air is used to cool refrigeration pipes, which reduces the amount of city water needed to cool the system. All hot water is efficiently heated on-demand.