

# British Columbia's carbon tax

Nicholas Rivers

Graduate School of Public and International Affairs  
and Institute of the Environment  
University of Ottawa

September 9, 2015  
Edmonton, Alberta

## BRITISH COLUMBIA'S CARBON TAX

- ▶ Carbon tax on all combustion greenhouse gases implemented in July 2008.
- ▶ Initially \$10/t CO<sub>2</sub>, increased to \$30/t CO<sub>2</sub> by 2012. Works out to about 7 c/L on gasoline.
- ▶ All revenue from tax (\$1B/yr) used to:
  - ▶ Reduce personal income taxes
  - ▶ Reduce corporate income taxes
  - ▶ Compensate low income and northern/rural households
- ▶ BC now has amongst lowest income taxation in Canada (for corporations and individuals earning up to \$75,000)
- ▶ OECD refers to policy as “a textbook example of good climate policy” (simple, cost effective, environmentally effective)

# FUEL USE IN BRITISH COLUMBIA

- ▶ Since tax was implemented, per capita fuel use subject to tax has fallen by 16% relative to rest of Canada (Elgie and McKay, 2013)
- ▶ A study on gasoline market suggests 11-17% reduction in gasoline sales due to tax (Rivers and Schaufele, 2013)
- ▶ Simulation model suggests roughly 10% reduction in provincial greenhouse gas emissions due to tax (Beck, at al., 2014)



# ECONOMIC PERFORMANCE IN BRITISH COLUMBIA

**Table:** GDP by province 2008-2012 (period of carbon tax phase-in)

	2008-09	2009-10	2010-11	2011-12	2008-12
Canada	-2.7%	3.4%	3.0%	1.9%	5.5%
British Columbia	-2.5%	3.3%	2.8%	2.4%	5.9%

- ▶ No evidence that GDP growth worsened as a result of carbon tax (Metcalf, 2015; Rivers and Schaufele, 2015)
- ▶ This is consistent with model-based simulations of tax in BC and other jurisdictions (Beck et al., 2014)

# WHAT HAVE WE LEARNED?

British Columbia went through a bold experiment in environmental tax reform. What have we learned?

- ▶ Environmental tax reforms can be effective in addressing environmental problems
- ▶ Modest environmental tax reforms can be implemented with little or no aggregate economic cost
- ▶ Deep greenhouse gas reductions require a much higher carbon price than currently in place in British Columbia (or other jurisdictions)