Oregon's Healthy Climate Bill

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Transitioning to a Clean Energy Economy

Oregon can build on its leadership in clean energy by enforcing the pollution limits already in law, protecting our families' health by keeping pollution out of our air and water, and preserving Oregon's quality of life for our children. We can't ignore the strange and severe weather we've experienced the past couple years—we owe it to our children to take steps now to protect them.

Pollution imposes major costs on Oregonians, from the costs that lung diseases like asthma foist on families and the healthcare system to the burdens that drought and wildfire inflict on farmers and communities. A modest rise in global temperatures could lead to a <u>54 percent increase</u> in area burned in Western states by 2050. If we don't act now, climate pollution will cost Oregonians <u>billions of dollars</u> in healthcare outlays, vanished salmon, and recreation industry losses.

Damage to the climate stems from a single fact: we allow dirty energy companies to treat our atmosphere as a free dumping ground. Countries and states around the world have successfully used a price on greenhouse gas¹ pollution—through either a tax or a hard cap—to reduce emissions and to transition to a clean energy economy. Oregon can use this proven strategy to enforce the greenhouse gas pollution limits written into state law nearly a decade ago, transition off fossil fuels, build a thriving clean energy economy, and generate broadly shared prosperity and local jobs while protecting our families and safeguarding our climate.

The Healthy Climate Bill will enable Oregon to enforce the <u>climate pollution</u> <u>law</u> passed nearly a decade ago and ensure the largest polluters do their part to protect Oregon. Enforcing limits on pollution also lets Oregon seize the opportunity to transition off outdated fuels, build a thriving clean energy economy, and generate broadly shared prosperity and local jobs while protecting our families and safeguarding our climate.

¹ This program would cover emissions of carbon dioxide (CO_2), methane, nitrous oxide, and hydrofluorocarbons, all measured in carbon dioxide equivalents (CO_2 e).

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How Climate Pollution Pricing Works

Oregon already has pollution limits on the books. In 2007, the Oregon Legislature passed a law to reduce greenhouse gas pollution 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050. To enforce those limits, the Healthy Climate Bill sets a hard cap on pollution, issuing one allowance per ton of pollution allowed under the cap. Each year, as the hard cap tightens, the state issues fewer allowances. The cap's slow and steady decline ensures that we gradually transition our economy away from fossil fuels and towards clean energy.

Regulated businesses—fuel refiners, power plants, utilities, and large industrial facilities—periodically verify to the state that they hold enough allowances to cover their emissions. Most businesses will buy their allowances in a state-run auction, though some will receive allowances for free to help them transition to clean energy. Because they will pay an allowance to account for each ton of pollution they emit, businesses will find the lowest-cost ways of reducing pollution from their operations.

Without pollution limits, Oregon ratepayer dollars might flow to propping up old coal plants. A price on pollution would instead make new solar and wind facilities, energy efficiency investments, improved grid management, and electric vehicles look more enticing. As the supply of allowances slowly decreases, the price of each allowance rises, and businesses and customers will invest even more in efficiency, clean energy, and climate-friendly transportation options. In addition to diverting existing private sector investments, an Oregon pollution price will also attract new investments from private, clean-tech venture capital that sees the state as a welcoming place to start new business ventures. For example, California has the strongest pollution price in the United States, and in 2014, it attracted the majority of all the clean-tech venture capital in the United States—\$5.7 billion (up from \$2 billion in 2005, the year before the California legislature passed the state's climate action law, AB 32).

Sources of Oregon's Greenhouse Gas Pollution

The biggest source of climate pollution in Oregon is the transportation sector. Electricity and natural gas and industrial facilities are also major sources of pollution. An effective policy must limit pollution from these three major sectors.

Oregon Healthy Climate Bill

Statewide Emissions Limits

Oregon already has statewide emissions goals for 2020 and 2050. Because 2050 is far away and 2020 is perilously close, this bill sets a steady path by defining two additional interim goals on a straight-line path to 2050: cutting statewide emissions 20 percent below 1990 levels by 2025, and 45 percent below 1990 levels by 2035.

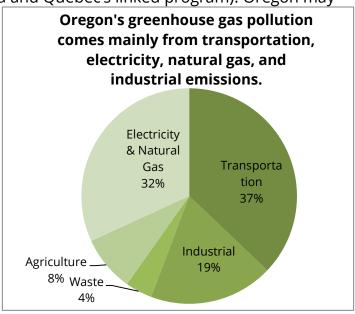
Capped Emissions

The hard cap would cover about 85 percent of Oregon's emissions—around 52 million metric tons of carbon dioxide equivalent (MMT CO_2e), out of a statewide total of 61 MMT, in the first year. It would not cover agricultural and waste emissions, but would cover all pollution from the three major sectors: transportation, electricity and natural gas, and industrial facilities. The transportation sector is the biggest source of pollution in Oregon, contributing about 46 percent of the emissions covered by the hard cap. About 33 percent of emissions come from residential and commercial use of electricity and natural gas and about 21 percent from industrial facilities. The state qould issue one allowance for eaach ton of emissions allowed under the hard cap, for a total of around 52 million allowances in the first year.

Allowance Value

Oregon's 52 million allowances would be worth **around \$650 million** in the first year (assuming the allowances are worth \$13 per ton—the current allowance price in California and Quebec's linked program). Oregon may

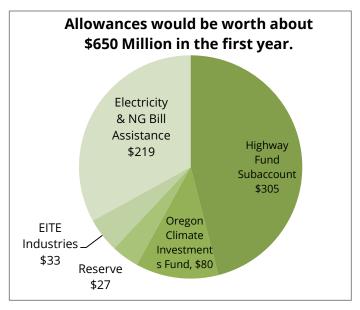
monetize some of these allowances by selling htem in an acution, and may give some allowances away—for example to industrial facilities that face competition from out-of-state facilities that do not have to pay for their pollution—so that those facilities receive the "value" of the allowance, but no money changes



hands.

The Bill is in development, but the following numbers represent possible uses of allowance value:

Approximately \$300
 million in revenue
 from allowances
 auctioned to the
 transportation sector
 will be deposited into
 a subaccount in the
 State Highway Trust
 Fund, to be invested
 in projects that meet
 constitutional
 requirements,
 particularly projects
 located in



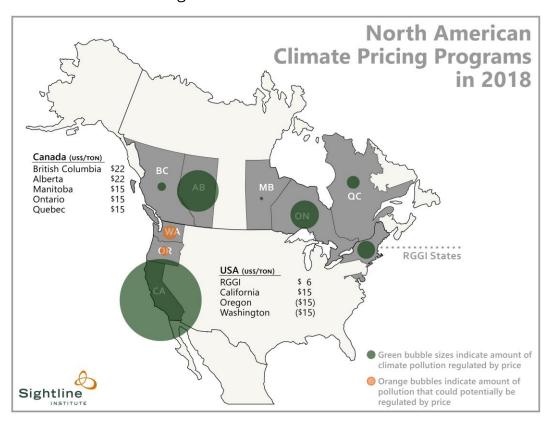
disadvantaged urban and rural communities.

- Around \$80 million in revenue from allowances auctioned to the industrial sector will be deposited in the Oregon Climate Investments
 Fund to be invested in projects that contribute to the reduction of greenhouse gas emissions and the transition to a clean energy economy, particularly in projects located in disadvantaged urban and rural communities, and in a Just Transition Fund to help workers transition.
- A little over \$200 million worth of allowances will be given to electricity
 and natural gas utilities for free, with the requirement that the utilities sell
 the allowances back into the state auction and use the revenue to help
 their customers—especially low-income households and small
 businesses—through bill assistance and climate credits.
- Around \$30 million worth of allowances will be given to Oregon industries that are both energy-intensive and trade-exposed to ensure they remain competitive with out-of-state competitors that are not paying a pollution price.
- Around \$30 million from allowances auctioned to the industrial sector will be used to create a reserve of allowances to prevent price volatility and to provide funds to encourage voluntary investments in renewable energy.

Other Places in North America with a Price on Pollution

In North America, nine northeast states (collectively "RGGI"), British Columbia, California, Alberta, and Quebec are already pricing greenhouse gas pollution, and Ontario will join soon. Those pricing policies have been in place for three to eight years and have helped them attract clean energy investments, create local jobs and benefits, and grow their economies. The RGGI states spent most of their allowance revenue on energy efficiency, creating 16,000 jobs in the program's first few years.

If Oregon implements a market program that can link to existing programs in California and Quebec (soon to be joined by Ontario and Manitoba), it would match those programs' price—currently about \$13 per ton², likely to rise to about \$15 per ton in 2018. Nine northeastern states have a \$5 price on pollution, British Columbia has a \$22 price, and Alberta has plans in place to implement a \$22 price. In the map below, the green bubbles indicate the amount of pollution covered by each region's pollution price. The orange bubble indicates that Oregon's Health Climate bill would cover 52 MMT.

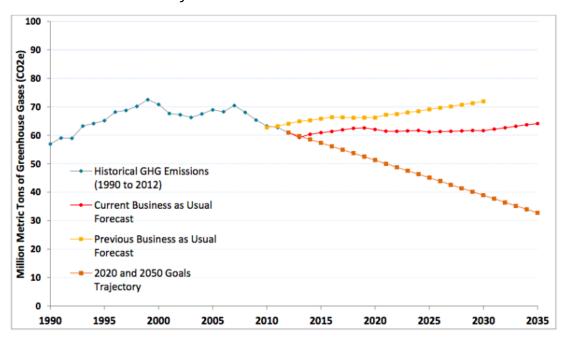


² Please note that all figures are in US dollars. US \$22 is approximately Can \$30.

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Why Oregon Needs a Price on Pollution

Oregon has already required the major utilities to get 25 percent of their power from renewable sources by 2025 and has already required fuel producers to decrease the carbon intensity of their fuels 10 percent by 2025. Why must Oregon do more? The most recent Oregon Global Warming Commission Report shows that if Oregon had not taken any of the steps it has already taken, emissions would have continued increasing for decades (yellow line in graph below), but its existing policies bring its emissions down to a relatively flat trajectory (red line). However, climate stability and Oregon's existing goals require it to steadily *reduce* emissions (orange line). That is what the Healthy Climate Bill will do.



How Oregon Compares on Clean Energy Accomplishments

While pollution pricing is the driving force behind a transition to clean energy, it works in tandem with other clean energy policies. Oregon has taken some steps in the direction of a clean energy economy, but could do more to catch up with its two closest neighbors.

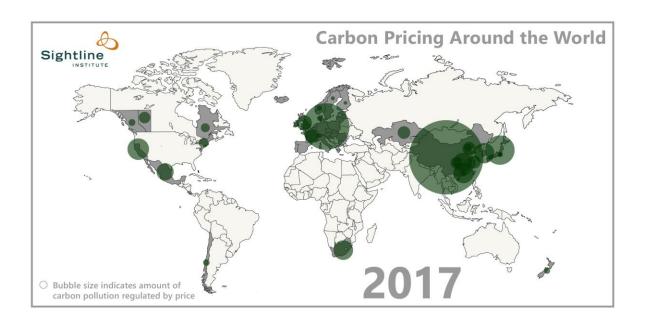
	Oregon	California	Washington
<u>Transportation Sector</u>			
Adopted Clean Cars Standard	<u>2006</u>	2002	2005
Clean Fuels Standard	10% reduction by 2025	10% reduction by 2020	No
State Gas Tax	31¢	42¢	44¢. Rising to 49¢ in 2016
Policy aimed at reducing vehicle miles traveled (VMT)	No	SB 375 (2008)	No
Hard Cap or Pollution Price	Not yet	Yes	In rulemaking
Electricity Sector			
Renewable Portfolio Standard	25% by 2025	50% by 2030	15% by 2020
Percent Power from Coal	33%	6%	7%
Energy Efficiency	Ranked #4	Ranked #2	Ranked #8
Hard Cap or Pollution Price	Not yet	Yes	In rulemaking
<u>Statewide</u>			
Greenhouse Gas (GHG) Emissions Per Capita	<u>15.7</u>	12.2	14.2

Interaction with the Federal Clean Power Rule

This summer, the United States Environmental Protection Agency (EPA) issued its final Clean Power Rule, requiring states to come up with plans for cutting pollution from their electricity generation. However, the goals that EPA set for Oregon fall short of Oregon's existing statutory targets. This gives Oregon the opportunity to meets its own pollution limits through a hard cap while also generating credits under the federal Clean Power Rule. Oregon could sell its allowances to other states and use the revenue to turbo-charge its clean energy investments, or it could simply retire the credits so that no one else may use them.

Global Context

In 2015, <u>39 countries and 23 cities, states and provinces</u> already use pricing mechanisms to limit greenhouse gas pollution. By the end of 2016, nearly <u>one-quarter of all climate pollution</u> in the world will have a price tag attached.



Conclusion

Oregon is well positioned to unhitch our families and businesses from the fossil fuel rollercoaster and walk down the pollution stairs to a clean and prosperous economy. By incorporating the price of pollution into the economy through a well-designed hard cap, Oregon can improve the health, wellbeing, and economic prospects of Oregonians along the way.



Sightline Institute is a think tank providing leading original analysis of energy, economic, and environmental policy in the Pacific Northwest.