

SMART CLIMATE INVESTMENTS FOR A CLEAN ECONOMY

The Climate Commitment Act (CCA) generates funding to invest in carbon reduction solutions while capping total carbon pollution in the state. Washington is a top-ranked state for Best Economy, Best States to Live In, and Top States for Business. With smart public policies and investments, our state can continue to lead the way in building a clean economy that outpaces other states. This *Smart Climate Investments for a Clean Economy* series highlights projects that achieve cost-effective benefits for Washington communities, including those most economically-stressed, pollution-impacted, and under-served.



FOOD PRODUCTION

WHAT

Twenty food processors across Washington state generate a combined 700,000 metric tons of carbon dioxide equivalent (tCO₂e) greenhouse gases (GHGs) each year, including nearly 200,000 tCO₂e of methane.¹ Among the food processors are eleven facilities, primarily making potato products, emitting more than the 25,000 tCO₂e per year threshold for a covered party in the state's [Climate Commitment Act](#) (CCA). These facilities are covered in the CCA as [Emissions-Intensive, Trade-Exposed \(EITE\) facilities](#). In all, 20 food processors are included in Washington's GHG Reporting Program: 10 potato production facilities, 3 dairy production facilities, 3 fruit production facilities, 3 other food production facilities, and 1 meat production facility. These facilities can be found throughout the state, including from the Canadian to Oregon borders along the I-5 corridor. The highest concentration is in the Central Washington Columbia River Basin (around Moses Lake, Yakima, and the Tri-Cities).²

WHY

Food processing facilities are an important part of our economy, including in many rural communities, which leverage the productive fields and farms across the state. Many of these facilities are energy and water-intensive, which contributes to both GHG and local air and water quality. There are opportunities for increased efficiency and fuel-switching to cleaner energy sources in the food processing industry. Making these changes can also make processing and production operations more resilient, insulating against fuel price volatility.

A grant program run by the California Energy Commission known as the [Food Production Investment Program](#) (FPIP) helps food processors in that state reduce GHG emissions and improve local air quality while saving money on energy and water use. The FPIP has received funding to date via auction revenue generated in California's Cap-and-Invest program. California's program shows that there are extra costs associated with many processing improvements, with an average cost



COST

\$39
per tCO₂e*

**California Climate Investments
82% identified as benefiting priority populations.
\$124M Awarded and \$112.8M implemented through May 2022.*

of \$39 per ton of GHGs avoided, meaning improvements typically need financial support.

California is providing \$85 million in new grants this year in order to accelerate advanced energy efficiency and renewable energy technologies, and demonstrate their reliability and effectiveness in benefiting priority populations and moving the industry towards a low-carbon future. Higher application scores are awarded to projects that are located within and provide a benefit to disadvantaged and low-income communities, as the majority of projects result in reduced criteria air pollutants, leading to improved public health outcomes while continuing to support local jobs.



HOW

Revenue from the CCA can support GHG reducing projects that provide additional benefits to local communities. Opportunities such as scaling up the existing Clean Energy Fund or creating industrial decarbonization programs can leverage this revenue. CaPWA is recommending that, through Fiscal Year 2025, \$50 million be allocated to Industrial Decarbonization and \$105 million - including \$25 million specifically to Tribal Nations - be allocated to the Clean Energy Fund. Washington can follow the example of California, where the FPIP has already implemented [\\$113 million](#) and is continuing with another \$85 million in a [new round of grants](#) being awarded this year. Already, 50 projects in FPIP are working to avoid nearly 3 million metric tons of GHGs while providing significant co-benefits. Some examples of the 50 projects already funded include:

- “Thor”, a [state-of-the-art mechanical vapor recompression water evaporation system](#) for tomato processing is now saving over \$1 million in annual operating costs while improving air quality in a population-dense community. On CaPWA’s first California study mission, participants got to see “Thor” in person at Pacific Coast Producers in Woodland, CA. The water evaporation system, installed with matching funds from the FPIP, saves 85% in total water usage by recompressing generated steam for reuse. The facility has also transitioned boilers and connected them to a new steam turbine to improve efficiency by 30% and create steam that is reused at least once more at the facility.³ Pacific Coast Producers has [facilities in California, Washington, and Oregon](#).
- Energy efficiency upgrades and a microgrid system at a [Coachella facility](#) converts residual food and other organic waste into animal feed. These upgrades included low-emissions boilers, heat exchangers and more that reduce natural gas and electricity consumption and costs while reducing both GHG and local criteria pollution. The microgrid provides resilience and the ability to operate off-grid and during outages through solar panels and batteries, as well as the ability in day-to-day use for peak demand reduction and participating in demand response programs that help avoid the risk of widespread outages.
- At a [dried-fruit packing and processing facility](#), efficiency improvements using an optimized compressed air energy system, which uses a centrifugal compressor and heat recovery technology, has reduced operational costs and improved efficiency. The technology has also reduced maintenance needs and costs and emissions of criteria pollutants from the facility into the local community.

¹ Emissions data is based on the [Washington State Department of Ecology’s GHG Reporting Program](#), which includes emissions data through 2021.

² [Data.WA.gov](#): Map of facilities showing location and emissions.

³ Our [study mission report](#) provides more details on “Thor” and other examples and lessons learned from California’s cap-and-invest program. This includes a [presentation by Erick Watkins](#) of Pacific Coast Producers.

Image Source: [CaPWA Study Mission Report](#). Image is of Pacific Food Producers “Thor” multi-effect evaporator system for tomato