Pacific Coast
COLLABORATIVE

Leadership now
for a sustainable tomorrow

Vision 2030

Positioning Pacific North America for Sustainable Prosperity

Released for comment and discussion by the Premier of British Columbia and the Governors of California, Oregon and Washington on the occasion of the first Leaders' Forum of the Pacific Coast Collaborative in Vancouver, B.C. on February 12, 2010.

OVER THE NEXT TWENTY YEARS, the jurisdictions along North America's Pacific Coast are poised to emerge as a mega-region and global economic powerhouse driven by innovation, energy, geographic location, and sustainable resource management, attracting new jobs and investment while enhancing an already unparalleled quality of life.

The jurisdictions of Pacific North America are each blessed with abundant resources to shape a sustainable future:

- **People:** Our citizens are our greatest asset. From the tribes and First Nations who originally inhabited this land, to the millions of residents who have arrived from around the world, the jurisdictions of Pacific North America are each welcoming, dynamic and culturally diverse.
- **Economy:** Taken together the region would be the 7th largest economy in the world–by 2030 this Pacific Coast economy will surpass $4 trillion.
- **Ideas:** Innovation drives the region's economy, as scientists, entrepreneurs and skilled workers bring new technology solutions to the global market place.
- **Natural Resources:** The Pacific Ocean, coastline, forests and farmlands offer the promise of new products and services, and a legacy to conserve and regenerate for future generations.
- **Distinct Sense of Place and Outlook:** Informed by our environment, the region is a model for healthy and sustainable communities, harmonizing urban, working, and wild landscapes to create an unequalled quality of life and unique "west coast" outlook.
- **Location:** The jurisdictions are North America's meeting place and gateway to Asia in the "Pacific Century."

Serious regional and global challenges face our region now and in the next twenty years, including:

- **Regional impacts of the current global economic crisis:** While our strengths have helped to shelter the region, we face similar challenges of declining investment and consumer demand, increased unemployment, and declining government revenues, with consequent budgetary pressures.
- **Meeting energy demands:** Whether in the built environment, transportation or industry, meeting the energy demands of the region through clean and renewable sources remains a critical challenge.
- **Renewing regional infrastructure:** Building a 21st century economy will require a significant investment in rebuilding crumbling transportation infrastructure, modernization of public and commercial buildings and expansion of the region's electricity grid.
- **Managing regional growth:** An estimated 14.6 million new residents in the next twenty years will bring population pressures to Pacific North America, including urban sprawl and congestion. Smart land use choices, water policies and transportation planning will be needed to maintain the quality of life and distinctiveness of our communities.
- **Addressing impacts of climate change:** Shifting precipitation patterns, accelerated sea level rise and severe weather events will threaten property and infrastructure leading to higher economic and social costs from north to south.
- **Protecting our environment:** Population growth and climate change will combine to put increasing pressure on the region's environment, including air and water quality, arable land and natural resources.

The citizens of each Pacific Coast jurisdiction are remarkably alike in terms of our shared values and aspirations. How do we ensure a prosperous future that is sustainable, driven by innovation and low-carbon solutions, energy and resource conservation, and provides secure and meaningful jobs to its citizens?

Harnessing the Power of Collaboration

Realizing the aspirations of each Pacific Coast jurisdiction will require decisive action at the local, state/province, and national level. In an increasingly complex and interdependent world, innovative responses are also required regionally and globally to address climate change, manage shared resources and create long-term economic prosperity for our citizens.

What could our region look like in 2030?

This document, *Vision 2030*, aims to set out answers to that question. It is intended to serve as a living document for the Pacific Coast Collaborative, providing a strategic vision for regional collaboration to be refreshed and refined with new ideas and information in the coming years through engagement with our citizens. The agreements signed at the first meeting of the Collaborative partners in 2010 represent an important step toward the realization of this longer-term vision.

A Sustainable Regional Economy in 2030

The Pacific Coast economy in 2030 is powered by sustainable, renewable, resource-efficient systems of production. The jurisdictions of the region will have responded to the challenges of energy security, environmental protection and climate change to emerge as a global leader in bringing clean, low-carbon solutions to the marketplace. The region generates thousands of new "green" jobs and attracts billions of dollars in investment each year, establishing the conditions for long-term prosperity.

Creating Green jobs

Responding to regional and global demand for clean energy expertise, Pacific North America is prospering from a worldwide market for clean energy technology and services valued at $1 trillion by 2030. New green-collar jobs are well-paying and locally-based, ranging from designing and manufacturing solar components and wind and tidal turbines, constructing fuel-efficient vehicles and green buildings, to engineering new bio-fuels from our forests.

Building upon a base of highly-skilled technology workers, the region has adapted policies and incentives designed to attract and grow new green industries. The emergence of next generation green design and environmental services allows Pacific North America to thrive in the international clean-tech marketplace; joint trade missions brand the region's expertise around the world.

Building Economically Sustainable Communities

Pacific North America's innovation and green economy has not only created new jobs but also transformed where and how we perform them. Urban centres are models for workforce efficiency, environmental sustainability and healthy productive living–featuring compact communities requiring less automobile use and smart buildings with enhanced telecommuting possibilities. People-friendly neighbourhoods and a diverse cultural environment continue to attract knowledge workers from around the world to our technology and creative industry sectors.

With the expansion of communications, transportation and energy infrastructure, rural and remote communities are also growth engines of the green economy. New economic opportunities in our forests, coastlines and farmlands, ranging from renewable energy generation to ecotourism, create and sustain jobs in rural and coastal communities. Broadband and wireless infrastructure allows individuals and businesses in rural and remote communities to connect and compete in the global marketplace.

An Innovative Economy

The Pacific North American economy in 2030 is powered by innovation, generating global solutions on climate action, advanced energy, life sciences, and ocean health. The region continues to attract the world's leading scientists and innovators, putting their minds to new energy solutions, medical breakthroughs and environmental discoveries, transforming our economy through science and technology and creating new jobs in cutting-edge industries.

Creating Regional Networks of Innovation

Enhanced collaboration amongst the region's research universities and institutions has led to thriving networks of innovation, conducting joint research on next generation clean energy technology, sustainable design and green building practices, climate change and ocean science, cancer and infectious diseases. High bandwidth networks connect universities throughout the region, enabling data-sharing, scenario modelling and interactive education applications.

The region has fuelled innovation by creating greater synergies among universities, governments, the private sector and philanthropic community. Policy challenges facing governments related to health, climate change and resource conservation are directly informed by scientific research. Private venture capital and public clean technology funds provide access to capital throughout the technology innovation cycle, strengthening the transition from laboratory to commercial application.

Providing Innovative Education and Skills Training

Meeting the workforce requirements of the green economy has led to comprehensive and coordinated workforce development strategies throughout the region. Education and training programs equip workers for new jobs in the green economy, ranging from bio-fuel engineers and energy modellers, to wind-field technicians and living-building designers. Enhanced collaboration amongst the region's educational institutions has led to regional curriculum development and the online delivery of Pacific Coast 'virtual' university courses. Student mobility is greatly enhanced through exchange programs, tuition reciprocity agreements, and industry internship placements.

A Low-Carbon Economy

Pacific North America in 2030 remains a region that is committed to ambitious targets for green house gas emission reductions. Coordinated measures to stimulate investment, reward innovation and incentivize bold action ensure that the region is largely powered by clean energy sources.

A North American cap-and-trade system, based on the Western Climate Initiative, provides opportunities to leverage the carbon storage potential of our forests. The region continues to partner and share information to capitalize on new economic opportunities as the world transitions to a low-carbon economy.

Promoting Renewable Energy

The development of carbon-free, local and inexhaustible energy resources is the cornerstone of Pacific North America's energy planning in 2030. Individual commitments have led to regional alignment of regulation, standards and investment incentives for renewable energy. Coordinated approaches to feed-in tariffs and alignment of portfolio standards have resulted in the emergence of a regional market for renewable energy in Pacific North America.

Advances in energy storage technology have solved the challenges of large-scale storage of intermittent renewable energy generation. Expansion and upgrade of electrical transmission infrastructure now allows for seamless integration of renewable energy sources to the grid. This, combined with streamlined permitting processes, has allowed the region to capture its vast supply of 'stranded' renewable energy resources.

Onshore and off-shore wind development generates over 20% of the region's total electricity by 2030. The region's leadership in solar energy has expanded beyond photovoltaic manufacturing and installation as new innovation moves to the mainstream, including concentrating solar power and thin-film technologies. Next generation bio-fuels, producing cellulosic ethanol and biodiesel from feedstocks ranging from wood and crop waste to algae, bring economic opportunities to rural areas and clean fuel sources to the aviation and marine transportation industry.

Technological innovation in ocean wave and tidal energy has moved from prototype to full commercialization, integrating ocean energy in the region's renewable portfolio and bringing new industry to coastal communities. Run-of-river hydro projects and in-stream turbines harness clean power from the region's rivers.

While transitioning to renewable energy–as well as carbon-sequestered coal and nuclear power generation–natural gas serves as a less carbon intensive intermediate solution to oil and gas in 2030. New transmission, storage and distribution infrastructure connects the region's vast reserves to the North American and global energy markets.

Accelerating Clean Transportation

In 2030, Pacific North America's vehicles–from scooters and automobiles to trucks and buses–have shifted away from fossil fuels to clean, alternative fuel sources. Up to 90% of new cars sold in the region are fuelled by alternative energy sources, including electricity, hydrogen fuel cell, and bio-fuels. Stringent carbon fuel standards ensure that remaining vehicles are burning the cleanest fuel available. Incentive programs have accelerated the turnover of the vehicle fleet, both public and private.

Expansion of public transportation infrastructure, both within and between urban areas, has reduced single occupancy vehicle miles travelled, contributing to billions of dollars of savings in congestion costs. Smart highway technology facilitates a

shift to vehicle miles travelled (VMT) taxes to support highway maintenance while also encouraging travel choices that alleviate congestion, support ride-sharing, and reduce greenhouse gas emissions emissions and air pollutants. Vehicles equipped with real-time GPS-based route navigation systems improve traffic flows and road safety.

In 2030 the I-5 corridor and other major roadways feature an extensive alternative fuels distribution network for the region's ever-expanding fleet of hydrogen, bio-fuel and electric vehicles. Solar power provides electrification for highways and truck stops. Commuter transportation hubs allow commuters to take rapid transit to city centres, while their electric cars are recharged in solar panelled parking lots. Smart growth community planning encourages alternatives to vehicle driving through the shape and form of communities.

Connecting High Speed Rail

Environment-friendly high speed rail corridors are in full operation throughout the region in 2030, facilitated by public private partnerships. High speed rail corridors now connect San Diego to Sacramento and Portland to Seattle and Vancouver, carrying over 120 million passengers per year, reducing greenhouse gas emissions and easing congestion on the roads and in the skies. A fast and efficient rail system has created thousands of permanent new jobs, thinned the international border and exponentially expanded the Pacific Coast economy.

Utilizing Green Ports

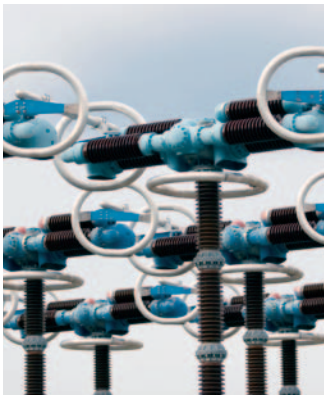
Collaboration amongst Pacific Coast ports has resulted in consistent environmental standards throughout the region, allowing them to maximize Asia Pacific shipping traffic without competing on environmental standards. A common voice both federally and internationally has helped to initiate and drive the greening of ports worldwide. Port electrification is complete for all cargo handling equipment and berthed vessels. Low sulphur fuel requirements, combined with regional innovation in bio-fuels for marine vessels, have led to significant reductions of greenhouse gas emissions by Pacific Coast ports. Intelligent transportation systems have cut truck and rail freight congestion and pollution associated with port traffic.

A Conservation Economy

Pacific North America in 2030 is a region committed to conserving energy and natural resources, recognizing that healthy ecosystems and communities are integral to smart economic growth. The region is a global leader in energy efficiency targets, appliance standards and green building codes, supported by R&D in new energy saving technologies. Coast-long approaches to conserving shared natural resources have emerged from a collective recognition that protecting our environment is critical to maintaining our quality of life.

Building a Smart Grid

Recognizing that a modern transmission system is critical to the region's energy future, Pacific North America has put in place the right mix of incentives and policies to encourage public and private utilities to expand the region's smart grids. The application of information technology for intelligent and efficient delivery of electricity has ushered in a new era of consumer choice and energy savings at the household level, leading to millions of dollars in energy savings each year. Distributed energy systems allow for the integration of renewable energy from a wide range of sources–ranging from rooftop solar to fuel cells to electric vehicles. By 2030, smart grid technology has moved from meters, sensors and software applications to a broader interface with green neighbourhoods and district energy systems.



Constructing Green Buildings and Communities

Pacific North America has leveraged its existing green building leadership to completely transform the region's built environment. Green building codes have been streamlined on a regional basis and energy-efficient building products are widely available for all new construction as well as building retrofits. The region has provided global leadership in promoting a wood building culture, featuring enhanced building technologies in structural wood design and innovative wood products for interior and exterior finishing. This carbon neutral building material, together with sustainable forest management practices, plays a key role in the region's sustained carbon mitigation strategy.

Through progressive government policies and innovation by the design and construction industry, Pacific North America has achieved net zero emission targets for all residential, government and commercial buildings by 2030. Living building innovation is applied to achieving entire carbon- and resource-neutral communities. Green neighbourhoods feature district heating systems, off-grid energy, water storage and treatment and waste processing systems. Smart growth communities are compact and walkable, better served by efficient transit systems, and surrounded by productive and protected farmlands, providing citizens with increased food security. Experiences and best practices are shared by networking urban precincts and rural green communities throughout the region.

Getting to Zero Waste

With leadership from major cities throughout the region, Pacific North America is a zero waste economy in 2030, having developed the right policies, practices and industry standards to reduce and eliminate waste and toxics while improving profitability, competitiveness and environmental performance. 'Cradle to cradle' design principles have been adopted by industry in product development and manufacturing, eliminating waste to landfills or incineration through intelligent design, source reduction, recycling and closed-loop processes. Coordinated approaches to environmental packaging and eco-labelling allow our citizens to make smart choices about the products they buy. Public education and social marketing catalyses the demand for "green" products and services–and governments lead by adopting sustainable procurement practices.

Promoting Resource Conservation

The health of the Pacific Ocean, coastal ecosystems and bioregion is crucial to the sustained economic and environmental well-being and standard of living of Pacific North America. Recognizing this fact, coast-long conservation and regeneration strategies are in place in 2030, engaging governments and local communities, tribes and First Nations, environmental advocates, industry and the scientific community.

Given that Pacific North America's economy and social fabric is intricately linked to our coastline and access to the ocean, coordinated action has helped to clean up marine debris, address invasive species, and eliminate toxins and non-point source pollution. Pacific North America engages as a region, with federal counterparts, in Pan-Pacific initiatives to protect marine habitat. Coordinated coastal tourism strategies inform development choices and celebrate the culture and heritage of coastal communities.

Sustainable resource practices developed in partnership with local communities, farmers, and fishery and forestry workers, have been shared and adopted up and down the coast, leading to enhanced productivity and regional food security. The Pacific Coast of North American has emerged as a global model for sustainable management of ocean and marine fishery resources. Eco-certification of forest

products and marine fisheries and seafood highlights the region's sustainable resource practices in the global marketplace. Forest product innovation, including advances in wood densification and efficient use of wood biomass for energy generation helps to sustain rural communities. Net-zero deforestation policies ensure the region is able realize the full value of the bioregion's forests for carbon storage.

A Secure Regional Economy

Protecting the lives and livelihoods of the citizens of our region remains a top priority for Pacific North America. Natural disasters, ranging from earthquakes and tsunamis to severe storms, flooding and forest fires, do not respect state or national borders. Coordinated emergency preparedness and response systems serve to secure the region's economy and keep our citizens safe.

Establishing Emergency Management Systems

In 2030, a Pacific Coast emergency management agreement ensures the interoperability of emergency systems throughout the region. New technology platforms enable emergency systems to communicate across jurisdictions. Regional training exercises and shared training protocols facilitate rapid and seamless deployment of personnel. Barriers to cross-border emergency response have been removed

and an inventory of regional emergency resources has been established. Public awareness programs, including region-wide emergency drill campaigns, bring high-level attention to preparedness and response issues.

Adapting to Climate Change

The impacts of climate change will progressively intensify during the 21st century and by 2030 communities, businesses and government policies will have needed to adapt to this change. Sea level rise and storm surges causing erosion and flooding present increasing threats to coastal cities and communities, with the potential to inflict billions of dollars in damage to the region's economy. Warming sea temperature and ocean acidification will alter the ocean ecosystems. Climate change will reduce snowpack and river runoff patterns, leading to more frequent summer drought and winter flooding events, affecting everything from agriculture production to hydroelectric power generation.

The need for a coordinated regional response to the impacts of climate change has led to the creation of a regional network of climate change scientists, researchers and policy makers, sharing data and monitoring impacts on biodiversity, migratory species, fish stocks and ocean and marine habitat. This collaborative regional response has made the region more resilient to climate change while also offering new economic opportunities.

Regional strategies for water conservation, flood prevention, watershed management, forestry, fisheries and coastal land use have been implemented. Through smart technology, strong management and appropriate rates and incentives, water-efficient practices have reduced the total human use of water in the region by 20% while satisfying a growing population, maintaining a healthy agricultural sector, and supporting a vibrant regional economy. Scientific research has led to the development of new drought- and pest-resistant crops.

Summary

As Pacific Coast jurisdictions, we remain authentic to our region's history, culture, and ecology, while sustaining strong and competitive economies. This common commitment to Pacific North America draws upon the vision of political and corporate leaders, the ingenuity of industry and entrepreneurs, the knowledge of researchers and educators, and the ideas and collective action of our citizens, communities, tribes and First Nations.

The Pacific Coast Collaborative established by the leaders of these jurisdictions in 2008 provides a mechanism to leverage these individual strengths and our existing ties to realize new opportunities for economic growth and prosperity for all. Through this process, the jurisdictions further enhance opportunities for citizens: speaking with one voice to our federal governments as necessary and building global recognition as a clean and sustainable region in the Pacific Century.

Comments

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Comments may be provided to the Premier and Governors as follows:

- **Premier of British Columbia:** Premier@gov.bc.ca
- **Governor of California:** http://gov.ca.gov/interact#email
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