



SPRING 2012



The Spring of our Discontent

An Editorial by Tom Pedersen, Executive Director

In 1963, Bob Dylan famously penned “The Times They Are a-Changin’”, a powerful anthem that reflected a new and growing social and political awareness in the western world. And although Dylan wasn’t thinking about sea level rise or global climate when he wrote the first verse—

*Gather 'round people
Wherever you roam
And admit that the waters
Around you have grown—*

a half-century later here we are, with climate change now a key phrase in international political discourse. Dylan went on to write—

*Come senators, congressmen
Please heed the call
Don't block at the doorway
Don't block up the hall.*

He could have been writing about climate-change policy in Canada in the Spring of 2012, for never has national action on the climate change file been so blocked up. Consider these telling events:

- The Canadian Foundation for Climate and Atmospheric Sciences—the principal agency that has supported climate research in Canada for the last decade—closed its doors on March 31 after having successive requests for continuing funding rejected by the Harper government
- Environment Canada scientists at the International Polar Year conference in Montreal in April—an internationally-prominent gathering of the world’s best high-latitude researchers—were reportedly sent a memo prior to the conference ordering them to have a government media liaison present during conversations with reporters
- As this is being written, the federal government is using a 420+ page omnibus budget bill to pass changes to Canadian

environmental regulations, an unusual move that is being seen by many as a strategy to weaken environmental safeguards on hydrocarbon exploitation in the country. Among other provisions, the bill includes measures to repeal the Kyoto Protocol Implementation Act and set timelines for environmental assessment hearings while giving the federal cabinet, not parliament, the authority to approve large new pipeline projects

- The government has ordered the Canadian Revenue Agency to audit some environmental NGOs—notably the Tides Canada Foundation—on the grounds that “foreign” donors have been “laundering” funds for political advocacy through such bodies.

Many commentators view the audits as undisguised harassment

- The National Roundtable on Energy and the Environment—an agency of the government founded in 1988 to provide independent, broad-based, non-partisan, consensus-based advice—was eliminated in the federal budget

Nationally, the sheer scale of these negative changes is unprecedented. But sub-nationally, the news is better and should give us cause for qualified

optimism. According to editorials in the *Globe and Mail* and the *Vancouver Sun*, concern about continued inaction on the climate-change file played a role in the Alberta provincial election in April. Both papers fingered Danielle Smith’s declaration in the last week of the campaign that “the science of climate change is not yet settled” as a significant factor in steering voters away from her Wildrose Party and into Alison Redford’s Progressive Conservative camp.

The strong majority Premier Redford received is an encouraging signal that climate change is perceived in Alberta—as it is elsewhere in Canada—as an issue that demands action. And indications are that Premier Redford intends to follow through. In her speech to the Economic Club of Canada in Toronto last November, she

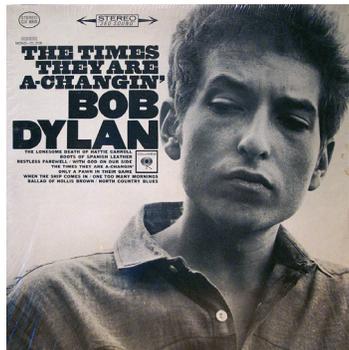


Photo by Epiclectic (Flickr).

clearly acknowledged that environmental responsibility must be front and centre in energy production. She reinforced the importance of diversifying energy production in Canada, of broadening the primary focus from hydrocarbons to include enhanced exploitation of biomass, wind and solar power, and of the need to put a price on carbon emissions and to integrate electrical grids and build smart grids.

PICS is, of course, conducting research in all of these areas, and in so-doing, providing knowledge needed to address such multiple components of the clean energy challenge. As noted elsewhere in this newsletter, we have recently announced new funding for over a dozen graduate fellowships in support of research on such topics as development of platforms for offshore wind turbines, clean-technology entrepreneurship, energy performance of buildings, and risks associated with exploitation of geothermal resources. But knowledge provision is not enough. We are in the midst of a global transformation in energy systems that demands wise leadership—today—in support of better policy. Delays threaten our long-term economic and environmental health; this is a concept that Dylan understood:

*For he that gets hurt
Will be he who has stalled...
For the times they are a-changin'.*

Premier Redford closed her speech with a challenge: "It is time to stand up and show others how Canada can lead globally..." While it is reassuring to see this imperative expressed at least at the provincial level, there remains a crying need for federal climate action, a need that will not be met by demonizing responsible NGOs, muzzling scientists, or closing agencies that support research.

A version of this editorial was originally published in the *Edmonton Journal* on 28 May 2012.

PICS website gets a facelift

The PICS website is getting a makeover and will re-launch in early June with a new look and easy to navigate organization. PICS has engaged Victoria-based web design firm Trapeze to help with the refresh, and we expect the result to be an improved, more user-friendly and dynamic version of pics.uvic.ca. One of the site's new and improved features will be a searchable publications database, where users will be able to easily find PICS white papers, briefing notes, and other publications by author or keyword. We are also enhancing the research pages of the site, and will be asking PICS researchers and fellows to update their pages and to send us any related images or publications .

New white papers examine regulations for district energy, renewables

PICS released two new white papers this spring, and both take an in-depth look at energy infrastructure in BC.

The first, authored by Mark Jaccard, Noel Melton and John Nyboer of SFU's School of Resource and Environmental Management, looks at provincial energy infrastructure choices BC will need to make in order to meet its goal of providing 93 percent of future energy from renewable sources. In particular, the paper examines the critical decision of whether to increase small-scale, run-of-river (RoR) projects with, or without, the concurrent development of the Site C megaproject. The paper concludes with recommendations on how renewable energy projects in BC can be scaled up in a way that minimizes harm to the environment.



The Dockside Green biomass plant in Victoria, BC is run by the investor-owned Dockside Green Energy LLP.

The second white paper takes a look at the emerging potential of District Energy (DE) systems to meet heating needs in BC's urban communities. Authored by Peter Ostergaard of the Fraser Basin Council, this paper compares the services, financials, governance, and rate-setting frameworks for nine diverse DE systems in BC. It identifies the risks associated with DE systems and recommends regulatory measures that can help ensure that DE development occurs in a way that reduces emissions and provides affordable energy services to customers.

Both papers can be found at pics.uvic.ca under publications.

PICS internships announced

PICS has provided support for 10 internships for the 2012/13 fiscal year, and as a result a number of summer and fall jobs related to our five research themes have been created. For example, the World Wildlife Fund in Vancouver will hire an intern to perform communications about climate adaptation, and the Ministry of Forests in Nelson will hire an intern to look at the resilience of forest ecosystems.

Employers will post internship jobs with their local university's campus career centres and/or co-op offices. A list of recipients can be found at pics.uvic.ca under research > internships.

PICS at UNBC's 2012 Green Day

On March 20th, UNBC hosted its third annual Green Day, an event that highlights environmental initiatives underway on campus and in the community. This year's theme was Going Green in Your Own Backyard.

Green Day opened with a welcome to the traditional territory of the Lheidli T'enneh from Chief Dominic Frederick and First Nation drummers from the region. The day was filled with workshops on composting and gardening and included more than 30 exhibits, including a PICS display showcasing the new Climate Insights: Bite Size series. UNBC Campus Coordinator Kyle Aben was on hand to speak with students, faculty and community members about PICS; lively discussions ranged from hydrogen cars and solar power to bioenergy options for residential use. Other highlights included a farmers market, musical performances and recycling games. Green Day 2012 was a success and PICS was pleased to be present at the event. See more at unbc.ca/green/green_day.

Mobilizing for climate action

While public awareness and concern about climate change is on the rise, we have yet to cross the tipping point when it comes to large-scale social mobilization. In March, PICS joined forces with the Canadian Centre for Policy Alternatives' Climate Justice Project and Voters Taking Action on Climate Change to host a one-day summit on how to motivate the civic engagement so urgently needed to respond to the climate challenge. Participants included cutting-edge researchers and social change leaders. A recording of the keynote panel, "State of Play in Climate Communication," featuring Tom Crompton, Change Strategist with WWF UK and Susanne Moser, Research Associate at the University of California-Santa Cruz and Stanford University is available at pics.uvic.ca. PICS is grateful to the BC Climate Action Secretariat and VanCity for supporting the event.

Smart environmental policy with full-cost pricing

Canada's natural capital is vital to our long-term economic productivity and quality of life, but governments are not taking the necessary steps to ensure a sustainable and prosperous future for generations to come. In a new report, SFU economist, public policy expert and PICS Program Committee member Nancy Olewiler argues that inefficient subsidies are distorting the true cost of ecological goods and services, and that full-cost pricing is urgently needed to remedy this imbalance. A webcast recording of Dr. Olewiler's May 8 presentation on this topic at the University of Victoria is available at pics.uvic.ca.

PICS Sustainable Communities projects released

This June, two PICS-funded projects will be unveiled at the ICLEI 2012 World Congress in Brazil, a high-profile event planned around the Rio+20 Earth Summit. Led by Dr. Mark Roseland of SFU's Centre for Sustainable Community Development, these initiatives are the first to be realized under PICS' sustainable communities' research theme.

The first is the completely revised fourth edition of Roseland's classic book, *Toward Sustainable Communities: Solutions for Citizens and Their Governments*. The second is a new online network: Pando | Sustainable Communities promotes knowledge-sharing and collaboration for sustainability researchers and practitioners in academia and in local government.

"These projects are very much interconnected – indeed, Pando grew out of the book," says Roseland. "I published the first edition of *Toward Sustainable Communities* in 1992 just as the first Rio Earth Summit was taking place. The initiatives I profiled at that time were relatively few. While writing the fourth edition 20 years later, it became clear that innovations for sustainable communities are now happening so quickly that we need a 'living' platform to share them among planners, researchers and decision-makers. That's how Pando began to take shape."

To learn more, and to participate in Pando's international launch, visit www.pando.sc.



Mark Roseland, chair of the PICS sustainable communities research theme, sporting his e-bike.

GreenTech solutions in the food system

On April 26, a forum organized by GreenTech Exchange and PICS explored the impacts and solutions of a changing climate on agriculture, including new technologies and opportunities in the alternative food system. "Greentech Solutions in the Food System – Addressing Food Security and Impacts on Agriculture" was held at SFU's Harbour Centre and brought together over 120 participants, including entrepreneurs, professionals, industry members, students and the public. For details or to watch the archived panel recording, visit pics.uvic.ca.

SFU's Sustainability Network

SFU celebrated Earth Day with the launch of the SFU Sustainability Network, a hub for sustainability, energy reduction, climate action and related education. PICS is a founding partner, along with SFU's Facilities Services, Sustainability Advisory Committee, Faculty of Environment, and Sustainable SFU. The Network seeks to advance sustainability in four areas of the university: Campus & Facilities, Students, Teaching & Learning, and Research. As part of the launch, the Network hosted the first annual Sustainability Network Awards, honouring outstanding individuals and groups within the SFU community that have made a positive and inspiring contribution to sustainability. Dr. Mark Roseland, who leads PICS 'sustainable communities' research theme, won for outstanding research. For more information, visit sfu.ca/sustainability.

Student Research Day at SFU

On April 2, the Climate Change Impacts Research Consortium (CCIRC) and PICS hosted the second annual CCIRC Student Research Day at SFU. Eighteen graduate students and one undergraduate student presented their research and obtained feedback from fellow students and faculty members. Included were five PICS fellows:

- Mary Ann Middleton is assessing how climate change and water use affect groundwater-sensitive streams, and is developing criteria for sensitive stream designation to protect fish habitat and aquatic ecosystems.
- Dionne Bunsha is working with the Central Coastal First Nations to evaluate the factors of success for ecosystem stewardship by grassroots organizations, with the aim of helping these communities become more resilient to climate change impacts.
- Steve Conrad, Sabine Jenssen, and Vinu Subashini Rajus presented their ongoing research on Water Allocation and Adaptation

Policies, Planning for Marine Ecosystem Resilience under Climate Change in BC, and Ambient, Interactive Displays and Controls for Sustainable Living, respectively.

For more information, visit www.sfu.ca/vpresearch/ccirc.html.

The power of storytelling

With the intriguing title "Storyomics: Proof that Scientists Evolved from Humans" filmmaker and former scientist Randy Olson talked to academics about the power of storytelling and showed how to communicate science effectively by telling a story. Olson urged audiences to "tell a personal story" and "take your audience on a journey" in his presentations at SFU, UBC and UVic this past March. To see a recording of his talk, visit the events archive at pics.uvic.ca.



Randy Olson drew a full house at SFU's IRMACS Theatre in March.

Dr. Stewart Cohen reflects on 17 years of climate research

On April 3, PICS UBC hosted a special lunchtime lecture titled "Climate Change Adaptation: Reflections on Experiences at UBC and a Look Ahead" with Dr. Stewart Cohen. The event offered a chance to provide a formal thank you to Dr. Cohen, an Environment Canada scientist who had been residing on the UBC campus while engaged in climate change adaptation research for close to 17 years. Dr. Cohen reflected on some highlights and talked about the evolving role for adaptation research in enabling dialogue and decision making in response to climate change. You can access a recording of Dr. Cohen's talk at the pics.uvic.ca event archive pages.

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