

ENERGY & THE ENVIRONMENT

AT THE ALBERTA SCHOOL OF BUSINESS

GETTING CLIMATE POLICY RIGHT

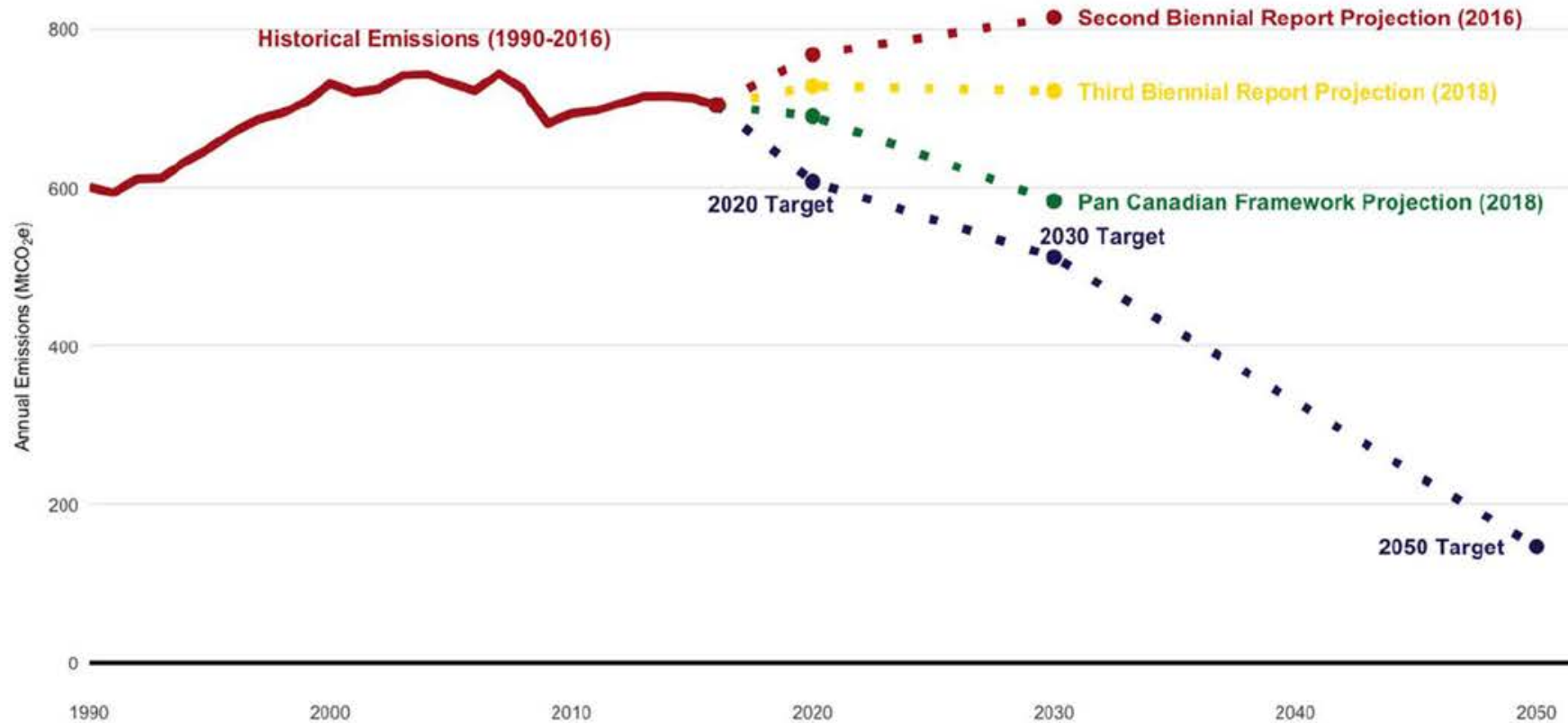


Can we balance economic growth and emissions reductions on the path to 2030?

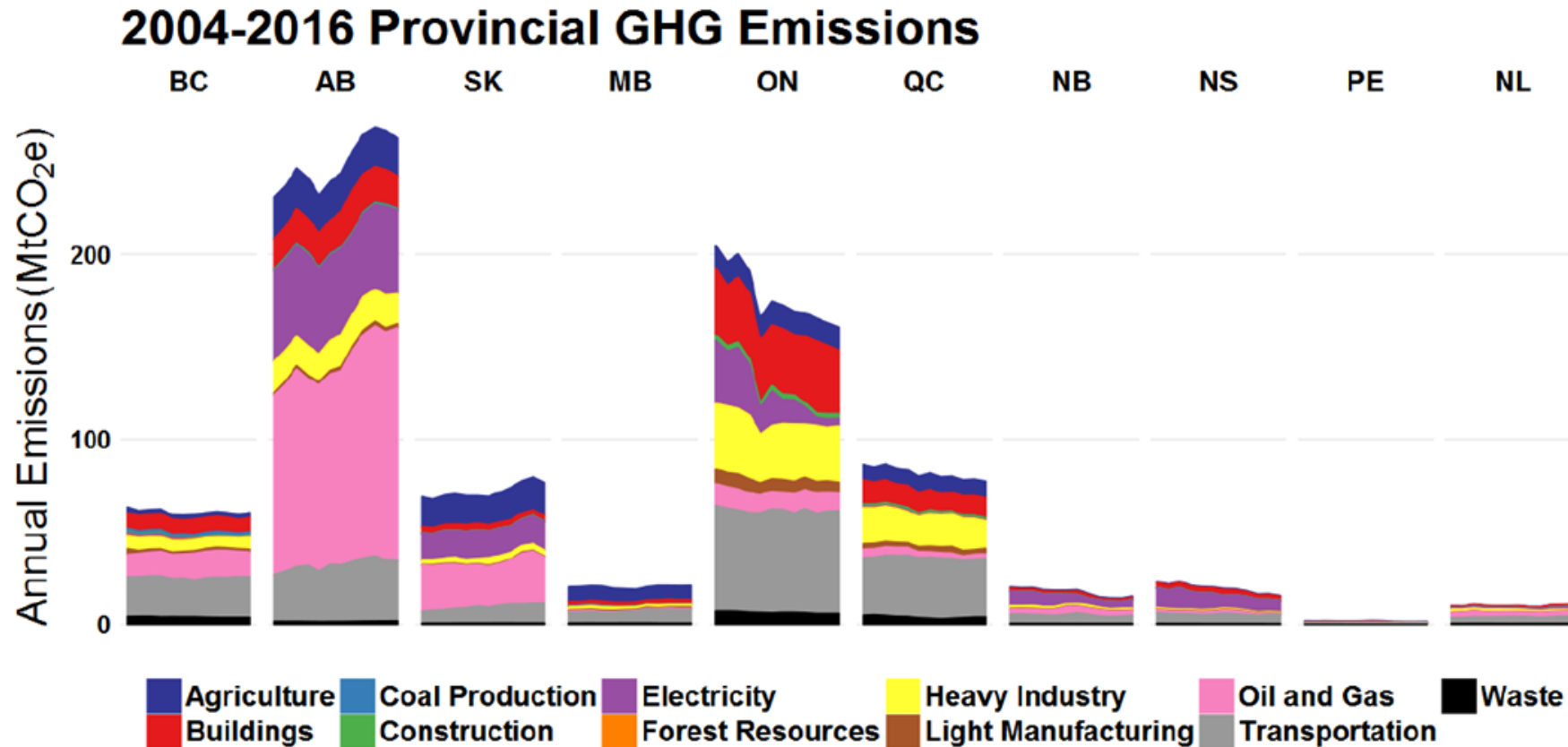
Canada's Emissions Targets

Canada's GHG Emissions, Projections and Future Targets

Source: Environment and Climate Change Canada 2016 Preliminary Emissions Inventory (2018); Second and Third Biennial Report to the United Nations (2016,2018), and February 2018 PCF Update.



Canada's Emissions

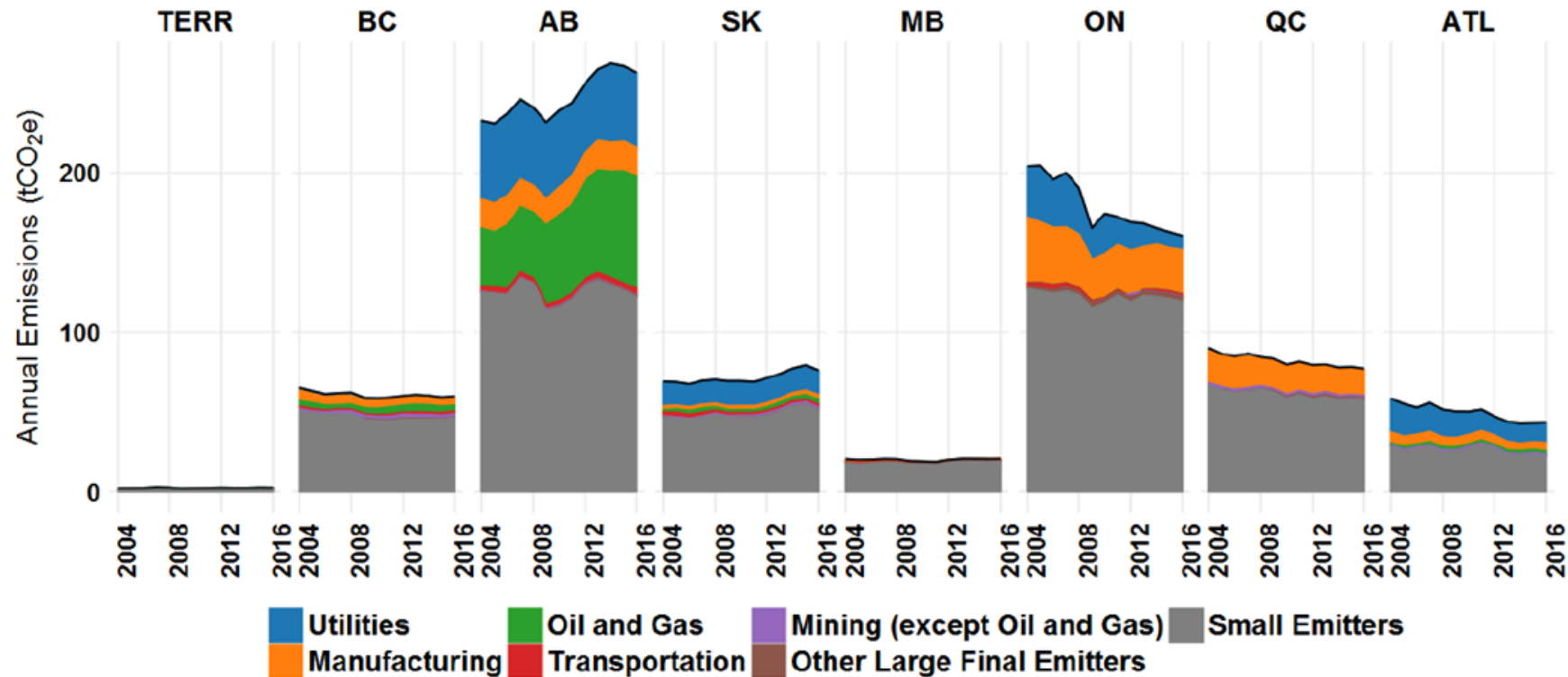


Source: Environment Canada Preliminary Data
Graph by @andrew_leach

The Peril of a “Big Industry Only” Approach

2004-2016 Emissions from Large Emitters and the Rest of the Economy

Small emitters include emissions from all sectors from sources other than large, point source emitters with federal reporting requirements. Federal reporting is required if annual emissions are above 50kt CO₂e.



AB Climate Policy Fundamentals

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Main components of CLP policy package

- **Carbon pricing as the backbone of a climate policy system**
 - Delivers emissions reduction at lowest total cost to the economy
 - Influences large and small decisions beyond regulatory approach
 - Drives markets for new products and services
- **Carbon pricing with complementary policies**
 - Climate change programming including incentives, funding for transit, government procurement, etc.
 - Methane regulations
 - Coal Phase Out
- **Competitiveness protections**
 - *Output-based allocations* for EITE sectors and electricity
 - Opt-in for smaller emitters

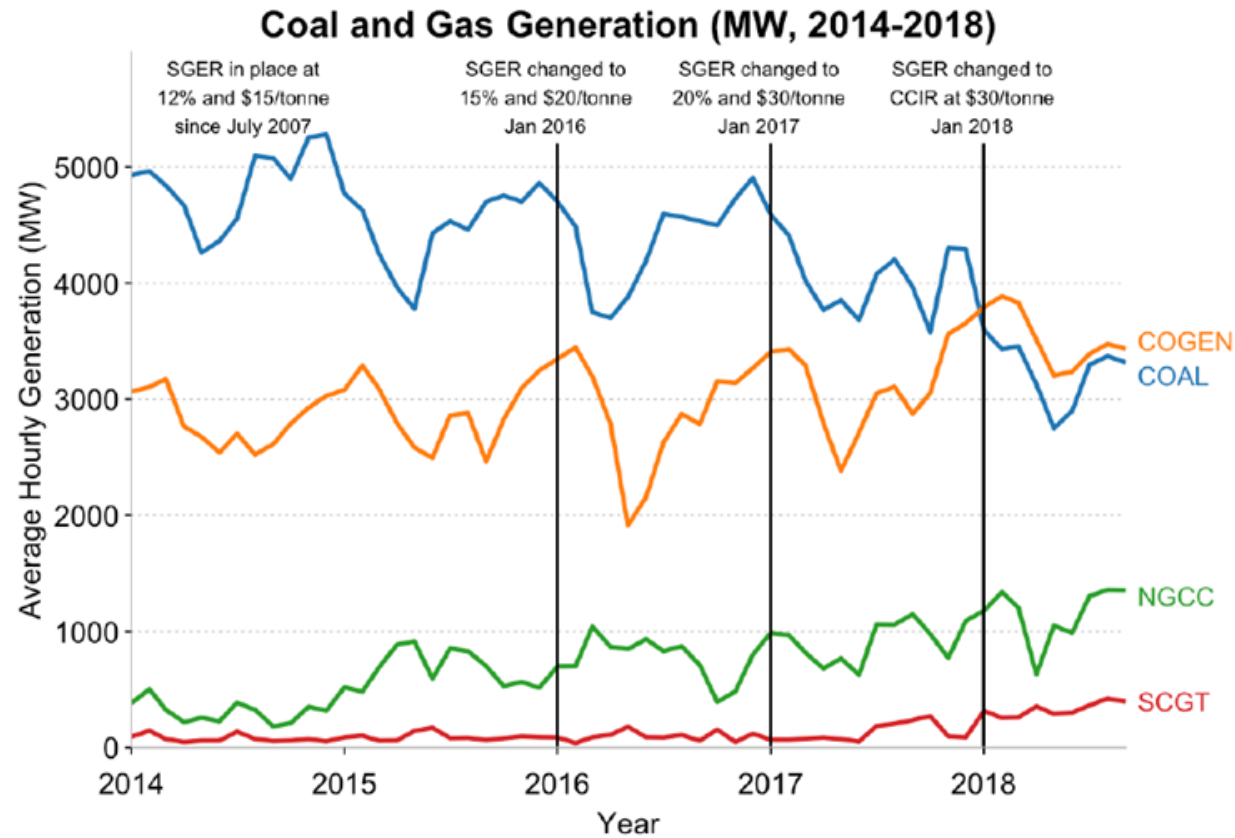
PCF Climate Policy Fundamentals

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Main components of Canada's approach

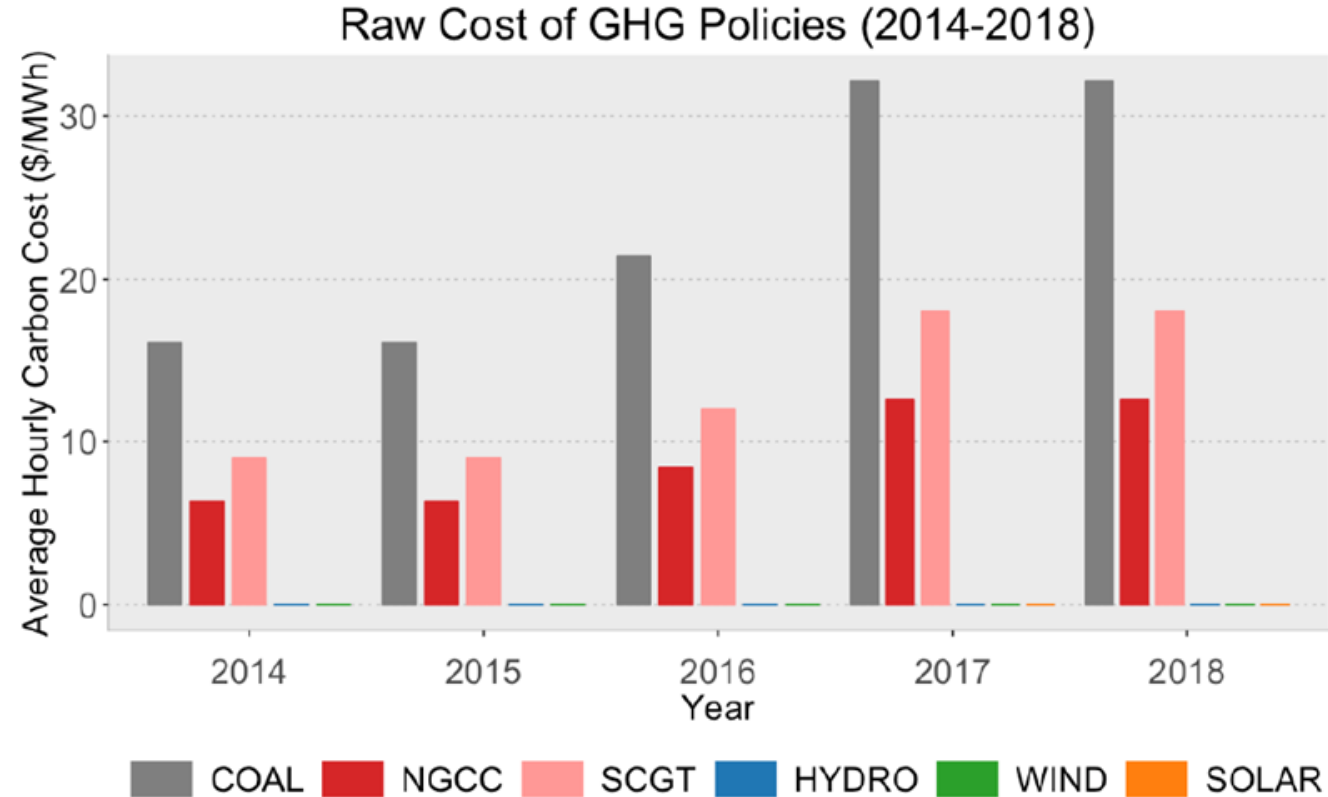
- **Carbon pricing as the backbone of a climate policy system**
 - Provincial carbon pricing regimes recognized
 - Federal backstop for jurisdictions without their own policies, whether by choice or by challenge
- **Carbon pricing with complementary policies**
 - Climate change trust funds and other federal government spending
 - Clean Fuel Standard
 - Coal Phase Out
 - Vehicle Emissions Standards
- **Competitiveness protections**
 - *Output-based allocations* for EITE sectors
 - *Input-based allocations (?)* for electricity
 - Opt-in for smaller emitters

The AB/PCF approach and electricity



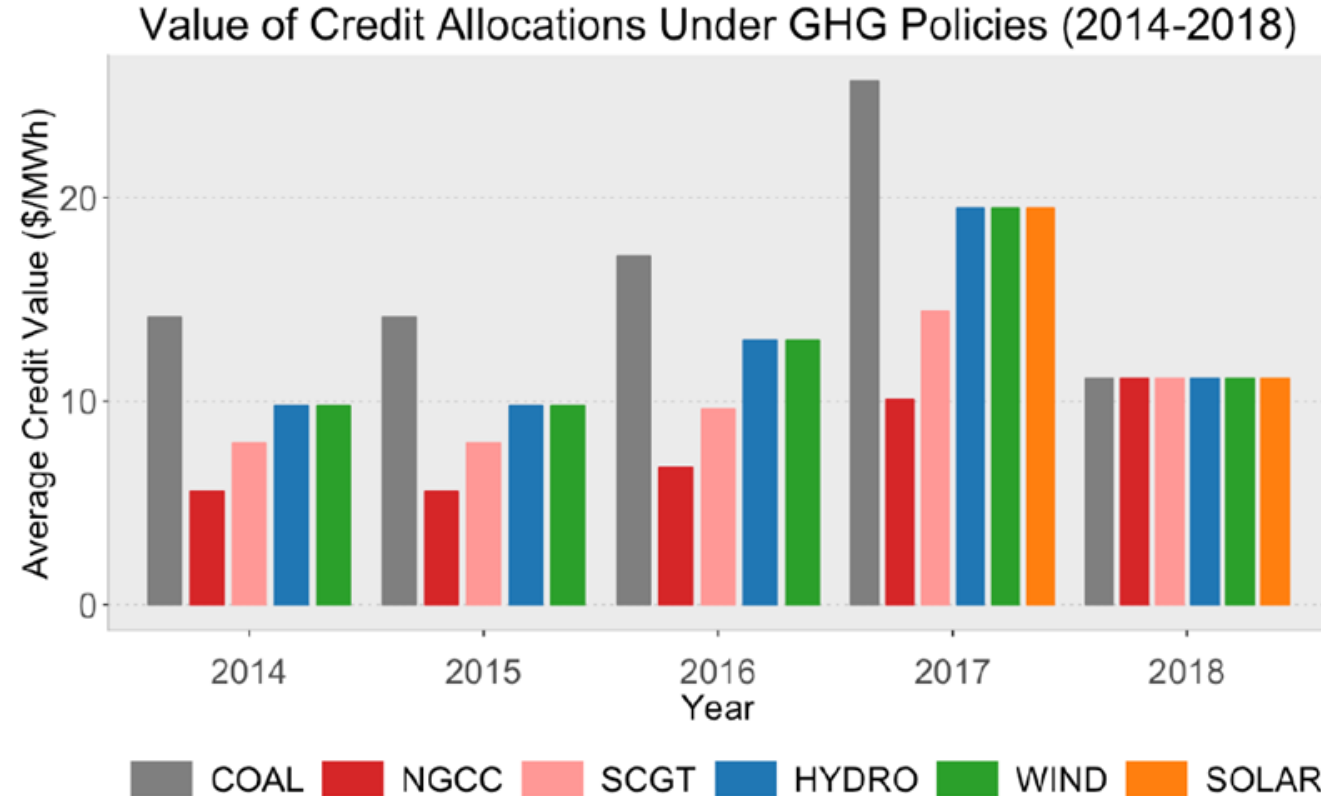
Source: AESO Data, accessed via NRGStream
Graph by @andrew_leach

The AB/PCF approach and electricity



Source: AESO and SGER Data, with assumption that renewables capture full offset value pre-2018.
AESO data accessed via NRGStream, graph by @andrew_leach

The AB/PCF approach and electricity

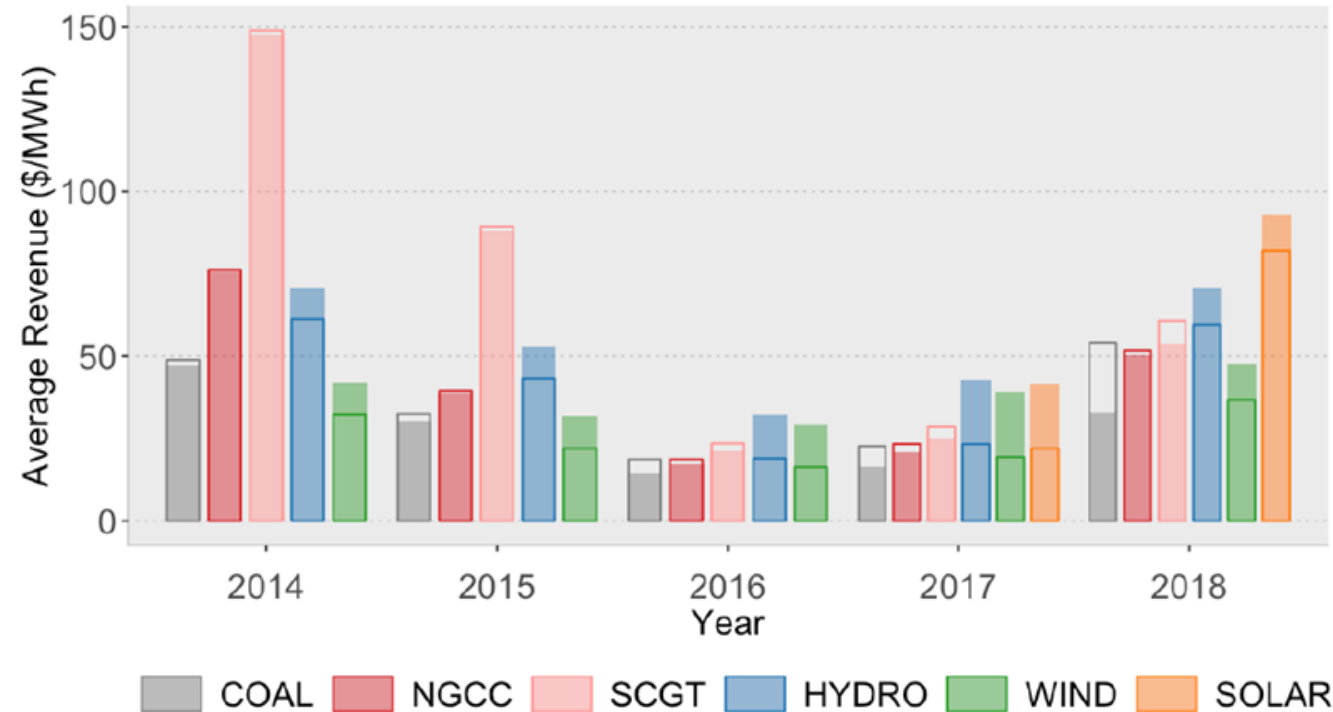


Source: AESO and SGER Data, with assumption that renewables capture full offset value pre-2018.
AESO data accessed via NRGStream, graph by @andrew_leach

The AB/PCF approach and electricity

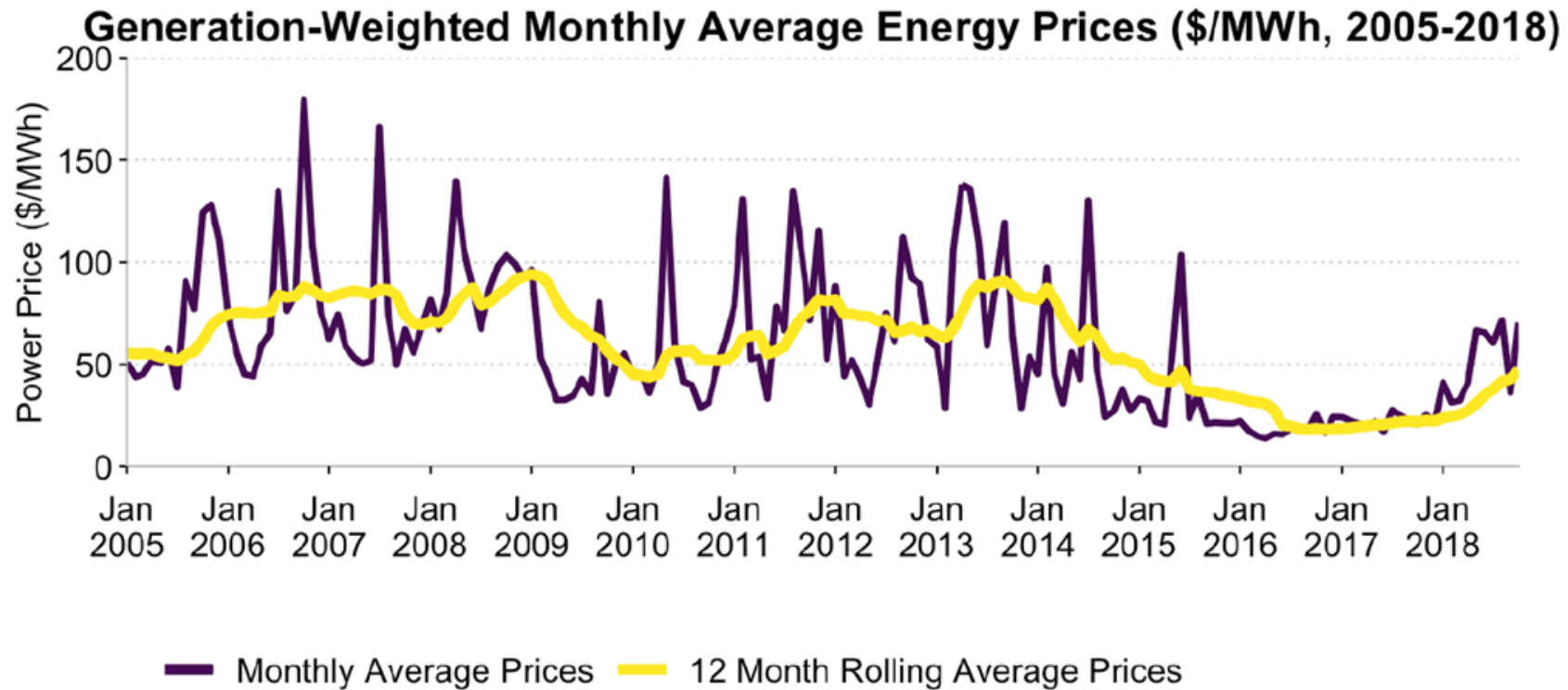
Change in Energy Price Capture Due to GHG Policies (2014-2018)

Outline shows market revenues, fill shows market revenue net emissions policies revenues and costs



Source: AESO and SGER Data, with assumption that renewables capture full offset value pre-2018.
AESO data accessed via NRGStream, graph by @andrew_leach

The AB/PCF approach and electricity



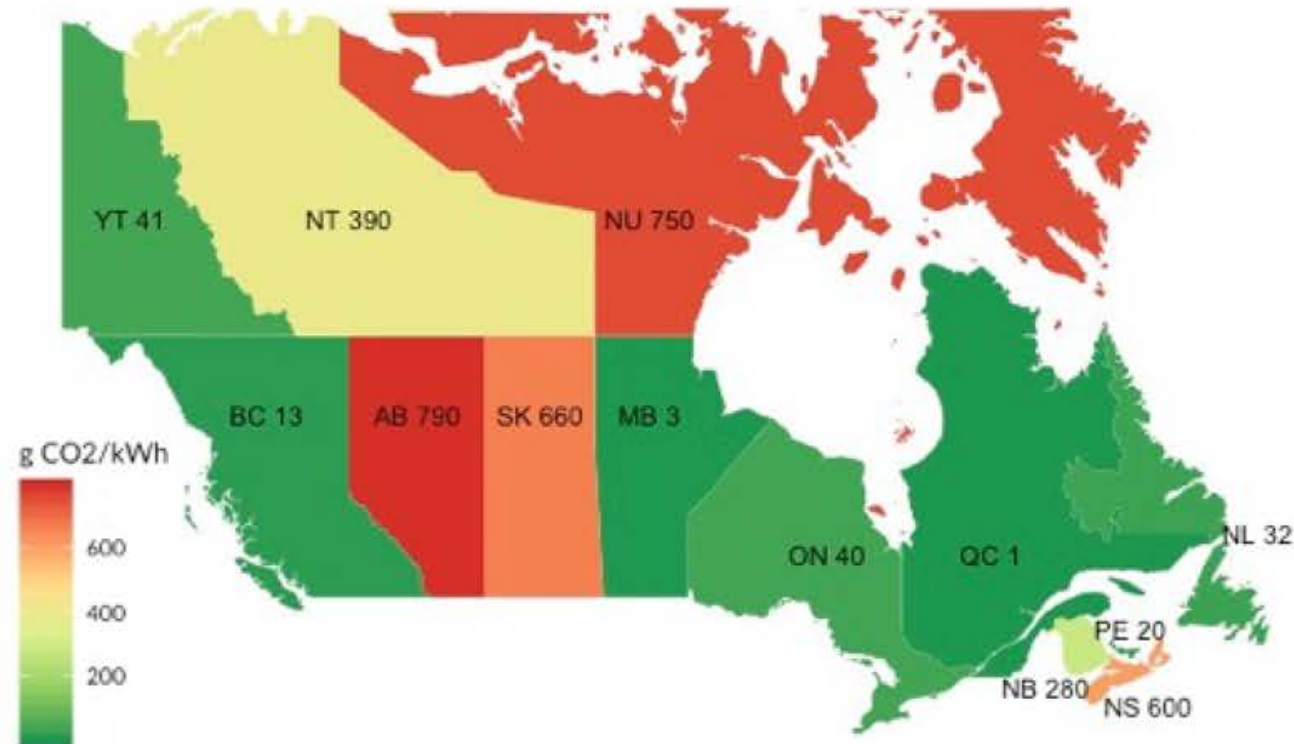
Source: AESO Data, Accessed via NRGStream, Graph by Andrew Leach

The AB/PCF approach and electricity

- Works well for Alberta since one of the big challenges was decarbonizing electricity
- Same approach will work well in the rest of Canada with potentially very small price impacts if managed correctly
- Recent federal proposals will backload stringency and discourage early shut-down or conversion to gas
- Electricity action alone won't get us to 2030

The AB/PCF approach and electricity

Electricity generation emission intensity across Canada



Data from National Inventory Report 2016 @ open.canada.ca
Via Blake Shaffer

Three questions

- Are the policies stringent enough to meet 2030?
- Will the political will exist to get us there?
- How do we keep getting into this mess?

Three questions

- Are the policies stringent enough to meet 2030?
 - No
- Will the political will exist to get us there?
 - No
- How do we keep getting into this mess?
 - Confounding reductions and stringency
 - Poor communication of climate change policies
 - Unwillingness to apply policies both to big polluters and commuters

Final Thought

“The Trudeau-Notley consensus is – was – an ugly deal...But it was the best shot we’ve ever had at turning the corner decisively on a crisis that counts in decades and centuries. Maybe – just maybe – it could have built a consensus sturdy enough to survive a couple more election cycles and become, like health care or multiculturalism, a permanent fixture. Canada might even have emerged as a sort of model. Now we are in imminent danger of becoming just one more country with no plan at all, going nowhere fast.”

-Chris Turner, The Globe and Mail, Oct 12, 2018

CONTACT INFORMATION

Andrew Leach

University of Alberta School of Business

andrew.leach@ualberta.ca

Twitter: @andrew_leach