

AGRICULTURAL AND FOREST INDUSTRY

BENEFITS OF A LOW CARBON FUEL STANDARD

Washington State is well-positioned to generate more clean energy jobs in our agricultural and forestry communities by passing an LCFS. Renewable diesel (RD), renewable natural gas (RNG), electricity, and biodiesel are all produced from industries already here in Washington, and they all qualify for market-based credits under an LCFS.

By passing a state-wide LCFS, Washington would provide incentives for additional biorefineries and biodigesters to locate here, creating high potential for increasing the market for forest residue and other agricultural products as a feedstock for renewable fuels and creating jobs in the forestry and refining industries.

LOW CARBON FUEL STANDARD (LCFS) CREATES JOBS IN RURAL COMMUNITIES

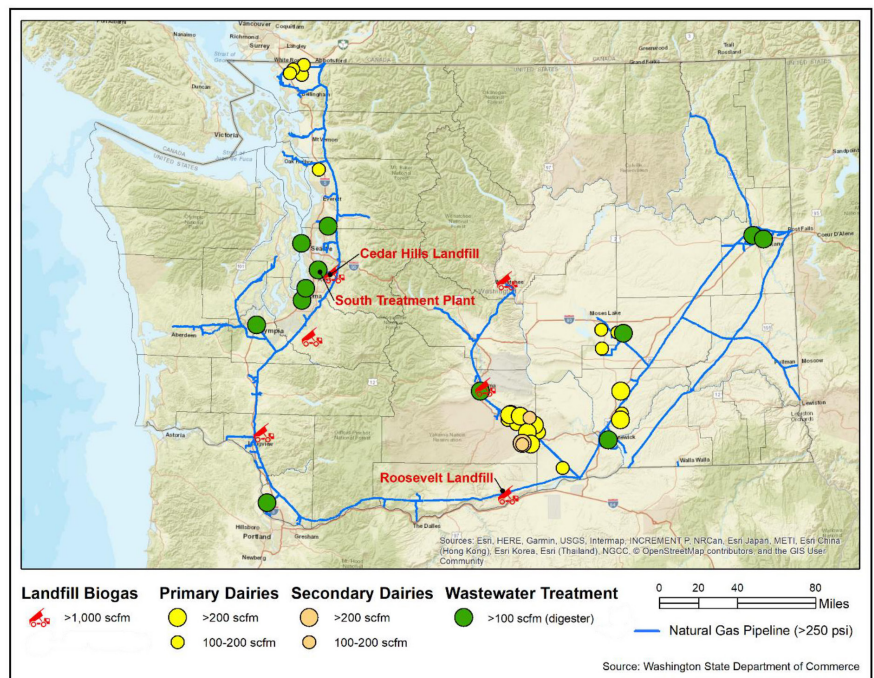
Washington is home to the nation's second-largest renewable fuel production facility in Grays Harbor that produces ~100 million gallons per year. An LCFS would help incentivize more renewable fuel production facilities like this one and create opportunities for renewable fuels to be sold competitively in Washington State. Because market credits are currently available for low carbon fuels in Oregon, British Columbia and California, Washington purchasers currently pay a price premium that would disappear if Washington adopts a comparable LCFS.

Regions with the greatest amounts of municipal solid waste (on the Washington/Oregon border as well as central and eastern Washington) and forest residual feedstock (west and northeast Washington) are best poised to benefit from new economic activity.

In states with an LCFS, dairy farms can create new revenue when their dairy wastes (e.g., manure) are converted into Renewable Natural Gas (RNG). These farms receive marketable credits for sale at high value to fossil fuel refiners.

More than a hundred dairy biodigester projects are underway in California as a result of their LCFS standard and other state incentive programs.

Near-Term Opportunities for RNG Production at Existing Waste Management Facilities in Washington state.



LCFS DOESN'T INCREASE FUEL PRICES ANYWHERE ALONG THE SUPPLY CHAIN

Clean fuels policies in California and Oregon have not resulted in increased fuel prices. In fact, fuels cost less in California now than in 2011 when that state adopted its LCFS.

Renewable diesel is comparably priced with conventional on-road diesel fuel in California, and biodiesel currently costs less nationally than conventional on-road diesel.

Fuels used for on-farm agricultural and off-highway logging work are exempt from an LCFS, when “red dye off-road” fuels are used. Meanwhile, farmers and logging companies could continue to use conventional diesel fuels at the same costs as before.

However, renewable diesel in LCFS states has been priced at or below conventional diesel fuels so farmers and loggers would have another fuel option available that has superior fuel characteristics priced at or lower than conventional fuel.

All trucks and farm equipment that use regular diesel can use RD. And there is a long list of agriculture equipment manufacturers, and truck manufacturers, whose products are compatible with a 20 percent biodiesel blend, including:

- Caterpillar
- John Deere
- Arctic Cat
- Peterbilt
- Kenworth
- Volvo Trucks
- Daimler Trucks
- Ford, Chevrolet, and GMC

An LCFS has produced economic opportunities for farms in California and Oregon and has made lower carbon, higher quality fuels widely available at prices comparable to or lower than conventional fuels.

An LCFS is a win/win solution for improving the climate, enhancing the transition of fuels supplies to lower carbon options with a market-based approach while creating opportunities for jobs and new businesses in rural communities.

