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PICS News Scan – 13 December 2011

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The PICS 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 UBC's 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

Rapid growth in CO_2 emissions after the 2008–2009 global financial crisis

December 6, 2011. The Global Carbon Project (GCP) published its annual analysis of global carbon dioxide (CO_2) emissions from human activities, reporting a jump of 5.9 percent in 2010. The atmospheric concentration of CO_2 in 2010 rose by 10 billion tonnes to reach 389.6 parts per million, the highest level recorded in at least the last 800,000 years. The global financial crisis was responsible for a global reduction in 2008-2009, but increased coal burning and cement production in 2010 led to rising CO_2 production in developed and developing countries. The largest contributors to emissions growth were China, the US, India, the Russian Federation, and the European Union. The research team also studied the link between emissions and other significant economic events since 1960. The study suggests that in times of crisis, countries maintain economic output by supporting less energy-intensive activities. In previous cases the changes led to longer-term reductions in CO_2. According to the authors of the report, the financial crisis was a missed opportunity to move the global economy away from a high-emissions trajectory.

One reason suggested for the rapid return to high CO_2 emission levels was government

investment intended to expedite economic recovery. In British Columbia (BC), green groups criticized the budgets in 2009 and 2010 as making only token investments in clean tech and demand-side management programs, while continuing with large subsidies to the traditional resource-extractive industries. According to the 2011 inventory submission to the United Nations Framework Convention on Climate Change (UNFCCC), Canada emitted 690 million tonnes of CO_2 in 2009 (down from 730 million tonnes in 2008). Canada's 2010 emissions totals will be released in the 2012 inventory submission. BC's 2010 inventory data will also be released in 2012. Canada and BC's emissions were in line with the global trend and dropped from 2008 to 2009. When the 2010 data are released, it will be interesting to find out if, and by how much, the national and provincial emissions increased. Did we also miss the opportunity to emerge from the global recession with a less energy-intensive economy?

http://www.sciencedaily.com/releases/2011/12/111206102527.htm

Research Theme II: Sustainable communities

Solar power much cheaper to produce than most analysts realize, study finds

December 7, 2011. A new study conducted at Queen's University finds that solar panels are more economically viable than realized by industry analysts. The authors believe many estimates are based on older technology and don't adequately account for the advancements that have led to a 70 percent reduction in the cost of solar panels since 2009. Equipment costs are calculated based on dollars per watt of electricity produced. According to the authors, a 2010 study estimated the cost at $7.61, while a 2003 study set the amount at $4.16. The new study suggests that the real cost in 2011 is under $1 per watt for solar panels purchased in bulk on the global market. Another aspect often not considered is that the output of top-of-the-line solar panels only drops between 0.1 and 0.2 percent annually, rather than the 1% often cited.

The study uses Ontario as an example to assess the economic viability of solar energy compared to other electricity sources. BC's hydro-dominated electricity generation has led to rates roughly 60% of those in Ontario and is at the low end ($0.06/kWh) of the range considered as economically feasible for solar power deployment. According to the BC Sustainable Energy Association, Canada currently lags behind the rest of the world in solar deployment, largely due to our cheap power and a lack of political will. The study makes a number of policy recommendations that could aid implementation if BC sought to effectively expand solar panel usage. The government, for example, could encourage third party sales of solar electricity to the grid at a retail price (beyond a feed-in-tariff) to increase the profitability of the system. Further tax breaks (sales or income) could also be considered for cleaner and renewable technologies to encourage their adoption.

http://www.sciencedaily.com/releases/2011/12/111207132916.htm

Transport report launched at United Nations Framework Convention on Climate Change Conference of the Parties (COP 17)

December 6, 2011. Creating low-carbon transportation alternatives will also have positive health outcomes, according to a World Health Organization (WHO) policy report announced at the UN COP 17 in Durban. The transportation sector is one of the dirtiest, but efforts such as rapid transit and initiatives to promote cycling and walking have the dual benefit of reducing CO_2

emissions and improving the health of a community. Active modes of transport combined with better land use planning promote improved physical activity as well as reduce stress and urban air pollution. The policy brief is part of a broader series on 'Health in the Green Economy', which seeks to identify the health co-benefits that will result from various sector-specific initiatives to mitigate CO_2 emissions.

This fall, the University of British Columbia (UBC) hosted a one-day conference on integrating active transportation and health into transportation planning and Transport Canada also recognizes the health impacts of transportation options. Research from UBC's Health and Community Design Lab identifies the most walkable areas in Metro Vancouver using the Walkability Index. The study noted that residents living in "the top 25% most walkable areas in Metro Vancouver were between two and three times more likely to walk or take transit for any home-based trip compared to those in the least walkable neighbourhoods." The report lists the health benefits of a more walkable lifestyle and ties them to access to grocery stores and other retail services. While some neighbourhoods in Metro Vancouver and elsewhere in the province are walkable, however, there is still a need to improve urban planning to promote active transportation, reduce CO_2 emissions and improve health outcomes for BC communities.

http://www.who.int/hia/green_economy/en/index.html

Research Theme III: Resilient ecosystems

Study of wolves will help scientists predict climate effects on endangered animals

December 2, 2011. Based on observations and data on wolf populations in Yellowstone National Park, an international research team has developed a mathematical model that explores the relationships between the changes in wolves' physical characteristics and population sizes in response to environmental changes. The team was led by Imperial College of London Professor, Tim Coulson who states: "We know that climate change is having an impact on the lives of animal species around the world… We now have a way to predict with unprecedented detail how populations of many different animals will respond to environmental change, including those animals threatened with extinction. However, we simply don't have sufficient information about most of these species and their environments to confidently make such predictions."

Of particular interest is the fact that this model can be used to inform conservation policy with regards to multiple animal species wherever there is sufficient data available. Earlier this month, BC introduced a new wildlife harvest allocation policy that attempts to address and balance the economic needs of BC's guide outfitters and resident hunters with conservation goals. The new policy will be in place for five years and be reviewed in 2014. This research highlights the opportunity and need to model data over this period in order that climate change impacts on animal populations can be incorporated into the next round of hunting-license quota allocations.

http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_2-12-2011-10-7-57

Research Theme IV: Social mobilization

Climate skepticism in media an English-speaking phenomenon

November 28, 2011. The print media in developing nations and continental Europe do a better job at communicating objective climate change news than their counterparts in the Anglo-Saxon world, according to a new report by the Reuters Institute. The report is based on a survey of 3,000 articles from two newspapers in each of Brazil, China, France, India, the UK and the US – supplemented by an overview of research on the media of other countries – and finds that US and UK media were the most climate-skeptic, while the French, Brazilian and Indian media were noted for their respect and reverence in science reporting. The Chinese media were found to be notably oriented toward solutions and adaptation.

Unfortunately, Canadian media were not included in the survey, as it would be interesting to see at which end of the spectrum the country lies. There have been past concerns that federal rules governing scientific communication with the media, introduced in 2007, contributed to a decline in climate science reporting since then. 'Bias masquerading as balance' is a common problem in fast-paced journalism – one that Canadian news consumers and producers should be careful to avoid.

http://reutersinstitute.politics.ox.ac.uk/publications/risj/poles-apart-the-international-reporting-of-climate-scepticism.html

Canadians want more from feds on climate change

December 1, 2011. Canadians want the Conservative government to do more to combat climate change, according to a recent poll by Environics. 'Be part of the solution, rather than part of the problem' is the message. According to the poll, 74% of respondents support the government imposing regulations to reduce CO_2 emissions despite the possibility of higher energy prices. Canadians ranked climate change and environmental concerns as the world's most pressing issue.

British Columbians similarly feel that government should take a leadership stance on climate change issues. A summer 2011 poll by the Pembina Institute indicated that 70% of British Columbians want BC to continue to demonstrate leadership around climate change. BC mayors from eight communities lent their voice earlier this year in a letter addressed to provincial leadership candidates, calling for them to support a low-carbon economy. Both provincially and nationally, it is clear that communities want governments to lead on climate change, take bold action, and actively support the transition to a new low-carbon future.

http://cupe.ca/environment/canadians-feds-climate-change