



Pacific Institute
for Climate Solutions
Knowledge. Insight. Action.

MEDIA RELEASE

October 28, 2014

Everything you want to know about climate change in three easy lessons

What's causing global warming? How can we slow climate change? And how can society adapt?

Answers are now just a click away with the Pacific Institute for Climate Solution's launch of a new animated and interactive course in its popular *PICS Climate Insights 101* educational series, which tackles climate change causes, mitigation, and as of today, adaptation.

The new online course is entitled *BC Climate Impacts & Adaptation*. Like its predecessor courses on *Climate Science Basics* and *Mitigation Needs & Action*, it typically takes two hours to complete, and contains a number of test-your-knowledge sections. It's free; anyone can use it.

This latest addition means that PICS now offers a trilogy of online interactive courses plus video mini-lessons on climate change that are relevant and engaging for a wide audience.

The course content has been provided and peer-reviewed by leading climate scientists from British Columbia including lead authors for the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5), which this week is going through its final revisions in Copenhagen, Denmark. *Climate Insights 101* is structured similar to AR5 with specific sections on the scientific evidence of anthropogenic climate change, and on the solutions offered through mitigation and adaptation.

PICS executive director Tom Pedersen says PICS is proud to have developed a world-class education series on climate change that bridges the gap between scientists and general society.

"The importance of raising awareness and taking action to slow global warming as well as adapt to its impacts has never been more crucial, with the IPCC reporting a 95 per cent or higher certainty that humans are now the dominant influence on climate."

Pedersen says the new course will be of special interest to British Columbians, with data on how BC's climate has already warmed since 1900, and what changes lies ahead. It showcases resources such as the "Plan2Adapt" tool that allows municipalities to downscale climate forecasts to a local level: providing a glimpse of future viable crops, water supplies, community health impacts, sea level rise related to urban and industrial planning, and biodiversity in their area. See attached backgrounder for more details.

"This course is jam-packed with vital information that BC communities need to know for effective adaptation planning, including how to assess likely local climate changes under different emissions scenarios, and step-by-step strategies that can be adopted to best prepare for those changes," says Pedersen.

To coincide with the launch, PICS has revamped the education section of its website including scientific updates of content. View the collection of courses and mini-lessons at pics.uvic.ca/education. PICS is a consortium of BC's leading research universities, hosted and led by the University of Victoria.

Media contact: Robyn Meyer (PICS Senior Communications Officer) at 250-588-4053 or rmeyer@uvic.ca



BC Climate Impacts & Adaptation online course – backgrounder

British Columbia is projected to experience *more warming* than the global average in the coming decades. This will affect regional water flow and supply, crop suitability and food security, pest distributions, urban and industrial planning due to sea level rise, and will increase the frequency of extreme weather events.

BC Climate Impacts & Adaptation is a new free course offered in the *PICS Climate Insights 101* series that will help decision-makers and communities anticipate and prepare for those changes. It's especially useful for those involved in land use planning, community health, agriculture, forestry management and wildfire prevention, natural environment protection, energy planning, and future infrastructural security for facilities such as dikes, sewage treatment and storm water systems.

The course contains four lessons. See some highlights below.

Lesson 1 - The Climate of British Columbia

- Find out about natural climate variation in BC due to influences such as El Niño, La Niña, and Pacific Decadal Oscillation and solar variation, as well as regional topography.
- See how baseline data reveal BC's climate has already been changing.
- Find out why past climate is no longer a reliable guide to the future, and why human-caused greenhouse gases are accelerating climate change.

Lesson 2 - Projected Climate Change in British Columbia

- Learn what BC will look like when modeled under a range of future emissions scenarios, and why we need to generate several scenarios in the first place.
- Find out why BC will heat up faster than the global average.
- See how "downscaling" reveals climate change at smaller and smaller scales.
- Try out the [Plan2Adapt](#) tool developed by the Pacific Climate Impacts Consortium (PCIC) that puts data in the hands of planners by "zooming in" to examine climate impacts in your own BC backyard.

Lesson 3 - Climate Impacts in British Columbia

- The Peace, Upper Columbia and Campbell River watersheds will receive more precipitation in winter and less in summer by 2050—yet the resulting snowpack and timing of stream flow will differ locally.
- Managing water resources will become critical given that changing hydrology patterns will impact power generation, community water supplies, agriculture and industry for each watershed.
- BC's \$20-million a year shellfish industry is under threat from ocean acidification. Learn more about that, as well as new pests facing the region's forests plus new opportunities for agriculture.

Lesson 4 - Adaptation

- Metro Vancouver and Victoria's Capital Regional District can both expect an annual average increase in warming of about one-to-2.5 degrees Celsius by the 2050s, plus an increase in winter precipitation of some 15 per cent—yet face differing impacts in terms of water supply.
- Parts of BC will be warm enough to support crops that today can only grow in the Okanagan and Fraser valleys. Farmers may need to consider new crops, or change management regimes.
- BC's coastal communities must plan for a one-metre sea level rise by the century end. But it may end up being even higher depending on future emissions. How can we plan for lasting infrastructure?
- See case studies of different adaptation approaches for Delta and Prince George.
- Try out the step-by-step-guide for adaptation planning processes yourself!