



Pacific Institute
for Climate Solutions
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PICS Climate News Scan – 7 February 2012

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The PICS Climate News Scan is a weekly summary of the major climate-change related science, technology, and policy advances of direct relevance to the BC provincial and the Canadian federal governments and more generally to businesses and civil society. The News Scan focuses on cutting edge climate issues and solutions gathered by the fellows and faculty of ISIS, a research centre at the Sauder School of Business, in partnership with the Pacific Institute for Climate Solutions (PICS). Access to some referenced articles may require a journal subscription or purchase of the article, and appropriate links are provided for this purpose. To be added to the News Scan distribution list or to provide content feedback and/or suggestions about interesting news items, please email picsscan@uvic.ca.

Complementing the News Scan is the PICS Briefing Note Service. This service provides timely and concise analysis, as well as suggested policy action, on issues related broadly to BC climate change mitigation and adaptation.

Research Theme I: The low carbon emissions economy

EU begins process to regulate carbon emissions from shipping

January 23, 2012. The European Union has announced that this year it will consider proposals on how to best regulate greenhouse gas (GHG) emissions from international shipping. This declaration comes hot on the heels of the airline industry's inclusion in the European Union Emissions Trading System (EU ETS), which is expected to provide the model for shipping. The EU is said to be looking at a market-based measure targeting shipping that would apply to "emissions of ships from their last port of call before calling to an in-scope [i.e. EU] port ... and those to the next port of call after [departing] an in-scope [port]." This latest move was triggered by legislation stating that unless the International Maritime Organization (IMO) agreed by the end of 2011 on emissions reduction commitments for shipping, the EU should act to ensure that the shipping sector contributes to the overall EU emissions reduction goal.

Although British Columbia (BC) has yet to confirm whether it will move forward with cap and trade in 2012 under the Western Climate Initiative (WCI), the province will nevertheless become party to systems around the world – linking to emissions trading systems through



necessity rather than design. The link between BC and the EU ETS is clear, as flights departing BC and landing in Europe are required to comply with the EU system, but shipping traffic is less direct. Most of BC's trade in the shipping industry is with regions in the Pacific Rim, namely [China, California, South Korea and Japan](#). All of these regions are at various stages of development in their emissions trading systems (California will begin trading this year; China plans to set an absolute cap on emissions and is [currently running trials of different designs in seven jurisdictions](#) with plans for a national scheme by 2015, as do South Korea and Japan). The EU has announced it will recognize [equivalent emissions reduction measures](#) taken by other countries within its own system, making it possible that by 2015 BC's shipping industry may be required to comply with the environmental restrictions of its largest and most desired trading partners in the Pacific Rim.

California passes new car emission regulations

January 27, 2012. One in seven new cars sold in California in 2025 will be full or hybrid-electric, according to new regulations passed in the Golden State. The [Advanced Clean Cars program](#) has been designed by the California Air Resources Board (CARB) in collaboration with car manufacturers and so is expected to see widespread acceptance. The regulations include more stringent limits on GHG emissions per mile, longer full life durability requirements, and a program that requires the production of more electric vehicles every year from 2018-2025. These new regulations build on previous ones, covering the period of 2009-2016, which called for a 25% reduction in overall car emissions by 2030, and were used as the basis for similar federal programs.

BC's car emission regulations have also closely followed California's in the past, although not immediately: [our 2008 regulations](#) referred to California's 2004 rules. However, in 2009, the two jurisdictions signed a [Memorandum of Understanding](#) to develop new vehicle regulations together and the current Minister for the Environment, Terry Lake, referred to his strong relationship with CARB Chair Mary Nichols [earlier this month](#). At least [ten other US states have said](#) they will follow California, confirming auto emissions once again as the archetypical example of [the 'California effect'](#). These clear and decisive policy signals provide fuel to an economy that thrives on innovation and the commercialization of products that are often later rolled out across North America and indeed the world. At the end of last year, BC announced its [Clean Energy Vehicles for British Columbia](#) program to attract auto manufactures to our province and compete for a share of this significant market.

Research Theme II: Sustainable communities

Achieving zero: delivering future-friendly buildings

January 24, 2012. [The Environmental Change Institute](#) has released a report outlining a plan to ensure 'all energy use in all buildings in the UK results in zero carbon emissions by 2050.' Most notably, the report shifts the conversation from one of energy purchases to energy services, and also focuses on the issues of multiple stakeholders (building owners and tenants). Monitoring of all homes and businesses to determine their energy efficiency will allow targeted action, and support (or pressure) where required. The report concludes with a

number of recommendations, including a Low Carbon Zone to 'take action on the worst housing, occupied by the poorest people', incentives to encourage the adoption of the most up-to-date energy efficiency technologies and buildings, and high minimum standards for new construction.

In Canada, the Conservative government announced on last week that it was [cancelling the ecoENERGY program](#), which provided grants to homeowners wishing to improve energy efficiency. The rationale is to reduce the deficit, yet critics argue that the program benefits outweigh the costs, citing job creation, energy reduction, and savings for families. Residents of BC can still apply for grants through the [LiveSmart BC program](#); however, the discontinuation of the federal ecoENERGY program will in some cases halve the previous incentive available for an energy-efficient retrofit to private sector building stock.

UK climate impact report outlines risks posed by climate change

January 26, 2012. The [first of its kind climate impact report](#) from the UK government says climate change poses risks and opportunities. The *Climate Change Risk Assessment* warns that flooding, heat waves and water shortages could become more likely, but that benefits could include new shipping lanes through the Arctic, fewer cold-related deaths in winter and higher crop yields. The aim of the report is to raise awareness of the scale of possible changes and to encourage key organizations and government to develop strategies for coping with global warming. The research was carried out over the past three years and involved studying the possible impacts in eleven key areas including agriculture, flooding and transport. [The report identified 700 impacts of climate change](#), with the four most immediate "high consequence" risks all related to flooding and the expectation that in 10 years or so there will be increased flood damage to homes with knock-on effects on insurance premiums and mental health. Without adequate investment to lessen the threat, between 1.7 and 3.6 million people are expected to be at risk of flooding by 2050.

The report provides useful insight for both the national and provincial adaptation strategies. The most recent national [impacts and adaptation study](#) conducted in Canada was published in 2007. It is less predictive than this UK report and provides little specific insight into the expected long-term impacts of climate change. BC has its own [Adaptation Strategy in place](#), which aims to provide a solid framework to address the impacts of climate change on the province. Recently, three states in the US have required insurers to disclose their [climate-change response](#) plans, illustrating that adaptation to climate change is increasingly becoming an issue for both the public and private sectors to work on collectively.

<http://www.bbc.co.uk/news/science-environment-16730834>

Research Theme III: Resilient ecosystems

Big trees face uncertain future

January 26, 2012. On the decline worldwide, big trees face a gloomy future as a result of habitat fragmentation, selective harvesting by loggers, exotic invaders, and the effects of climate change, according to a [new article in New Scientist magazine](#). The report details the

range of threats posed to large trees and outlines the substantial impacts their demise will have on biodiversity and forest ecology, while also worsening climate change. Giant trees offer critical habitat and forage for wildlife, while transpiring massive amounts of water through their leaves, contributing to local rainfall. Old trees also lock up massive amounts of carbon — in some forests they can account for up to a quarter of living biomass.

This report is timely given some of the parallel [findings reported in a Canadian study](#). Research by a University of Montreal biologist shows that northern forests in the three Prairie provinces are drying up and shrinking from drought caused by climate change. [The paper, published in the *Proceedings of the National Academy of Science*](#) suggests the forests of Alberta, Saskatchewan and Manitoba are already emitting more greenhouse gases than they absorb. The results reveal that recent climate change, and especially drought-induced water stress, is the dominant cause of the observed reduction in the biomass carbon sink, suggesting that western Canada's boreal forests may become net carbon sources. These findings contradict assumptions that global warming would improve growing conditions for trees in the north.

Research Theme IV: Social mobilization

An illustrated guide to the state of sustainability

January 23, 2012. The [2012 State of Green Business Report](#) was released last week, with some positive and not-so-positive news. One theme is the growing role that companies are playing in the sustainability realm, through investment in renewable energy, efficiency programs and improved farming practices. A number of report highlights, both positive and negative, include the fact that carbon intensity for US industries is leveling out, and that, in 2010, emission intensities increased 4%. The US economy wastes approximately 85% of the energy produced, with few signs of any significant change in sight. Automobile emissions rose in 2011, while the US administration created aggressive fuel standards that don't take full effect until 2025. Renewable energy continues to rise, both in terms of installed capacity and dollar investments in the industry. Many companies now report on environmental and social indicators, ensuring that sustainability metrics are counted and become part of the corporate fabric.

[According to the UN Climate Chief](#) Christiana Figueres, for any true binding climate agreements to become successful, companies are going to be required to play a strong supportive role in change by 'lobbying their governments for an accord', and pressure must come 'from the bottom up' as well as include consumers, firms, and the broader communities. In BC, both government and the private sector recognize the important role that firms will play in a low carbon economy. The Innovative Clean Energy Fund (ICE) [announced on February 1 funding](#) for six new projects totalling \$6 million. What BC, and other places in Canada still lack is a [strong consumer culture that helps to drive companies](#) in the right direction.

Also in the news:

Financing sustainable water infrastructure: study

http://www.johnsonfdn.org/sites/default/files/reports_publications/WaterInfrastructure.pdf

Reaping a bonus from cap-and-trade

<http://green.blogs.nytimes.com/2012/01/27/reaping-a-bonus-from-cap-and-trade/>

Socio-economic development: carbon emissions and sustainability

<http://www.nature.com/nclimate/journal/v2/n2/full/nclimate1399.html>

Denmark puts 2030 emissions target on the agenda

<http://www.euractiv.com/climate-environment/denmark-puts-2030-emissions-target-agenda-news-510478>

Costs of stricter CO₂ goal for EU nations drop, study shows

<http://www.bloomberg.com/news/2012-01-30/costs-of-stricter-co2-goal-for-eu-nations-drop-analysis-shows.html>

China report spells out "grim" climate change risks

<http://www.reuters.com/article/2012/01/18/us-china-climate-idUSTRE80H06J20120118>

China set to launch absolute cap on CO₂ emissions

<http://www.newscientist.com/article/dn21361-china-set-to-launch-first-caps-on-co2-emissions.html>

Bidders compete to host Green Bank

<http://www.ft.com/intl/cms/s/0/654fcca8-4c38-11e1-bd09-00144feabdc0.html#axzz1l4dopWMI>



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