



Climate Solutions.
PRACTICAL SOLUTIONS TO GLOBAL WARMING



Oregon
Environmental
Council
It's Your Oregon

March 1, 2017

Chair Dembrow and Chair Helm,
Members of the Senate Committee on Environment and Natural Resources
Members of the House Committee on Energy and Environment
Oregon State Capitol
Salem, OR 97301

Re: Senate Bills 557, 478; House Bills 2135, 2468

Dear Chair Dembrow and Chair Helm, and Members of the Committees,

We write in **strong support of SB 557 and SB 478** as economically sound and urgently needed approaches to managing climate pollution and furthering climate leadership in Oregon. Oregon is poised to reap the rewards of more jobs, clean air, and local, renewable energy if we place a limit and price on the largest sources of climate pollution. Capping and pricing climate pollution is a cost-effective, market-based solution that benefits the economy and Oregonians.

Climate Solutions is a regional non-profit working to accelerate practical and profitable solutions to global warming. For almost 20 years, Climate Solutions has been working to implement energy efficiency, renewable energy, and carbon reduction policies that demonstrate that clean energy and broadly shared economic prosperity go hand-in-hand. Founded in 1968, the Oregon Environmental Council (OEC) is a nonprofit, nonpartisan, membership-based organization. OEC advances innovative, collaborative solutions to Oregon's environmental challenges for today and future generations.

Oregon must do more to combat rising climate pollution. To fully transition from fossil fuels to a clean energy economy, Oregon needs a comprehensive policy that accounts for the true costs of climate pollution. Oregon has legislated targets for reducing greenhouse gas emissions, but the Global Warming Commission confirmed last month that we are far off track from meeting our goals.¹ In fact, our state's climate emissions are now rising – especially in the transportation sector. This is true despite the progress Oregon has made in recent years to address its shared carbon footprint.

Oregon is part of the global problem of climate change, and we need to be part of the solution. Oregon has innovative land use policies alongside good investments in statewide energy efficiency and public transit. Oregon is now leading on clean transportation fuels and has set the state on a path to transition from coal to renewables. Accounting for the true cost of climate pollution can drive additional investment to our clean energy transition and enhance existing clean energy

¹ Oregon Global Warming Commission, "Biennial Report to the Legislature 2017," February 2017:
<https://olis.leg.state.or.us/liz/2017R1/Downloads/CommitteeMeetingDocument/95809>

initiatives, by solving for the market failure of externalized costs from pollution and letting non-fossil energy compete on a fair and even playing field.

Oregon needs comprehensive solutions to climate change. By accounting for the price of carbon in our economy, we can encourage further investment in solar, wind, and biofuels; grow middle class jobs; improve public health; and move away from polluting fossil fuels. A price on carbon incentivizes more of what we do want – efficiency, conservation, and renewables - and discourages what we do not want – pollution. It corrects for market failures and rationalizes our energy use. For those who favor market mechanisms, it is one of the most potent, cost-effective, and flexible tools in the carbon control toolbox.

A cap and price on climate pollution acts as a necessary backstop, while other policies also drive down pollution and encourage market transformation to clean energy. In this way, a carbon cap and price approach ensures our climate pollution is brought under control and we meet the state’s greenhouse gas reduction goals, while the portfolio of programs reduce pollution efficiently. These other strong policies, including our state’s Clean Fuels Program and Renewable Portfolio Standard, help our industries and utilities achieve program compliance in a cost-effective way that drives the clean energy economy forward. In essence, these programs make reaching our emissions targets in specific sectors easier and cheaper, while the overall cap ensures the reductions happen. Together with investments in energy efficiency and other cost-effective measures, we can make the strides we need on climate change while providing tremendous benefits to our state’s economy, people, and environment.

Capping and pricing climate pollution is a cost-effective, market-based solution that benefits businesses. Oregon is poised to reap the rewards of more jobs, clean air, and local, renewable energy if we place a limit and price on the largest sources of climate pollution. Proceeds will be reinvested across the state to accelerate clean energy technologies and solutions and build healthy, resilient communities. We can build a thriving economy and ensure a healthy environment here in Oregon.

A lower carbon economy gives Oregon a first-mover advantage and top-notch workforce. Leading economies around the globe are prioritizing energy efficiency and emissions reductions. We can secure Oregon’s role as a thriving engine of innovation, attracting clean-tech investment and talent – or let the opportunity pass us by. By acting now, Oregon can gain a competitive advantage over other states and nations that are slower to act.

By the Numbers: Oregon’s Clean Energy Economy at Work²

- More than 48,000 Oregonians work in the clean economy, producing \$7 billion in goods and services (GDP, 2014).
- Clean economy jobs are growing at an 11% annual rate in Oregon – faster than state employment as a whole.
- More than \$9.8 billion has been invested in renewable energy in Oregon, with more than 5,300 jobs created directly and many thousands of additional jobs supported.

² Renewable Northwest, “Oregon Renewable Energy Projects Fact Sheet,” Summer 2015, http://www.rnp.org/sites/default/files/pdfs/OR_FactSheet_2015Oct1.pdf

- Oregon’s burgeoning electric vehicle industry has already created more than 1,600 direct and indirect jobs.
- Every dollar invested in the clean energy economy creates more than three times as many jobs as investment in fossil fuels, and most jobs cannot be outsourced.
- Clean energy benefits accrue across the state – Pendleton has the most solar panels per capita of any city in the Pacific Northwest.

A cap-and-price approach provides certainty and flexibility that businesses need to thrive.

Forward-looking businesses want to be ahead of the curve, making business decisions that account for the true cost of climate pollution. Reducing climate pollution with a defined limit and stable price on emissions provides a clear, consistent and long-term policy and regulatory framework. Using a market-driven approach allows flexibility to meet reductions in the most affordable, efficient way. Putting a price on carbon will also send a strong price signal to clean energy businesses that Oregon is ready to receive their investment and jobs.

The right policy framework reduces economic risk, helping our business competitiveness and protecting trade-exposed industries.

Climate action reduces the economic risks Oregon’s industries face from climate change and enable our state to seize the clean energy opportunity. The state can implement a limit on carbon pollution that protects energy-intensive, trade-exposed (EITE) industries while holding top polluters accountable and keeping overall energy prices stable.

Growing a clean energy economy and climate-resilient industries is technically and economically achievable in Oregon.

In the recently released study of cap-and-trade in Oregon, the Department of Environmental Quality (DEQ) confirmed what years of worldwide experience have proven: a market-based cap-and-trade system in Oregon offers a “flexible, cost-effective mechanism” for assuring greenhouse gas reductions that would have minimal effects on the state’s economy, and could grow our GDP.³ The study shows how pricing climate pollution can help Oregon regain our competitive edge and bring new jobs to both rural and urban parts of the state.

DEQ’s study also discussed the potential use of proceeds from pricing climate pollution. Reinvestment of the program’s proceeds is key to multiplying the success of a carbon pricing system: reducing pollution, creating clean energy jobs in local communities around the state, and empowering impacted communities. As the study recommends, significant proceeds from the program can be directed to reinvestment opportunities that benefit communities of color and rural communities. Examples of these reinvestment include training people to work in the clean energy sector, energy bill assistance, and weatherization in low-income housing.

Climate change is already harming Oregon’s economy, people and places. We must act urgently and boldly to protect our state.

According to the Oregon Climate Change Research Institute (OCCRI), our state is already experiencing the destructive effects of climate change caused by human emissions of greenhouse gases.⁴ Our state economy depends on industries like

³ Department of Environmental Quality, “Considerations for Designing a Cap-and-Trade Program in Oregon,” February 14, 2017, <https://olis.leg.state.or.us/liz/2017R1/Downloads/CommitteeMeetingDocument/98956> (DEQ Cap and Trade Study).

⁴ Oregon Climate Change Research Institute, “Third Oregon Climate Assessment Report ,” January 2017, <https://olis.leg.state.or.us/liz/2017R1/Downloads/CommitteeMeetingDocument/99261>

agriculture, fishing, forestry, ranching, wine making, brewing, outdoor recreation, and tourism. Climate change threatens these industries, costing us millions. And the impacts are fundamentally unequal; rural and urban low-income communities and communities of color are more acutely experiencing the effects of pollution and global warming. This is why any policy we enact to price carbon – either a fee or cap – must also invest in the people and communities in Oregon who are most vulnerable.

If we don't act urgently and boldly to curb our greenhouse gas emissions, Oregon's climate is projected to continue warming three to seven degrees Fahrenheit by the 2050s and five to eleven degrees by the 2080s (according to the OCCRI report). That rapid warming means that if we continue business as usual, Oregon will have as many ninety-five degree days in 2100 as Texas does now. Recent record wildfire seasons have eaten into the state budget. The State of Oregon's wildfire insurance premiums are spiking upward, and wildfires are expected to quadruple in our children's lifetimes. Snow pack and precipitation are at historic lows in some parts of Oregon. Vanishing snowpack and reduced streamflow impact the \$13 billion outdoor recreation industry that directly employing 141,000 people in Oregon. Our beef ranchers could lose up to \$11 million per year by 2040 due to drought.⁵

Commercial fishing and seafood processing generate \$518 million per year in Oregon. Crabs, shellfish, oysters and salmon are threatened by toxic algae blooms due to warm oceans, increasing ocean acidity and rivers running too low and warm during hot summers. The state has already spent money studying and helping oyster farmers adapt to rising ocean acidity, caused by increasing levels of carbon dioxide in the atmosphere.

Climate change threatens the health and productivity of Oregon's people. Burning fossil fuels causes asthma, heart disease, stroke, cancer and results in huge health costs for families to bear. Pollution is projected to create **\$1.1 billion in health-related costs** to Oregonians by 2040.⁶ Health costs, severe weather, and other impacts of climate change will **cost Oregonian families \$1,930 per year by 2020 and \$2,400 by 2040.**

Oregon must dedicate resources to both reduce climate pollution and adapt to unavoidable impacts. Oregon will have to build resiliency for some climate impacts already being experienced. However, it is both wise and more cost-effective to address the root cause of the problem by reducing climate pollution causing further impacts. Oregon should put its full force into adopting strong climate policies to mitigate climate pollution and urge other states and national leaders to join us. A price on carbon – especially a cap-and-invest model like SB 557 – could also generate proceeds to fund needed climate adaptation efforts, increasing our state's resiliency to climate impacts while avoiding even more extreme impacts.

Oregonians support climate action and state leadership is needed. At a time when our state cannot count on the federal government to make climate progress for the next four years, Oregon's innovative spirit and leadership are more needed than ever. Oregonians from all walks of life and

⁵ Environmental Entrepreneurs, "Oregon: Changing Climate, Economic Impacts, & Policies for Our Future," June 2016: http://www.e2.org/wp-content/uploads/2016/07/Oregon_Business_Climate_Report.pdf

⁶ See Id.

all corners of the state support action on climate change. The 2013 Oregon Values and Beliefs survey showed that 72% of Oregonians support actions to address climate change from across the state – eastern and western Oregon.⁷ Two-thirds of all Oregonians agree that stronger regulations are needed to make a polluter pay for the costs to the larger public. Over 200 Oregon-based businesses have signed the Oregon Business Leadership Climate Declaration since 2014 calling for state and regional climate action.⁸ There is a growing groundswell of support from local elected officials, farmers, parents, faith-leaders and individual citizens calling for climate action in Oregon.

There are different approaches for accounting for the true costs of climate pollution. SB 557 offers the opportunity for Oregon to adopt a flexible, market-based mechanism that can link with other jurisdictions, and bring about low-cost emissions reductions. SB 748 is an alternative Oregon-only approach that will require more direct in-state emissions reductions and attract investment for low-carbon development.

We support policies that adhere to the following principles: science-based, creates long-term business and policy certainty, is comprehensive in scope, reinvests in addressing the problem and creating benefits for under-served communities, is equitable for most impacted communities, supports workers, and is transparent and accountable. In particular, we believe a strong Oregon policy has the following features:

An enforceable cap

Oregon adopted climate reduction targets a decade ago. And while Oregon made temporary progress arresting the growth of emissions, climate pollution is on the rise again. Oregon currently has no enforcement or accountability mechanisms that ensure our 2050 goals are achieved; indeed, we are falling far short of our 2020 aspirations. For these reasons, Oregon needs an enforceable cap, based on the best available science. A cap should go into force as quickly as possible, decline steadily, and be authorized through 2050. An enforceable cap ensures environmental outcomes and a long time horizon creates adequate planning time for businesses.

A cap should also cover all major sources of Oregon’s greenhouse gas emissions, including in-state and imported power; transportation; and industrial emissions. A key recommendation from DEQ’s recent study “Considerations for Designing a Cap-and-Trade Program in Oregon” is as follows:

Cover as many sources of emissions as possible: A cap-and-trade program encourages the most cost-effective reductions to occur first, but this incentive only extends to sources of emissions covered by the program. Thus, a program covering more emission sources within the economy produces cheaper cuts in emissions than

⁷ OPB, OSU OHSU, “2013 Oregon Values & Beliefs Study,” 2013: http://oregonvaluesproject.org/ovp-content/uploads/2013/10/OVB_Environment_Summary.pdf

⁸ CERES, Oregon Business Climate Declaration, <https://www.ceres.org/declaration/sign/oregon-business-climate-declaration/oregon-business-climate-declaration-full-signatory-list>

a program with a narrower scope. A broad program is also needed to achieve Oregon's greenhouse gas reduction goals and to link with other jurisdictions.⁹

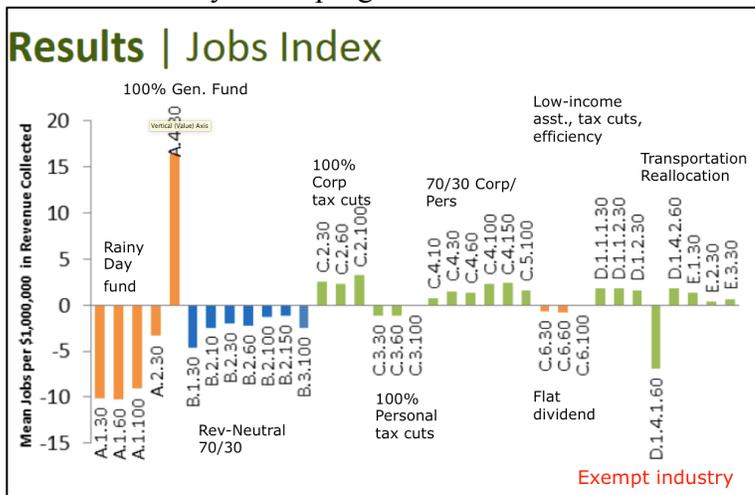
Invests in solutions and a vibrant Oregon

Pricing pollution creates opportunities for Oregon to invest in the transition to a clean energy economy. Climate change, however, disproportionately impacts some communities more than others. An Oregon policy should invest in communities hit first and worst by climate pollution (as well as the negative health impacts of fossil fuel combustion), and create opportunities for economic development in rural parts of the state. A responsible policy will dedicate significant resources to these communities. We support the current allocations in SB 557 and SB 748.

A policy should invest in reducing climate pollution, assisting industries to become more efficient and switch to lower-carbon fuels, provide support for low-income households, and aid in the decarbonization of energy sectors. These investments will lead to a healthier, more vibrant and resilient Oregon. Done right, this policy can leverage funding to create efficient and affordable housing, resilient infrastructure for the 21st Century, and clean energy jobs throughout the state.

Data-driven approach

A cap-and-trade or cap-and-fee based approach can have flexibility features built in to accommodate “energy-intensive, trade-exposed” (EITE) industries. However, we strongly support provisions in SB 557 and SB 748 that require a data-driven approach for assessing leakage risk. No industries emitting over 25,000 tons of greenhouse gases should be exempt. As the PSU/NERC carbon tax study showed, exempting industries leads to negative economic outcomes. (See green bar, D.1.4.1.60 below.) Exemptions decrease the overall efficiency of the program and reduce reinvestment opportunities.



Source: Northwest Economic Research Council, “Carbon Tax and Shift” report, commissioned by Oregon Legislature (SB 306). Bar labels added by Oregon Environmental Council

⁹ [DEQ Cap and Trade Study, page 5.](#)

Job training and worker assistance

Transitioning to a low-carbon economy will require support from engineers, construction workers, secretaries, electricians, project developers and many others. It is important that Oregon's labor pool have the skills necessary and that workers in fossil fuel-intensive industries have the opportunity for retraining. We strongly support inclusion of a Just Transition fund and dedication of resources for apprenticeship, pre-apprenticeship, and transition programs.

Transparent and accountable

Our organizations strongly support the addition of an Oversight Committee for a policy that caps, prices, and invests in solutions. An Oversight Committee should help ensure that a program is achieving emissions reductions, that benefits are distributed throughout Oregon, that climate impacted communities (both urban and rural) are receiving support, and that proceeds are being leveraged for positive outcomes in Oregon's primary energy sectors.

Other economies that cap and price climate pollution have flourished while reducing emissions. Strong clean energy and climate policies that put enforceable limits on climate pollution exist throughout the world. In the U.S., we have two successful programs that have effectively used cap-and-invest market mechanisms to limit climate pollution while maintaining robust economies. These states have decoupled emissions reductions from economic growth, and used clean energy investment to boost their local economies while keeping energy costs low.

- **California AB 32 Cap-and-Trade Program:** California's cap-and-trade program took effect in early 2012. Since 2001, California's economy (GDP) has grown 28% while its emissions per person have dropped 18% over the same time period.¹⁰ California has continued to attract \$48 billion in clean economic investments and created 500,000 jobs in the last ten years. In 2016, Bloomberg named California the #1 state in which to do business. This program also links to Quebec's cap-and-trade program, and will soon link to Ontario.

California is also a model for successful, equitable reinvestment programs. Proceeds generated through California's cap and trade program have been used to help the communities that have been most harmed by pollution. In the first round of funding, the most impacted and underserved communities received \$272 million for public transit, affordable housing, urban forestry, home weatherization, clean energy and cleaner vehicles.¹¹ California is continuing to explore increasing the amount of proceeds that are invested back into communities that need it most.

- **Regional Greenhouse Gas Initiative (RGGI):** The regional economy of the nine

¹⁰ California Air Resources Board, "California Greenhouse Gas Emissions for 2000 to 2014 – Trends of Emissions and Other Indicators," 2016 Edition,

https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf

¹¹ California Senate, "SB 535 Fact Sheet: Climate Change Policy That Helps Our Communities,"

http://sd24.senate.ca.gov/sites/sd24.senate.ca.gov/files/SB535%20Fact%20Sheet_0.pdf

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Northeastern states that are part of the Regional Greenhouse Gas Initiative (RGGI)¹² has grown 8% while reducing more than 45% of climate pollution in their power sector since 2005. Customers' energy bills in RGGI states have been *reduced* by \$460 million total. RGGI's primary investments in energy efficiency and clean energy have proven to be cost-effective ways to reduce pollution while driving down overall energy prices and encouraging growth.

The health benefits of RGGI reduction in air pollution have also been quantified in a new report. These health impacts from 2009 to 2014 included avoiding up to 830 adult deaths, up to nearly 10,000 asthma exacerbations, and 14,500 respiratory illnesses. The total health savings for RGGI added up to \$5.7 billion and avoided about 44,000 lost workdays.¹³ DEQ's study of the benefits of a cap-and-trade program in Oregon notably do not include the health benefits for the state.

Neutral on HB 2135 and HB 2468. While HB 2135 and HB 2468 contain elements of a carbon pricing mechanism that we support, our organizations remain neutral on these bills in their current form.

In summary, we support a science-based, equitable approach to carbon management that delivers broadly shared benefits for all Oregonians. SB 557 and SB 748 provide workable models for pricing and limiting climate emissions in Oregon that meet this criteria. We need to seize these opportunities and chart Oregon on a new course from pollution to prosperity.

Thank you for your consideration of these comments.

Sincerely,



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¹² The Analysis Group, "The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States." <https://www.c2es.org/docUploads/rggi-mou.pdf>

¹³ Abt Associates, "Analysis of the Public Health Impacts of the Regional Greenhouse Gas Initiative, 2009-2014, January 2017, <http://www.abtassociates.com/AbtAssociates/files/4c/4cd00d28-62e7-4902-84b4-4d9df08c25ce.pdf>