

State Fact Sheet ■ January 2018

## Oregon's Cap-and-Invest Program: Implications for Agriculture and Forestry

Oregon lawmakers are considering adopting an economy-wide, cap-and-invest program to meet the state's long-term greenhouse gas (GHG) reduction goals. On January 8, 2018, the Oregon House and Senate released cap-and-invest bills<sup>1</sup> that are expected to be taken up for a vote during the state's short legislative session. These bills are broadly based on Senate Bill 1070<sup>2</sup>, introduced in 2017, which set a framework for reducing emissions in the state, while mitigating potential cost impacts and driving investment in clean energy projects.

Oregon is one of a dozen or so states and Canadian provinces taking steps to limit GHG emissions to address the threat of climate change. States in the Northeast have been working to strengthen the existing Regional Greenhouse Gas Initiative (RGGI) trading program through 2030. Virginia has proposed a trading program that would link with the RGGI market. New Jersey is expected to rejoin RGGI after Governor Chris Christie pulled the state out of the program in 2011. And, Ontario joined California and Quebec in the Western Climate Initiative (WCI) carbon market in 2018 after launching its own program in 2017.

This fact sheet focuses specifically on what Oregon's cap-and-invest program could mean for the forest and agriculture industries in the state. The discussion is based on SB 1070 and the draft House and Senate bills released by Senator Michael Dembrow and Representative Ken Helm ("2018 draft bills"). A full discussion of Oregon's cap-and-invest proposals is provided in a separate fact sheet entitled: "What Would Cap-and-Invest Mean for Oregon?".

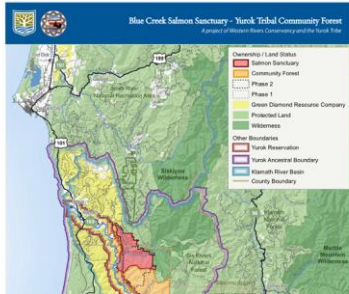
### What Would Oregon's Cap-And-Invest Mean for Forest and Agriculture Industries?

Oregon's forestry and agricultural industry are vital parts of the state's economy, and these industries stand to be significantly impacted in a changing climate. Already, farmers across the United States are facing the impacts of climate change—from increased pests, greater water scarcity, and heat stress affecting yields and their bottom line.

Wildfire, invasive species, and other climate stressors threaten the value of forest stock for foresters and land-managers. In 2016, aerial surveys conducted by the U.S. Forest Service found that 700,000 acres of forested land in Oregon had tree damage and mortality from insects, diseases, and other animals—up for a third consecutive year.<sup>3</sup> That does not include damage caused by wildfires, which in 2014, burned nearly a million acres in Oregon.<sup>4</sup>

Oregon's cap-and-invest program has the potential to bring added value to farmers and foresters while allowing them to play a role in cutting emissions. The program, as proposed in the 2018 draft bills, would provide covered entities flexibility by allowing between 4 and 8 percent of their compliance obligation to be met with offsets. Offsets represent real and verifiable emissions reductions achieved from sectors not covered under the cap. In the forestry and agriculture sectors, land-managers would have a financial incentive to reduce livestock methane emissions by installing biodigesters or to manage forests to promote greater carbon dioxide sequestration. Oregon's program would be similar to that of California. California allows offsets crediting for projects that reduce agricultural related emissions, bolster forest carbon sinks, destroy potent ozone depleting substances, and

capture methane from mines. To date, California has granted offsets totaling more than 85 million metric tons from five approved protocols.<sup>5</sup> A study by Stanford University researchers found that offsets purchased through California’s program has earned forest owners \$250 million since 2013.<sup>6</sup>



### Benefiting Forests and Land Managers through Offsets

In 2012, the Yurok Tribe of California registered a 56,000 acre offset project. The Yurok Tribe will undertake an improved management plan for the forest that will enhance carbon sequestration. The Tribe will generate revenue through the sale of the carbon offsets to the California market as well as limited logging on the property.

Source: The Reserve website. ARB Compliance Projects. Accessed Dec. 1, 2017.



### Promoting Climate-Smart Agricultural Practices

California’s offsets program also credited the Kettle Butte Dairy, a 7,000-acre dairy farm with approximately 6,000 milking cows. The farm installed a bio-digester that traps and destroys methane from manure. The digester includes two 848 kW generators that supply electricity to on-farm operations.

Source: American Carbon Registry website. Accessed Dec. 1, 2017.

## References

<sup>1</sup> Oregon Senate, “Clean Energy Jobs Bill Draft, LC 44” released on January 8, 2018, online at:

[https://www.oregonlegislature.gov/helm/workgroup\\_materials/LC0044\\_DRAFT\\_2018\\_Regular\\_Session.pdf](https://www.oregonlegislature.gov/helm/workgroup_materials/LC0044_DRAFT_2018_Regular_Session.pdf).

Oregon House, “Clean Energy Jobs Draft, LC 176,” released on January 8, 2018, online at:

[https://www.oregonlegislature.gov/helm/workgroup\\_materials/LC0176\\_DRAFT\\_2018\\_Regular\\_Session.pdf](https://www.oregonlegislature.gov/helm/workgroup_materials/LC0176_DRAFT_2018_Regular_Session.pdf).

<sup>2</sup> 79<sup>th</sup> Oregon Legislative Assembly, “Senate Bill 1070,” 2017 Regular Session,

<https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB1070/Introduced>.

<sup>3</sup> USDA, “Forest Health Highlights in Oregon – 2016,”

[http://www.oregon.gov/ODF/Board/Documents/BOF/20171101/BOFATTCH\\_20171101\\_08\\_01.pdf](http://www.oregon.gov/ODF/Board/Documents/BOF/20171101/BOFATTCH_20171101_08_01.pdf)

<sup>4</sup> National Interagency Fire Center, “National Report of Wildland Fires and Acres Burned by State 2014,”

[https://www.predictiveservices.nifc.gov/intelligence/2014\\_Statsumm/fires\\_acres14.pdf](https://www.predictiveservices.nifc.gov/intelligence/2014_Statsumm/fires_acres14.pdf).

<sup>5</sup> CARB, “ARB Offset Credit Issuance,” last updated November 22, 2017,

<https://www.arb.ca.gov/cc/capandtrade/offsets/issuance/issuance.htm>; CARB, “ARB Offset Credits Issued,” last updated November 22,

2017, [https://www.arb.ca.gov/cc/capandtrade/offsets/issuance/arb\\_offset\\_credit\\_issuance\\_table.pdf](https://www.arb.ca.gov/cc/capandtrade/offsets/issuance/arb_offset_credit_issuance_table.pdf).

<sup>6</sup> Anderson, Christa, et al, “Forest offsets partner climate-change mitigation with conservation,” *Frontiers in Ecology and the Environment* 15 (7), (September 2017) <http://onlinelibrary.wiley.com/doi/10.1002/fee.1515/full>.