

Lessons from Canada's Failed Climate Policies

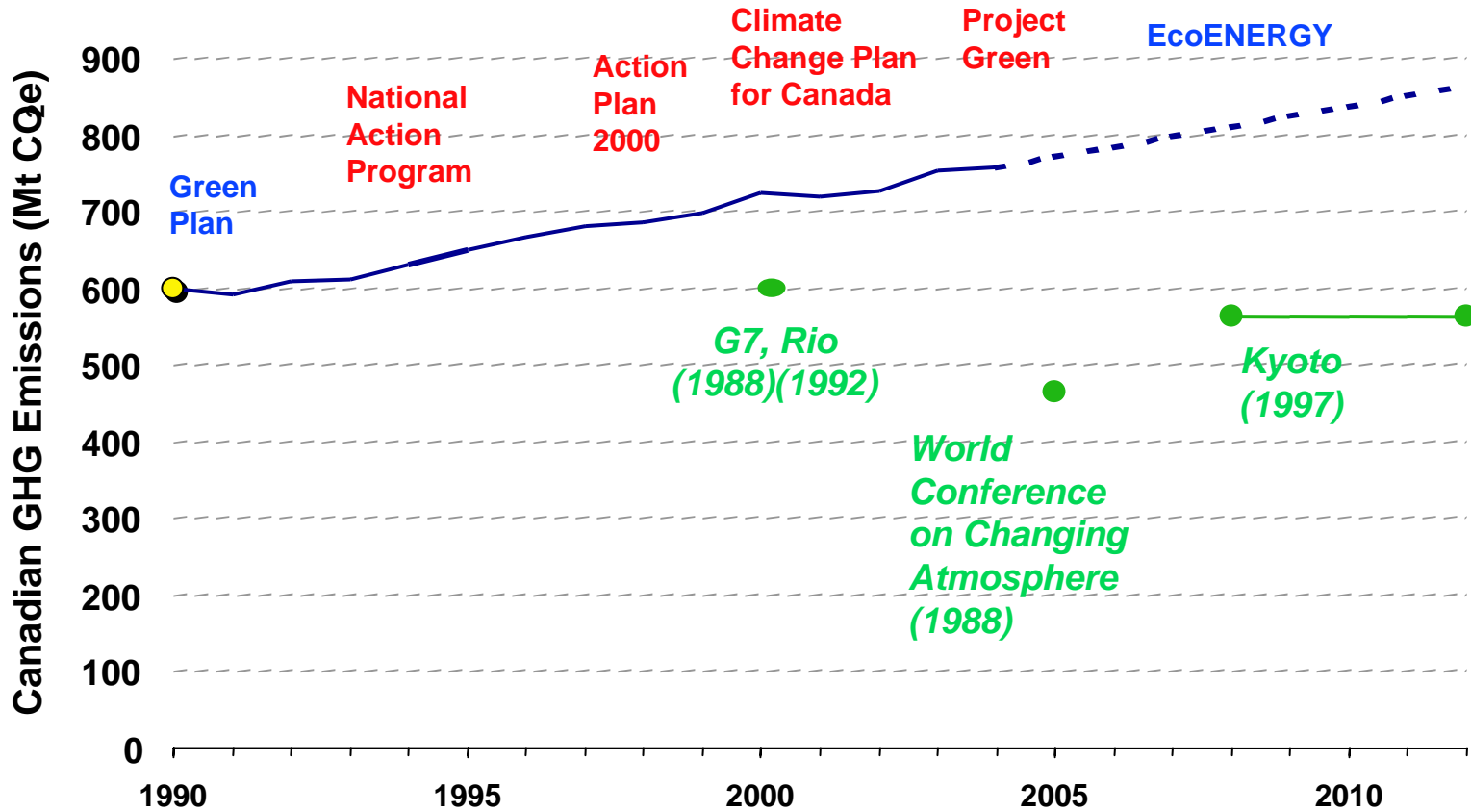
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December, 2007



Targets, policies, emissions





Greenhouse gas emission reduction policies

Information (labeling, ads, awards)

Subsidies to unregulated emitters (tax credits, grants, low-interest loans – including offsets)

Command-and-control regulations (efficiency standards)

Financial charges – (GHG taxes, investment charges)

Market-oriented regulations (cap and trade, niche market regulations like vehicle emission standards and renewable portfolio standards)



Case study - Kyoto policy assessment and policy choice

Kyoto commitment – 1997

National Climate Change Process – 1998-1999

Conclusion – cap and trade for entire economy or carbon tax of \$120 / tonne CO₂ (revised to \$150)

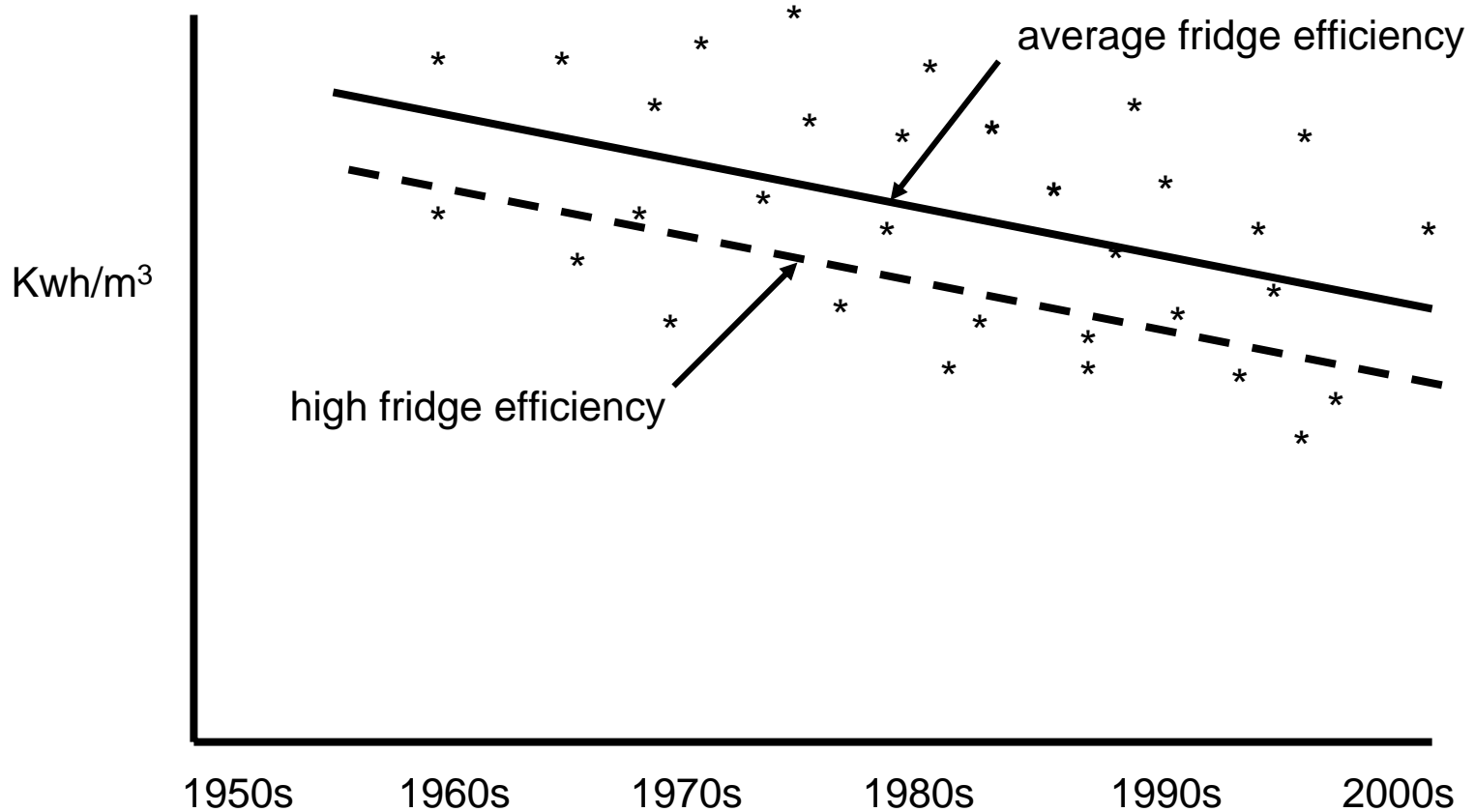
Action Plan 2000 – information programs and subsidies as substitutes for compulsory policies



Action Plan 2000

Transportation	Partnerships with automotive manufacturers and ethanol producers Information provision through EnerGuide for Vehicles Demonstration projects for hydrogen distribution infrastructure and efficient urban transportation	Subsidy/information Information Information
Energy Sector	Demonstration project for carbon sequestration Information provision and moral suasion through the Canadian Industry Program for Energy Conservation Voluntary agreements with industry Financial incentive for renewable energy Purchase of green power by government	Demo/Information Information Voluntary Subsidy Subsidy
Industry	Information gathering and benchmarking Energy-efficiency audits for small and medium enterprises	Information Subsidy/information
Buildings	Information provision to encourage retrofits in commercial sector Information provision through EnerGuide for Houses	Information Information

Energy efficiency trends and energy efficiency subsidies





Estimating the effect of subsidies on emissions

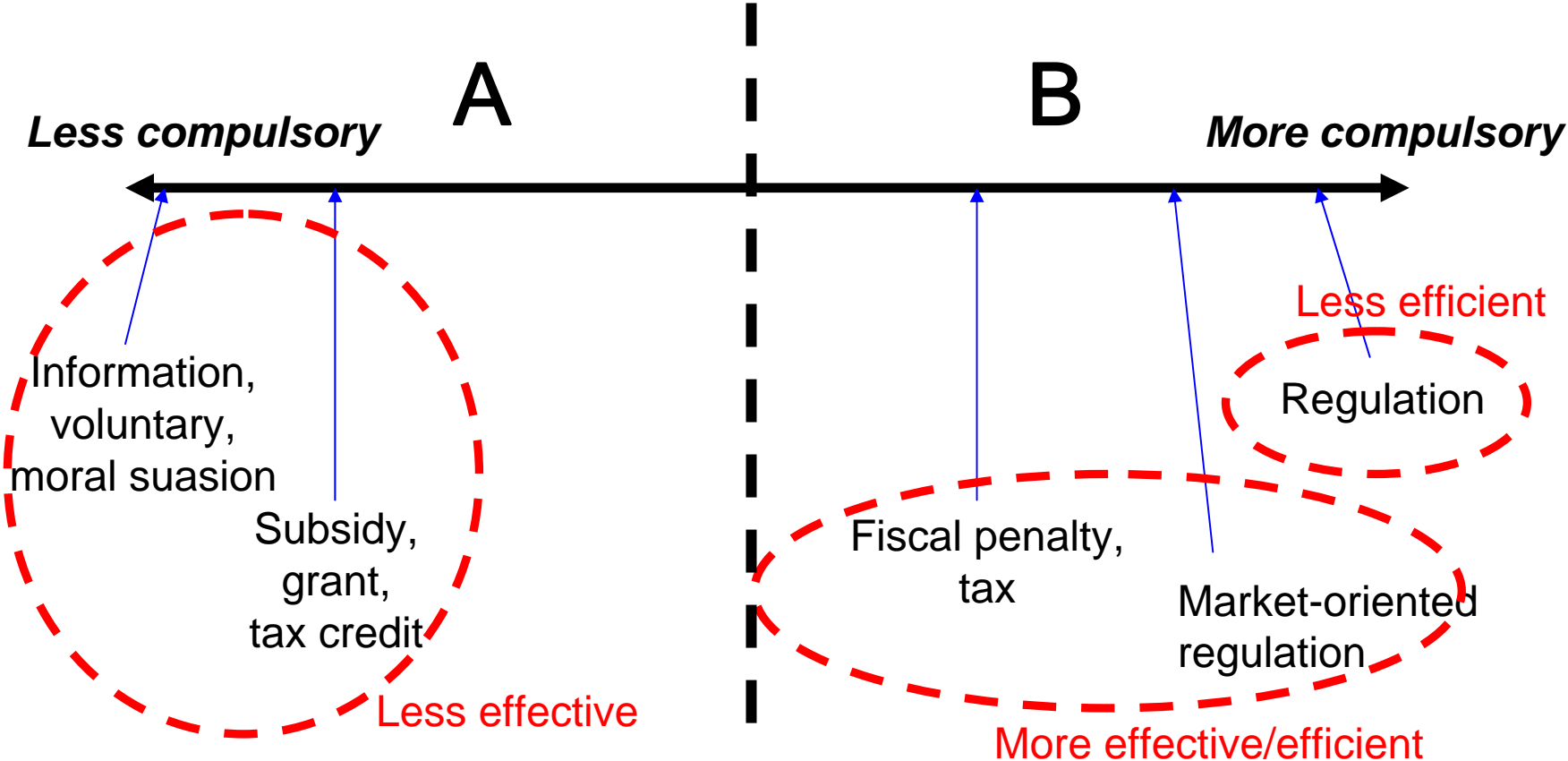
Free riders – evidence suggests 25-75% (unavoidable)

Direct rebound – evidence suggests 5-20%

Productivity rebound – evidence suggests very high potential for energy efficiency subsidies (new devices, new energy services), less so for fuel switching subsidies and carbon capture subsidies

Negative effect on economy may reduce emissions to some extent (high subsidy budget from government requires high income or other taxes)

Type A policies not substitutes for Type B





Offsets: what role?

Definition of offset – a subsidy, usually from one private entity to another, to help fund an action that reduces emissions from what they otherwise would be (business as usual)

Voluntary offset – individuals and corporations can voluntarily acquire offsets in order to reduce their net emissions

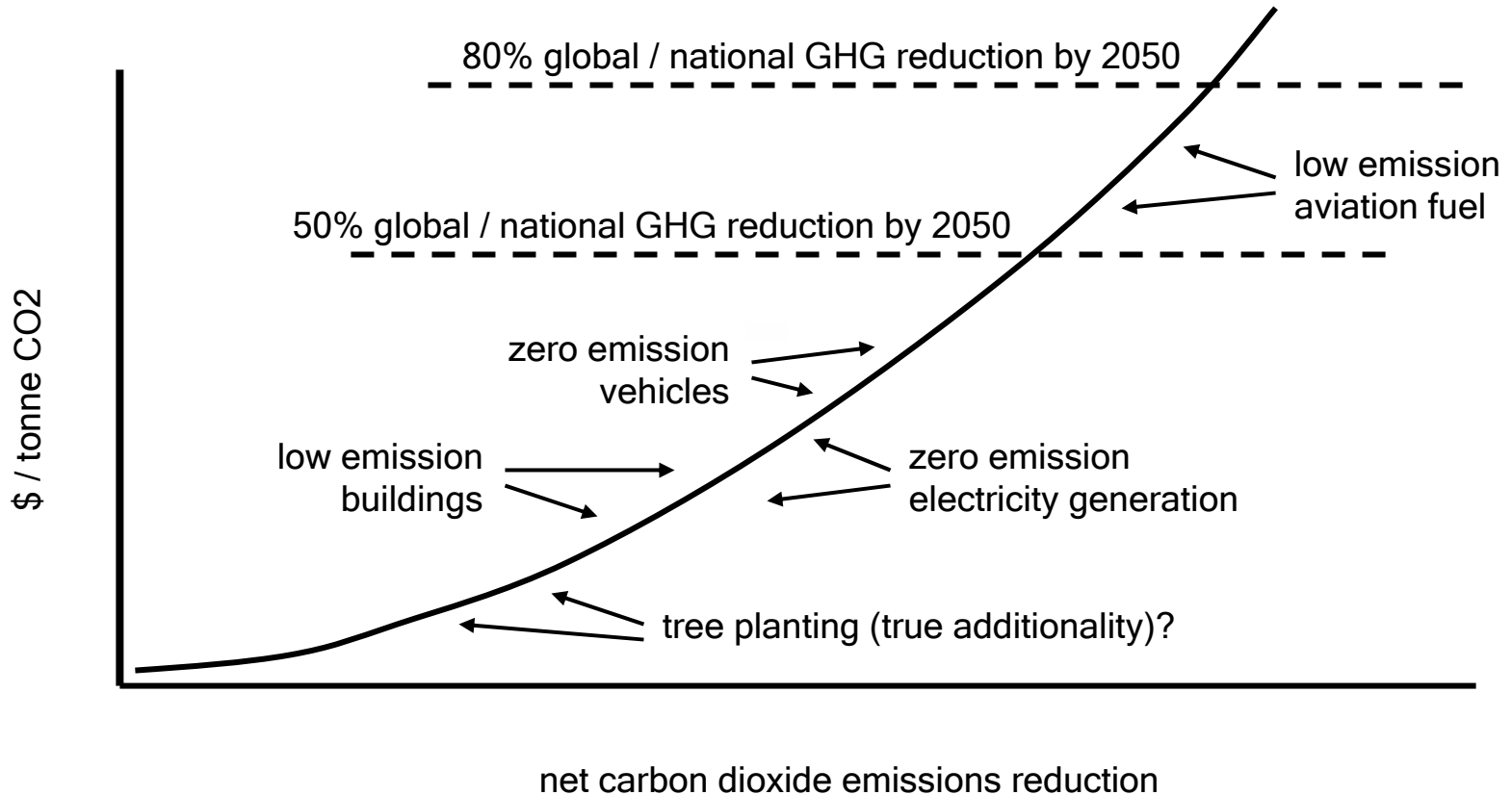
Regulated entity offset – a cap and trade system could allow a regulated entity to meet some or all of its emission reductions by acquiring offsets from unregulated entities (Alberta, Canada, CDM of the Kyoto Protocol)

Issue with offsets


are they really permanent and do they provide additionality?
do they prevent or delay actions that must also happen?



Climbing the cost curve: the delusion of offsets



Assessing policy effectiveness: Canada's latest policies

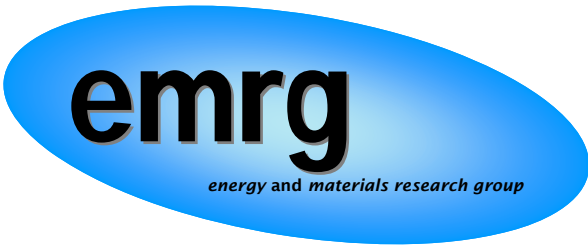


C.D. Howe Institute
Working Paper

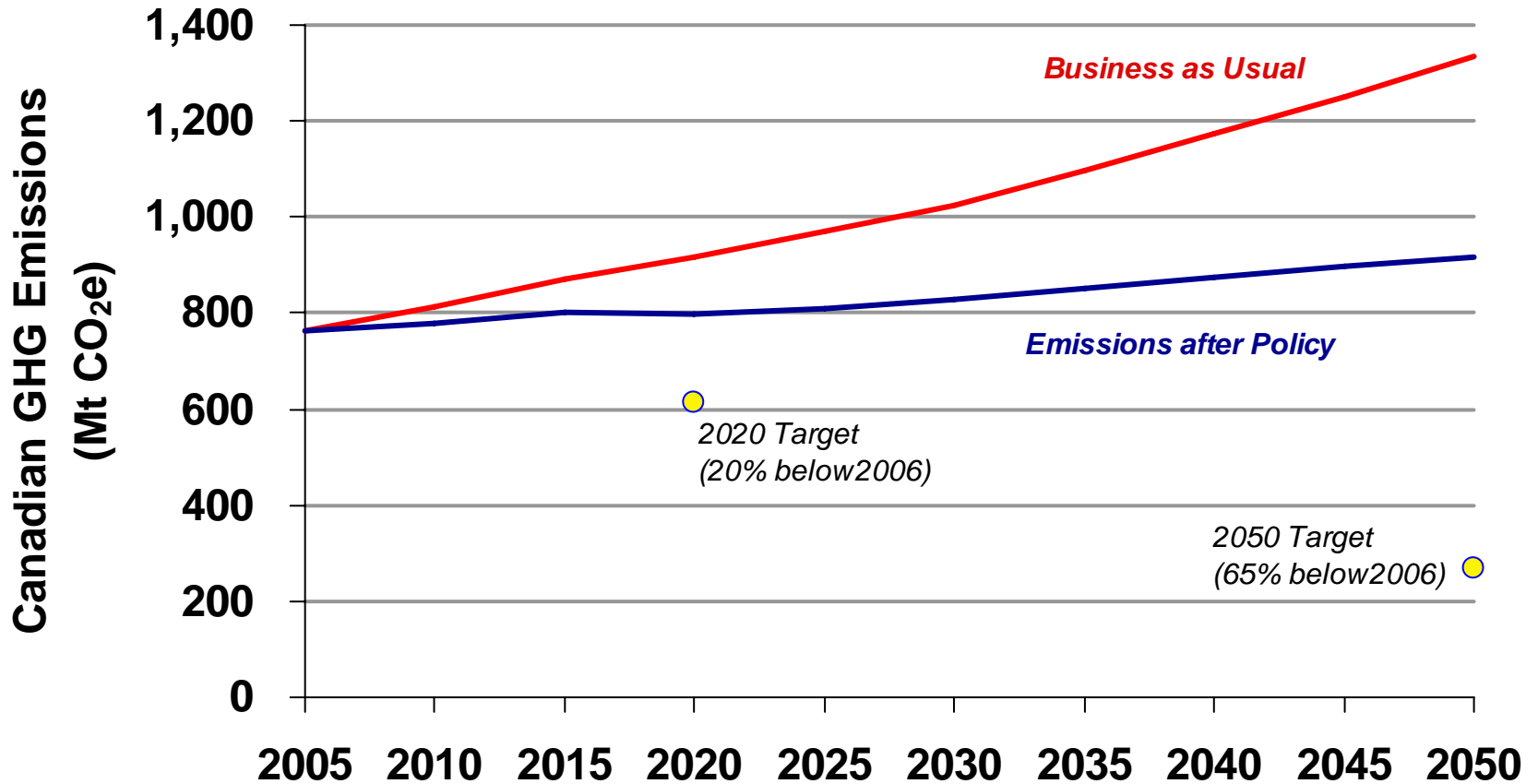
www.cdhowe.org June 2007

Estimating the Effect
of the Canadian
Government's 2006–2007
Greenhouse Gas Policies

Mark Jaccard and Nic Rivers

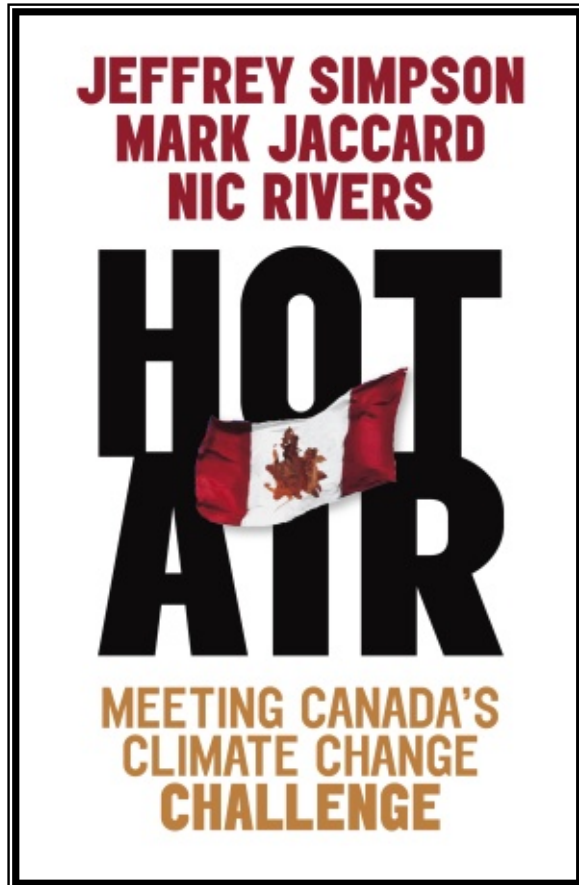


Federal Government's Latest Climate Policies



Recent Books

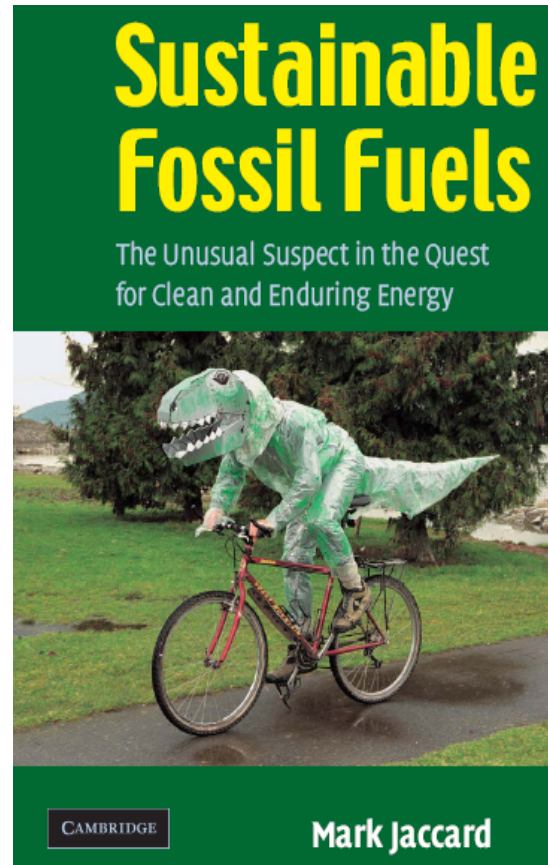
Canada/climate (2007)



12/2007

Jaccard-Simon Fraser University

Globe/ sustainable energy (2006)

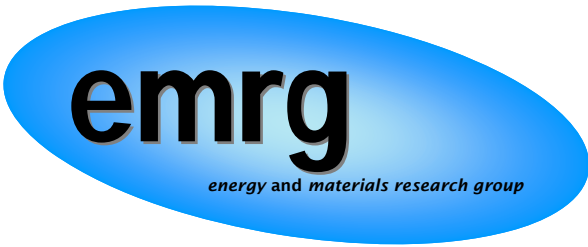


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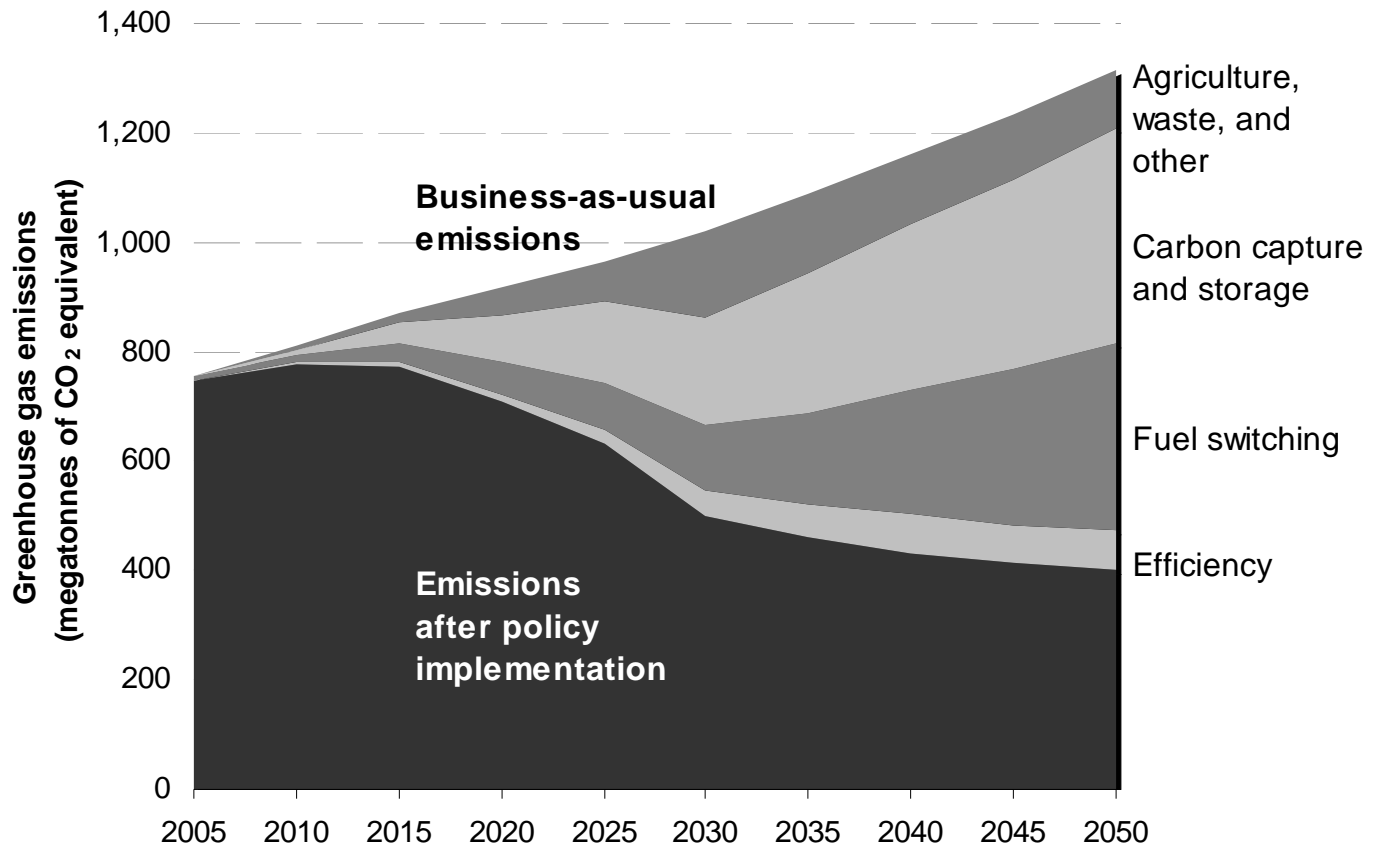


Canada vs. Norway (carbon tax since 1991)

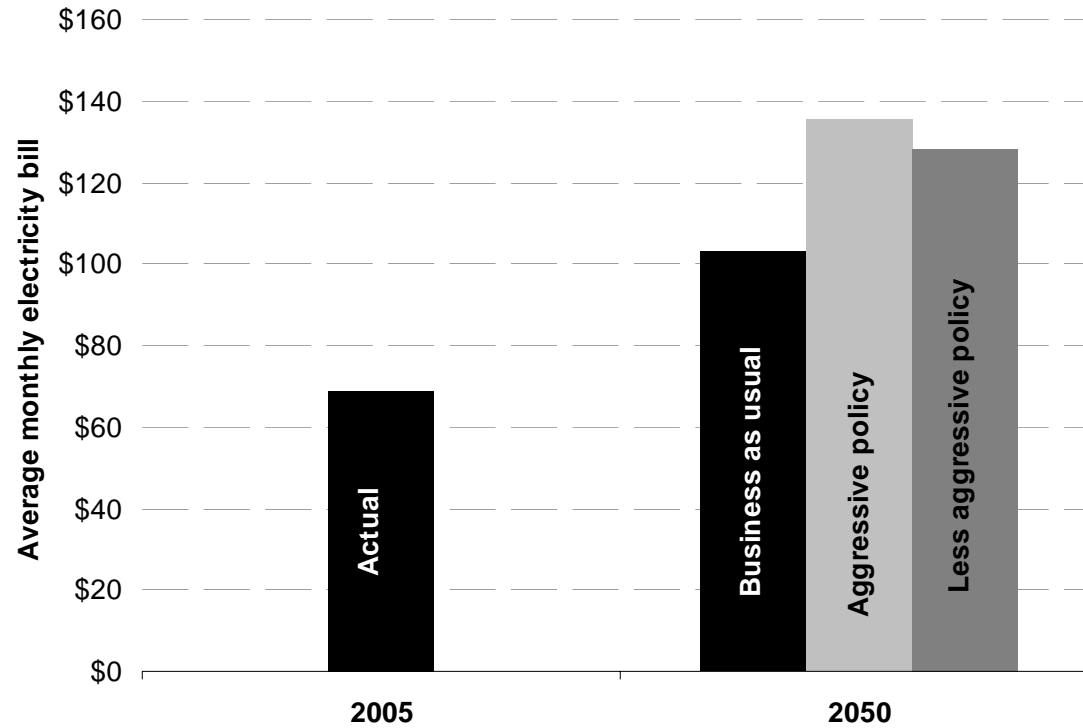
Growth from 1990 - 2005	Norway	Canada
Greenhouse gas / capita	- 0.4%	7.5%
GDP / capita	47%	30%

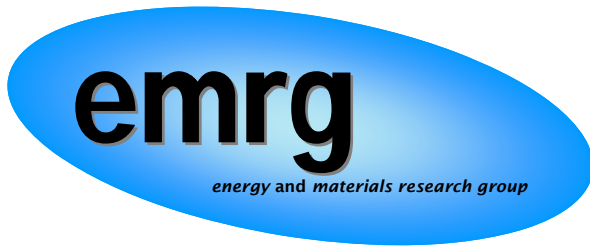


Package of GHG taxes and/or regulations (Hot Air)



Electricity bills in Alberta





What needs to happen?

Assumption: We must change our behaviour. True or false?

Assumption: We must develop new technologies. T or F?

Assumption: We must stop using fossil fuels. T or F?

Assumption: We must use less energy. T or F?

Assumption: We must wait for the US or China to act. T or F?



How do we assess our political leaders?

If a politician talks excitedly about targets, but has no policies to achieve them, assume failure.

If a politician talks excitedly about targets and policies, but the policies lack a financial or regulatory value on the atmosphere, assume failure.

If a politician talks excitedly about targets, and implements atmosphere valuing policies, but these have no real price effect, assume failure.