

Research

Big 5 (Phase II Research)

Five issues of critical importance to BC—transportation, electrical grid integration, energy efficient buildings, forestry, and natural gas development.

1. The Forest Carbon Management Project- (April 2014)

- Reports pending

2. The Scale of Natural Gas Development and Maximizing Social Benefits - (Dec. 2014)

- BC **Shale Gas** Scenario Tool - forecasting environmental impacts of LNG developments Pembina Institute
- **White Paper - BC's LNG strategy** won't help global climate change by displacing coal (Pembina)
- Direct **engagement with northern communities** - creation of Cumulative and Community Impacts Research Consortium Prince George

3. 2060 Project: Integrated Energy Pathways for British Columbia and Canada - (Jan. 2015)

- **10 publications to date** including: "Decarbonising the Alberta power system with carbon taxes", "The Columbia River Treaty: Fifty Years After the Handshake" and "Storage and the Shift to Low Carbon Energy"

4. Energy Efficiency in the Built Environment - (Jan. 2015)

Three white papers:

- The Path to "**Net-Zero Energy**" Buildings in BC
- Evolution of **Energy Efficiency Requirements** in the BC Building Code
- Accelerating **Energy Efficiency in BC's Built Environment**: Lessons from Massachusetts and California

5. Transportation Futures for BC - (May 2015)

Phase I Research:

36 projects under 5 themes, between 2010-2015.

Teams comprised members from PICS universities, industry, NGOs, and government (municipal, provincial and federal agencies).

White Papers (with policy recommendations) - 29 to date

- **How On-Bill Financing** for building retrofits means cheaper power bills, more jobs, less CO2
- Fossil Fuel **Divestment**: Reviewing Arguments, Implications & Policy Opportunities
- The Effect of British Columbia's **Carbon Tax** on Agricultural Trade
- How to achieve **climate friendly businesses**

Briefing Notes - 43 to date

Norway's **electric vehicle** revolution: Lessons for British Columbia

Internships

- PICS has funded **83** internships (14 this year) hosted across BC by diverse organizations eg:
- Fenestration modeling specialist (BC Ministry of Energy and Mines)
 - Analyst, Shale gas and LNG (Pembina Institute)
 - Blue Carbon Intern (Comox Valley Project Watershed Society)
 - Sustainable transportation planner (City of Kelowna)

Fellowships

PICS has funded **91** graduate fellowships to date in a wide range of fields. Current topics include:

- The social cost of carbon and Canadian climate policy
- Educating/mobilizing communities in a changing climate: Initiating action on Haida Gwaii
- Assessing offshore wind power production in British Columbia
- Developing technology that converts on-site waste materials from oil and gas production into high-value chemicals and desalinated water, for reuse by that industry. This project has been awarded \$500,000 from the Climate Change and Emissions Management Corporation (CCEMC).
- Tidal energy grid integration in BC
- Psychological barriers to climate action

Education

Online

Award-winning **Climate Insights 101** online education series aimed at high school level and above.

- **3 interactive courses** (Climate Science Basics, BC Climate Impacts and Adaptation and Mitigation)
- **12 Mini lessons** (eg. Carbon Tax and Cap and Trade, What YOU Can Do About Climate Change)
- **6 Mythbusting Mini lessons** (eg. The Earth is Cooling?)

Global audience-users in over 140 countries.

In the Community

PICS program coordinators host **workshops** at the university and middle/high school level as well as at science fairs, eg Vancouver's Science World.

University Education

Carbon Accounting courses - post secondary level (UNBC and Quest University, Squamish)

Outreach

Public Events (approx. 40/year)

Raising public awareness of climate change related issues.

General Audience

- **COP 21**-public discussion including BC Environment Minister Mary Polak, Vancouver City Mayor Gregor Robertson and the Ambassador of France to Canada, Nicolas Chapuis. A public briefing on the **IPCC AR5** and implications for BC
- **Dr. Gavin Schmidt** - director of NASA Goddard Institute for Space Studies: Subject, Climate models **Divestment** debate
- **J.P. Jepp - Shell Canada** - Energy Policy
- **Dr. Thomas Stocker** - Co-chair, working group I, IPCC, on the physical basis of climate change.
- **Dr. Naomi Oreskes** - Merchants of Doubt
- **Stephan Lewandowsky** - Cognition and climate change

Technical Events

- **Dr. John Fyfe** - Canadian Centre for Climate Modelling & Analysis, Environment Canada. Subject: The Global Warming Hiatus.
- **Dr. Marty Ralph** - NOAA - on atmospheric rivers.
- **Nathan Gilliland and Michel de Spot** - Prospecting Fusion and Solar Resources

PICS Sponsored / Supported Events

- **2015 Canadian Water Summit**
- **Renewable Cities Global Learning Forum**

PICS Climate News Scan

A weekly roundup of major global climate news analyzed for BC, produced since 2012.

Media

- **Media releases and advisories**
- Social media outreach includes twitter and facebook