

PACIFIC COAST CLIMATE LEADERSHIP ACTION PLAN



The Governments of British Columbia, California, Oregon and Washington,

Pursuant to the *Memorandum to Establish the Pacific Coast Collaborative* of June 2008, as provided for in Article 6;

Building upon the goals of the 2013 Pacific Coast Collaborative's (PCC) *Pacific Coast Action Plan on Climate and Energy*;

Implementing Pacific Coast jurisdictions' commitments embodied in the Under2MOU and reinforcing the 2015 COP 21 Paris Agreement's international ambition to limit global warming to less than two degrees Celsius by the end of the century;

Demonstrating that economic success and environmental protection are mutually dependent and not in conflict as jobs in the clean economy on the Pacific Coast grew twice as fast as jobs in the economies of the US and Canada as a whole from 2010–2014, influenced by new investments, supportive public policy, and shifting market demand for more sustainable products;

Observing that climate change has and will continue to bring new and unforeseen threats to the region and that investments in clean energy, clean transportation, and climate preparedness are needed immediately to mitigate future impacts;

Valuing climate policy approaches that address socioeconomic inequities and advance efforts that promote community resilience while protecting vulnerable populations from climate impacts;

Recognizing that resources, technology, expertise, and human capital from the region can help other jurisdictions, particularly developing jurisdictions, transition to low carbon economies; and

Highlighting the leadership of the Pacific Coast and the Pacific Coast Collaborative as a model for effective subnational action.

Now Agree As Follows:

I. Demonstrate global subnational leadership and ambition on climate and clean energy policy and the success of equitable low carbon regional economies.

- 1) **Implement our roles under the Under2MOU in each PCC jurisdiction, support implementation of the COP21 agreement, and advance compliance and increasing ambition over time in subnational and national commitments to reduce carbon emissions; highlight the critical role of subnationals by demonstrating Pacific Coast leadership as a model for regional, national, and international collaboration on climate change.**

British Columbia, California, Oregon and Washington are founding signatories to the Under2MOU, which calls for reductions of greenhouse gas emissions to two tons per capita or by 80–90 percent below 1990 levels

by 2050 and which at the time of this agreement has over 125 national and subnational signatories representing 710 million people and economies totaling \$20.7 trillion. Through the Under2MOU and individual international bilateral agreements, British Columbia, California, Oregon and Washington will continue to push for national and international climate action consistent with the ambition of the Paris Agreement and rising ambition over time.

- 2) **Address socioeconomic inequities by improving access to clean energy technologies and solutions and targeting investments to communities that are disproportionately affected by climate change.**

Through policy design and investments, PCC jurisdictions are helping ensure that climate and clean energy investments and policies address socioeconomic inequities and help communities most impacted by a changing climate. Jurisdictions will continue to actively engage disadvantaged communities, including on new policies and programs resulting from this Action Plan. Washington's recently-proposed Clean Air Rule creates an Environmental Justice Advisory board to create opportunities to reduce local air pollution and support disadvantaged communities. British Columbia's revenue-neutral carbon tax was designed to be sensitive to impacts on lower-income households, including through tax credits and reduced rates for lower-income taxpayers. California is investing hundreds of millions of dollars annually from cap and trade revenues into low carbon transportation, sustainable communities and affordable housing, energy efficiency, urban forests, and measures to reduce short-lived climate pollutants. By statute, at least 10% of the investments must be in disadvantaged communities, and 25% must benefit disadvantaged communities. Oregon has developed a framework to improve accessibility for transportation disadvantaged populations, while also establishing a community solar program that includes a 10% carve-out for the benefit of low-income communities.

- 3) **Actively promote the model of West Coast climate policy leadership, which continues to demonstrate that low carbon economies can thrive and lead the world in attracting investors, businesses, job-seekers, and residents.**

The governments of British Columbia, California, Oregon and Washington will share the leadership and ambition of the West Coast in implementing the actions in this agreement to demonstrate that regional collaboration to reduce carbon emissions and advance clean energy are driving economic growth, creating jobs, and reducing emissions by significant and measurable amounts. They will test innovative policies, programs, and technologies and share information about successful efforts with other developed and developing nations and subnationals. Jurisdictions will work together to collect data, conduct analysis, and communicate results that tell the regional story and demonstrate the power of sub-national coordination on climate action, emphasizing the region's successful decoupling of energy use and carbon emissions from economic growth. They will use regional analysis and jurisdiction-specific highlights from the public and private sectors to validate the value of climate action for job growth, transportation sector transformation, and return on clean energy and infrastructure investment. The PCC jurisdictions will

commission analyses of the West Coast clean economy and tell the story of regional success through a variety of formats and events that engage West Coast stakeholders critical to continued economic transformation. These efforts will demonstrate that the PCC model of subnational action is not only working, but scalable around the world.

II. Lead national and international policy on climate change with actions to:

- 1) **Account for the costs of carbon pollution in each jurisdiction and work nationally and globally to advance carbon pricing based on successful West Coast models.**

British Columbia's economy-wide carbon tax is set at \$30 per ton of CO₂e, and all revenues are recycled back into the economy through personal and business tax cuts. California has an economy-wide cap and trade program that has successfully linked its program with Quebec and is working toward linkage with Ontario. California and British Columbia are also part of the World Bank's Carbon Pricing Leadership Coalition. Washington is developing an economy-wide regulatory cap on carbon emissions under the authority of the State Clean Air Act and is considering ways to link with other carbon-reducing programs. Oregon is phasing out coal power and doubling the state's renewable energy target to 50% by 2040. It is conducting a study on market mechanisms for reducing greenhouse gas emissions in the state to inform future decisions, in part because carbon pricing helps ensure the cost-effectiveness of programs like renewable portfolio standards and low carbon fuels standards. British Columbia, California, Oregon and Washington will continue to maintain and pursue their programs and advance complementary clean energy investments. They will also work with other countries and subnational jurisdictions around the world to encourage, design, and implement successful carbon pricing efforts.

- 2) **Collaborate with major West Coast Cities in fulfilling the commitments in the 2016 *Pacific North America Climate Leadership Agreement* and putting the West Coast on a path to reduce greenhouse gas emissions 80% by 2050.**

The 2016 *Pacific North America Climate Leadership Agreement* between West Coast U.S. states, the Province of British Columbia, and six major West Coast cities affirms their shared vision of a vibrant low carbon regional economy and establishes formal commitments to joint efforts to transform energy systems, buildings, transportation, and waste management. The cities of Los Angeles, Oakland, Portland, San Francisco, Seattle, and Vancouver are global leaders that are building thriving, sustainable and livable low carbon economies. Recognizing shared goals to reduce greenhouse gas emissions by 80% by 2050, the PCC Governors and Premier affirm their commitment to working closely with the cities on the Pacific Coast to create a low carbon future that is the model for the world.

- 3) **Establish a consistent approach for monitoring and reporting on emissions of the powerful climate-forcing pollutants methane, black carbon, ground-level ozone, and fluorinated gases with the ambition of establishing targets for these pollutants by 2020.**

Short-lived climate pollutants—"super pollutants"—are chemicals that have relatively short lifetimes in the atmosphere—from a few hours to a few decades—and are powerful contributors to climate change. The primary short-lived climate pollutants are black carbon, methane, fluorinated gases (F-gases), and tropospheric ozone. Controlling these super pollutants worldwide could reduce global warming by 0.6 degrees Centigrade by 2050. These super pollutants are also dangerous air pollutants that affect human health, agriculture, and ecosystems. California has a short-lived climate pollutant reduction strategy with a target to reduce emissions of methane and F-gases 40% below 2013 levels by 2030 and reduce black carbon 50% below 2013 levels by 2030. All large landfills in British Columbia are required to install gas capture systems, reducing their methane emissions by up to 75%, and it has taken steps to reduce methane emissions from the oil and gas sector. Washington is estimating reductions in black carbon from woodstove and diesel retrofit programs, and will be reviewing data from ambient ozone and methane monitoring programs. Oregon has policies to reduce particulates like black carbon to achieve local health benefits. Given these actions within individual jurisdictions, California, Oregon, Washington and British Columbia will work together to investigate and employ best available methods to quantify state- and provincial-level emissions of methane, black carbon, HFCs, and tropospheric ozone. PCC jurisdictions will work to include these emissions in annual reporting of state and provincial greenhouse gas emissions with a goal of providing a firm basis upon which to consider reduction targets for these gases by 2020.

British Columbia and California will consider inclusion of short-lived climate pollutants in their greenhouse gas offset programs.

III. Increase awareness, understanding, and action on ocean acidification and other climate-related changes in ocean conditions with actions to:

- 1) **In partnership with federal agencies (U.S. and Canada) and key stakeholders, design and implement coordinated, effective West Coast ocean acidification monitoring and research.**

Since 2013, the PCC has worked to engage the U.S. federal government in monitoring and research activities along the West Coast. The PCC jurisdictions will continue to collaborate with national-level governments in the U.S. and Canada to create a shared vision for West Coast ocean acidification monitoring and increased funding for further scientific research and programmatic action to reduce impacts from ocean acidification. A coordinated monitoring network would provide key information to resource managers and fisheries industry representatives to mitigate the threat of ocean acidification and adapt to changing conditions.

- 2) **Initiate the development of an international network of countries, states, provinces and cities that will work together to address the threat of changing ocean conditions with a particular focus on ocean acidification.**

California, Oregon, Washington and British Columbia will continue to foster an international community focused on ocean acidification and other climate change-driven changes in the ocean. Cooperating partners will increase awareness and understanding of ocean acidification on a global scale. They will develop and implement best practices to mitigate and adapt to changing conditions and build resiliency in key marine ecosystems. The PCC jurisdictions recognize that more work is needed to engage stakeholders beyond the scientific community to effectively move from science to action at the state, national, and international levels.

IV. Transition the West Coast to clean modes of transportation and reduce greenhouse gas emissions from this sector with actions to:

- 1) **Create a robust regional market for low carbon transportation fuels.**

In 2015, the International Council on Clean Transportation concluded that there will be sufficient low carbon fuels available to the West Coast market to reduce petroleum gasoline and diesel consumption 25% by 2030 and the overall carbon intensity of transportation fuels by up to 21% over the same period. British Columbia, California, and Oregon have low carbon fuel programs in place that are stimulating regional production of low carbon-intensity fuels. While Washington does not have a low carbon fuel standard, the state has proposed a rule that will reduce greenhouse gas emissions from major sources, including transportation fuel use within the state, as part of the statewide carbon cap. The PCC jurisdictions will continue to work together to align key elements of these policies and programs to create an integrated West Coast market for low carbon fuels.

- 2) **Accelerate the transition of West Coast vehicle fleets to zero-emission vehicles (ZEVs) by reducing infrastructure and financial barriers to adoption and creating the opportunity for full electrification of fleet operations where suitable.**

In 2014, PCC jurisdictions created West Coast Electric Fleets to complement jurisdictions' individual efforts to accelerate market adoption of ZEVs and help achieve a goal of 10% ZEV fleet procurement on the West Coast by 2016. West Coast Electric Fleets has grown to include all of the state and provincial fleets on the West Coast, all major West Coast cities, many smaller municipalities, and many utility and private fleets. Recognizing the critical importance of charging infrastructure to ZEV adoption among fleets and the broader market, the PCC is committing to work with major West Coast cities to help create a comprehensive Pacific Coast charging network along major highway systems and accelerate the deployment of residential, workplace, and public charging infrastructure in major population centers. The PCC will continue to support and grow West Coast Electric Fleets and advance jurisdiction-specific vehicle and infrastructure programs. For example, as members of the ZEV Alliance, British Columbia, California and Oregon are striving to make all passenger vehicle sales in the states ZEVs as fast as possible, and no later than 2050. Through joint efforts and jurisdiction-specific policies and programs, the PCC will lay the groundwork for full fleet electrification for duty cycles

and technologies where ZEVs reduce fleet emissions, save money, and improve performance.

3) Lower the up-front cost and increase availability of zero-emission vehicles through bulk purchasing programs for passenger vehicle and transit fleets.

Led by California Department of General Services and other regional partners, PCC jurisdictions are collaborating on a national bulk vehicle purchasing effort with the goal of lowering average vehicle purchase prices by at least 15% and improving access to charging and fueling stations. This effort complements jurisdiction-specific procurement goals and fleet programs, including Washington's Electric Fleets Initiative goal of 20% electric vehicles in all new state passenger vehicles by 2017; California's ZEV Action Plan goal of at least 25% ZEVs in state fleets by 2020; British Columbia's Fleet Champions program; and the Multi-State ZEV Action Plan to which California and Oregon are signatories. PCC jurisdictions will continue to work together to develop bulk purchasing efforts and make them available to fleets throughout the region, with a particular emphasis on passenger vehicles and electrified buses for transit fleets. To demonstrate continued leadership, jurisdictions will continue to make meaningful efforts to increase ZEVs procured for their own fleets.

4) Work together to increase access to affordable alternative fuel vehicles for low income communities through fleet surplus policies and other support programs.

Alternative fuel vehicles can benefit low-income owners through lower fuel and maintenance costs over the lifetime of vehicles and reduce transportation-related emissions in low-income neighborhoods. PCC jurisdictions will collaborate by sharing lessons and technical expertise on effective policy and program models for increasing access to affordable alternative fuel vehicles, including by leveraging public fleet procurement and surplus policies and through passenger vehicle incentives. As a regional example, California has allocated \$19 million since 2014 for light-duty vehicle projects, such as purchase and lease incentives for ZEVs and hybrids, that benefit disadvantaged communities and lower-income consumers.

V. Invest in clean energy with actions to:

1) Promote integration of the region's electricity grids.

Oregon and Washington are participating in discussions with California and other Western states about transitioning to a Western regional grid operator that would provide clean energy and other benefits to each state and the region, while respecting the energy policy preferences of each state and the needs and interests of non-participating utilities. This builds in part on the recent successful experience of the California Independent System Operator's regional energy imbalance market that allows utilities from several states to trade energy in five minute increments to balance out supply and demand fluctuations, and that has saved costs and reduced greenhouse gas emissions. Promoting a more integrated and modern regional electricity grid and increasing opportunities for mutually beneficial cross-national energy sharing can lead to substantial system efficiencies and allow grid managers to draw on a broader and more diverse set of energy resources across the region to meet system needs. This will result in more cost-effective integration of renewables, reduced energy reserve margins, more efficient and cost-effective transmission planning, improved regional cooperation on physical improvements to the grid, and ratepayer savings. The jurisdictions will work together to achieve net benefits to the region by promoting greater integration of the region's electricity grids and help the region transition to cleaner sources of energy.

2) Drive enhanced building energy efficiency, increase transparency of information on building energy uses, and harmonize product energy efficiency standards across the region.

Energy efficiency is the least expensive and most reliable way to reduce greenhouse gas emissions in the built environment while creating good local jobs. In 2015, California adopted legislation to promote benchmarking and disclosure in large commercial and multi-family buildings. British Columbia, California, Oregon and Washington will continue to work together, and in collaboration with West Coast cities, to further expand large building energy benchmarking and disclosure throughout the region and leverage data to drive reductions in energy use. Through these efforts, PCC jurisdictions and cities seek to achieve a goal of 75% of eligible large building square footage on the Pacific Coast reporting energy data through state, provincial, and/or city programs in a way that is accessible and retrievable. The PCC jurisdictions will continue to advance and harmonize energy efficiency standards for products across the region through a regular exchange of information.

3) Shift reliance on fossil fuels to an energy resource mix of the future that increases accessibility to renewable energy resources across the region's electricity grids.

Oregon passed legislation in 2016 to eliminate the use of coal-fired power by 2030 and double its renewable energy portfolio by 2040. California has also adopted a 50% renewable energy mandate by 2030, and Washington is phasing out coal power in the state. In British Columbia, BC Hydro's 1,100 MW Site C clean energy project is the largest energy infrastructure project in Canada, providing a flexible capacity resource for the West Coast. Oregon, California, Washington, and British Columbia will work together to support procurement and investment decisions to expand access to clean energy sources across the region.

4) California, Oregon, and Washington will implement the U.S. Clean Power Plan through state policies and programs that provide a model for other U.S. states and leverage regional grid connectivity to reduce net regional emissions.

California, Oregon, and Washington will lead Clean Power Plan implementation by example through their own ambitious efforts. In parallel, British Columbia's Clean Energy Act establishes a legislative requirement that at least 93% of the province's electricity be generated by clean, renewable sources. All of the PCC jurisdictions will work with other U.S. states to support implementation of the U.S. Clean Power Plan and the goal of net national emissions reductions by sharing lessons and expertise from PCC policies and programs and collaborating on regional and national compliance strategies. The PCC jurisdictions will use their unique positions as carbon reduction leaders within the Western Region to encourage Western state and provincial strategies that reduce net emissions.

5) Increase West Coast support for clean energy research, development, demonstration and deployment through expanded public and private sector investment, including upgrades to aging transmission infrastructure and new transmission infrastructure needed to meet clean energy goals.

The PCC jurisdictions will continue and increase their support and investment in the development of new and emerging technologies and to expand the deployment of existing clean energy projects. The jurisdictions will also support upgrades to aging transmission infrastructure and invest in new transmission infrastructure needed to meet clean energy goals.

The jurisdictions will look for opportunities to partner with their federal governments on implementing Mission Innovation investments and other federal research and development efforts. They will also work cooperatively with their federal governments to secure support for grid modernization and seek to partner with the private sector through initiatives such as the Breakthrough Energy Coalition. Washington's Clean Energy Fund supports early stage research, grid modernization, manufacturing of renewable energy technologies, and financial support for energy efficiency and renewable projects. California's economy wide cap and trade program is generating hundreds of millions of dollars annually for clean energy investments. Oregon has a history of investing in energy efficiency and renewable energy through state financial incentives and a public purpose charge on utility bills, and recently passed legislation to provide production-based financial incentives for solar installations. In British Columbia, BC Hydro is investing and expanding its system with major projects such as the Site C clean energy project, and supporting small clean or renewable projects through the Standing Offer Program; in addition, British Columbia funds innovation projects in the clean energy sector through a levy applied to final sales of energy products such as natural gas and non-transportation fuel oil.

VI. Increase climate resilience with actions to:

1) Improve regional forest health, mitigate wildfires and pest infestation, and increase drought preparedness by collaborating on technical assistance and innovative regional projects.

Throughout the Pacific Coast Region, repeated, lengthy and severe droughts have led to significant impacts on agriculture and forests, increased risk of wildfires, and other impacts. The 2015 drought and wildfire seasons broke records throughout the region. California is developing an approach to dealing with an unprecedented die-off of trees in the Sierra Nevada Mountains by removing dead and dying trees, reforestation, and development of a biomass utilization facility and a Resiliency Center. Washington has supported the creation of the Yakima River Integrated Plan, which is designed to improve drought resiliency in the Yakima Valley, one of the largest and most economically significant watersheds in the state. Oregon created a Drought Emergency Response Task Force, is implementing an Integrated Water Resources Strategy, and

has committed significant funding to a Federal Forest Health Program to increase the pace and scale of forest restoration and fire resilience on fire-prone forest lands. British Columbia's Forest Enhancement Program is focused on enhancing forest ecosystem resilience via mitigating wildfire risks, and reforestation and habitat restoration. British Columbia's new water legislation will provide more tools for managing drought, and the province is updating its drought management plan. PCC jurisdictions will enhance collaboration, including sharing best practices and relevant scientific information and pursuing pilot projects and other new approaches for improving forest health, minimizing losses from wildfire, and enhancing drought preparedness. Representatives of the PCC jurisdictions and partners with expertise will meet to share current experiences in these areas with an eye toward identifying potential regional approaches that will enhance jurisdictional efforts.

2) Reinforce efforts in the insurance industry and regulatory system to highlight the economic risks of inaction on climate change.

As a sector focused on evaluating and underwriting risk, the insurance industry has unique insights and perspectives on the economic impacts of climate change and the consequences of inaction. Several studies, such as *Risky Business*, have highlighted the business consequences of inaction on climate change. West Coast jurisdictions are national leaders on climate risk in the insurance sector. California's Insurance Commissioner is leading a multi-state coalition conducting a national climate risk disclosure survey that measures the insurance industry's reaction to the impacts of climate change. The Commissioner has also launched a Climate Risk Carbon Initiative that calls on the insurance industry to divest from thermal coal and requires all insurance companies that are licensed in California and write \$100 million or more in national premiums to disclose all of their investments in fossil fuels. Washington's Insurance Commissioner serves as Chair of the National Association of Insurance Commissioners' Climate Change and Global Warming Working Group and led the charge to include climate change inquiries in the Financial Examination Handbook, which is used when conducting financial examinations of insurance companies. Oregon is recognizing the costs of increasing forest

fires by purchasing a private insurance policy that helps to cover firefighting expenses when other state and federal funding sources have been expended. British Columbia is supporting work to help communities, including the insurance and real estate sectors, understand and respond to changing flood risk on the coast and the Fraser River. The PCC jurisdictions will work together through their insurance commissioners and other state and provincial insurance regulators to quantify current and projected climate-related losses, community-level risks, and implications for the insurance, infrastructure, and financial sectors, with the objective of identifying needed improvements for risk assessment methods, risk prevention and mitigation, risk communication and other industry best practices.

VII. Implementation

PCC jurisdictions will ensure implementation of the commitments included in this Action Plan by developing a work plan with specific milestones and appropriate targets and annual progress reports to PCC leaders. PCC Governors and the Premier of British Columbia will meet periodically to refresh and extend commitments on climate and clean energy.

VIII. Interpretation

This Action Plan is intended to spur finding new, smart ways for our governments, agencies and staff to work together, and with other governments and non-government partners, as appropriate, to add value, efficiency and effectiveness to existing and future initiatives and reduce overlap and duplication of effort. Our goal is to reduce, not increase, fiscal demands to achieve shared objectives.

IX. Limitations

This Action Plan shall have no legal effect; impose no legally binding obligation enforceable in any court of law or other tribunal of any sort, nor create any funding expectation; nor shall our jurisdictions be responsible for the actions of third parties or associates.

SIGNED IN SAN FRANCISCO, CALIFORNIA THIS 1ST DAY OF JUNE, 2016.



EDMUND G. BROWN JR.
Governor of California



Governor of Washington



KATE BROWN
Governor of Oregon



CHRISTY CLARK
Premier of British Columbia