

ALBERTA'S CARBON TAX

The process, the lessons learned, and a look ahead



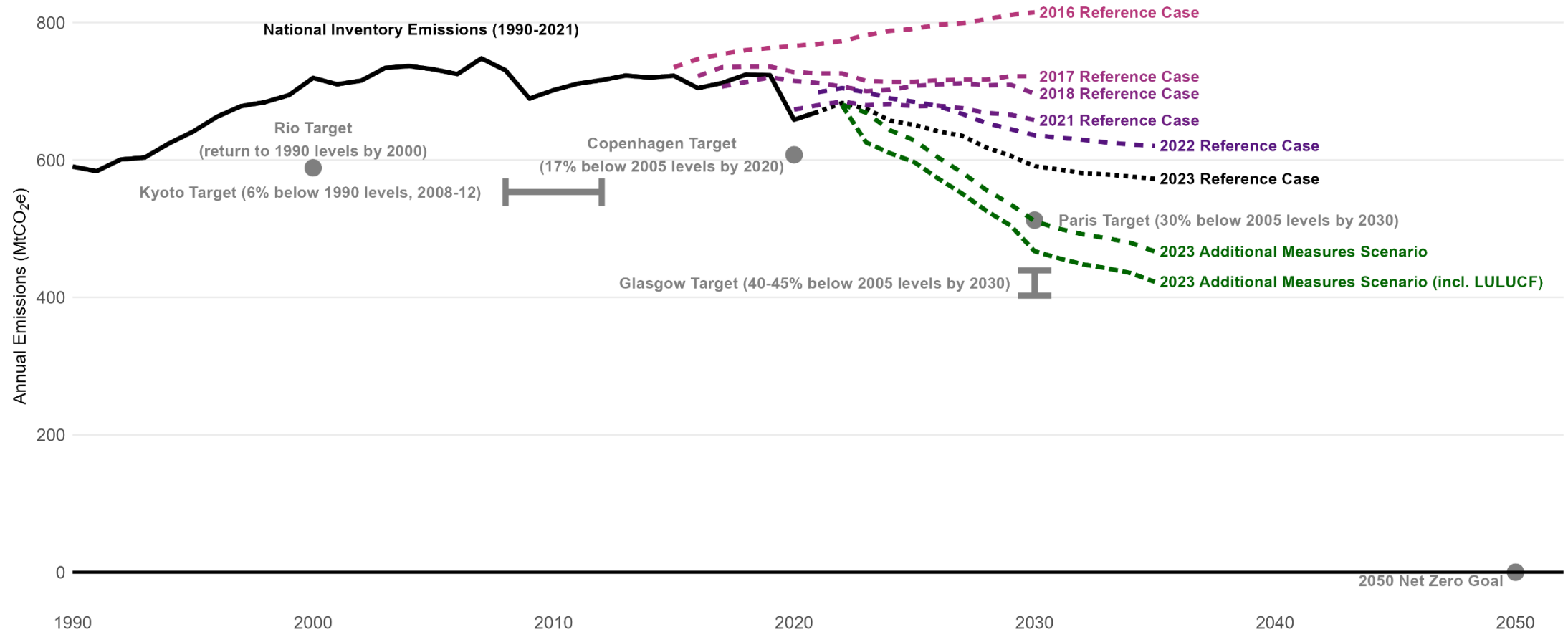
One of my rules: Always take calls from the government



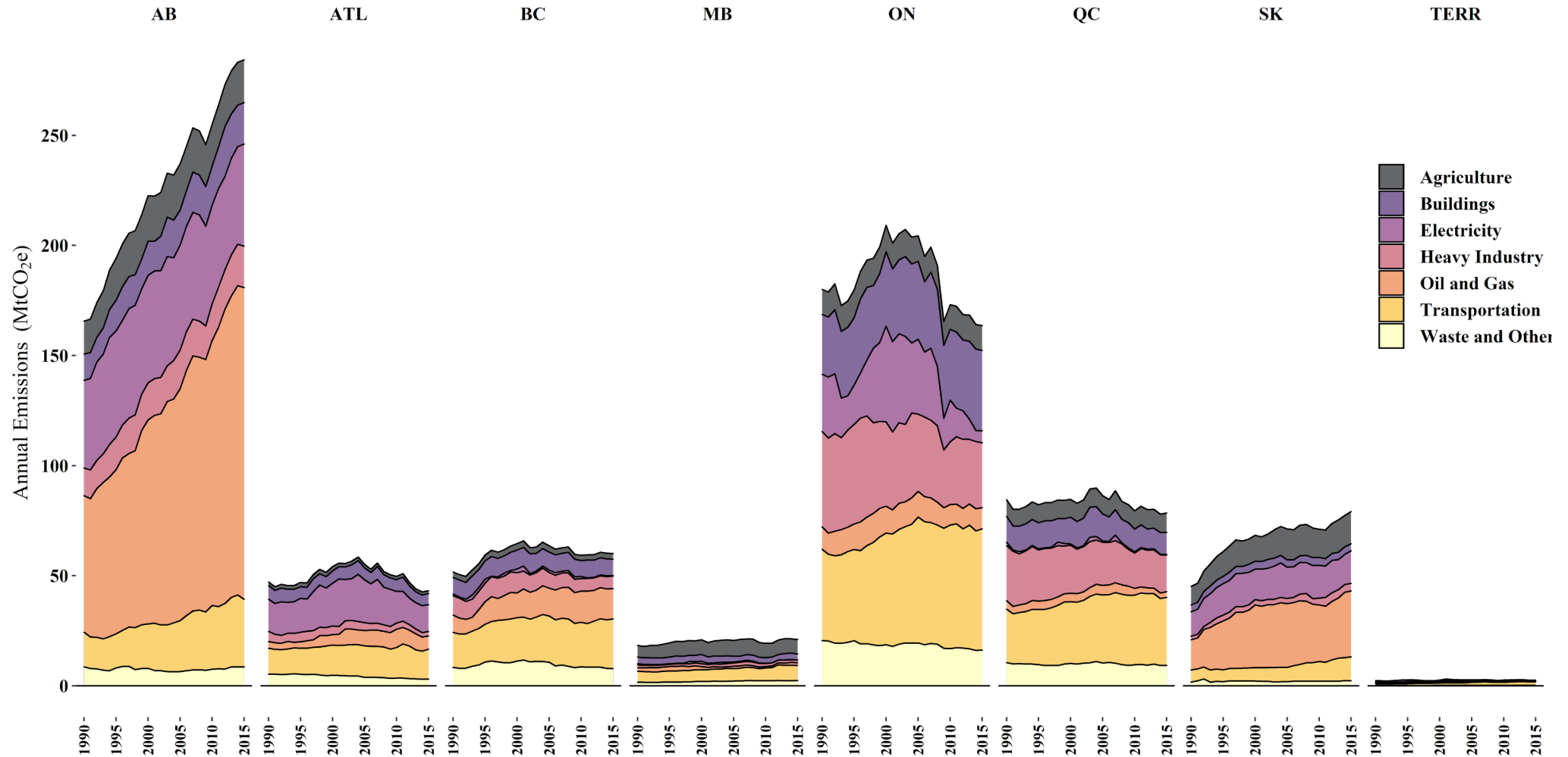
Our emissions and targets

Canada's GHG Emissions, Projections and Future Targets

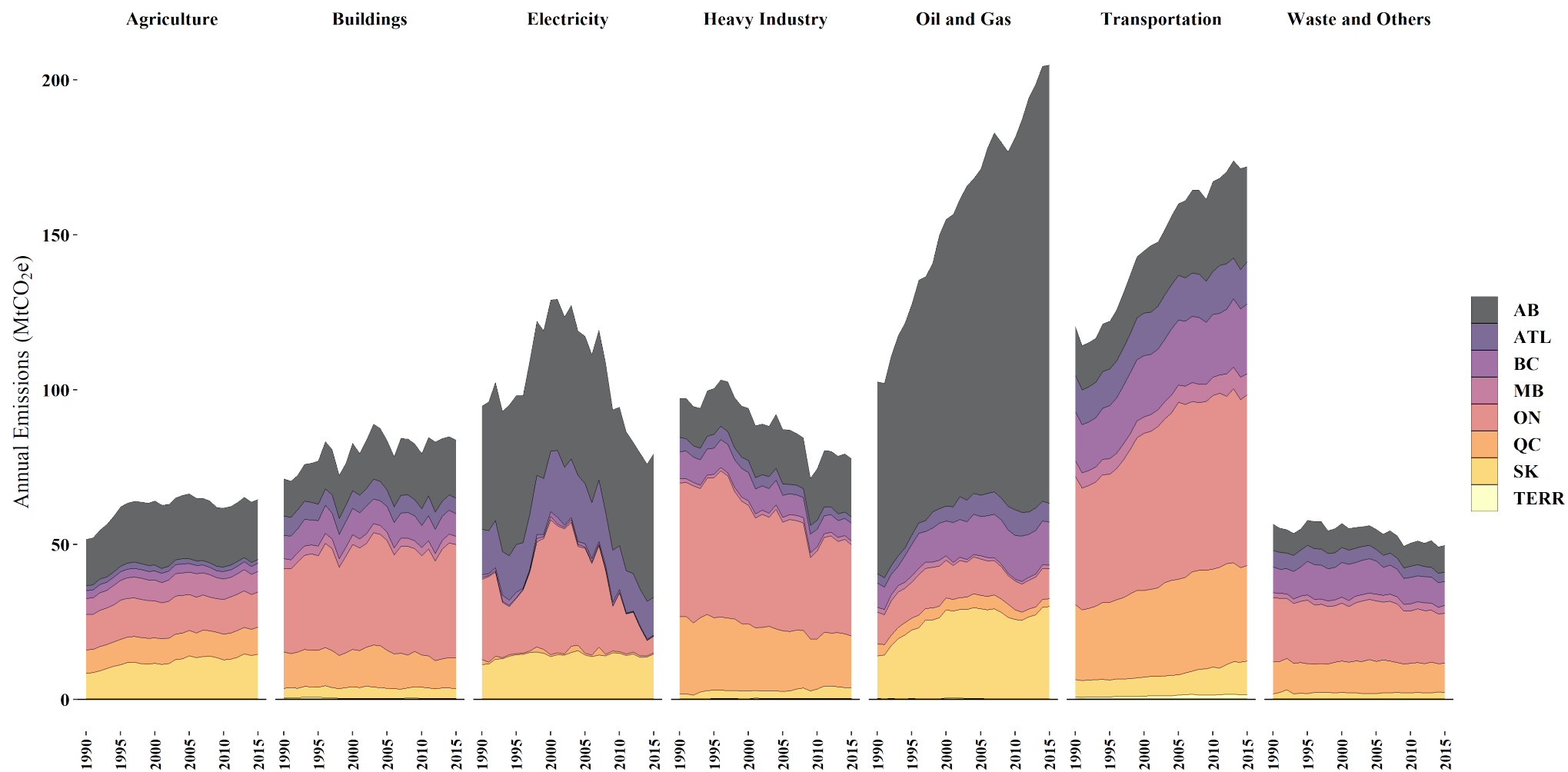
Source: Environment and Climate Change Canada National Emissions Inventory Report (2023) and Projections (2016-2023). Graph by Andrew Leach.



Canada's emissions by province in 2015



Canada's Emissions By Sector in 2015



The biggest issue in Alberta in 2015 was oil sands



How many people came to know of the oil sands

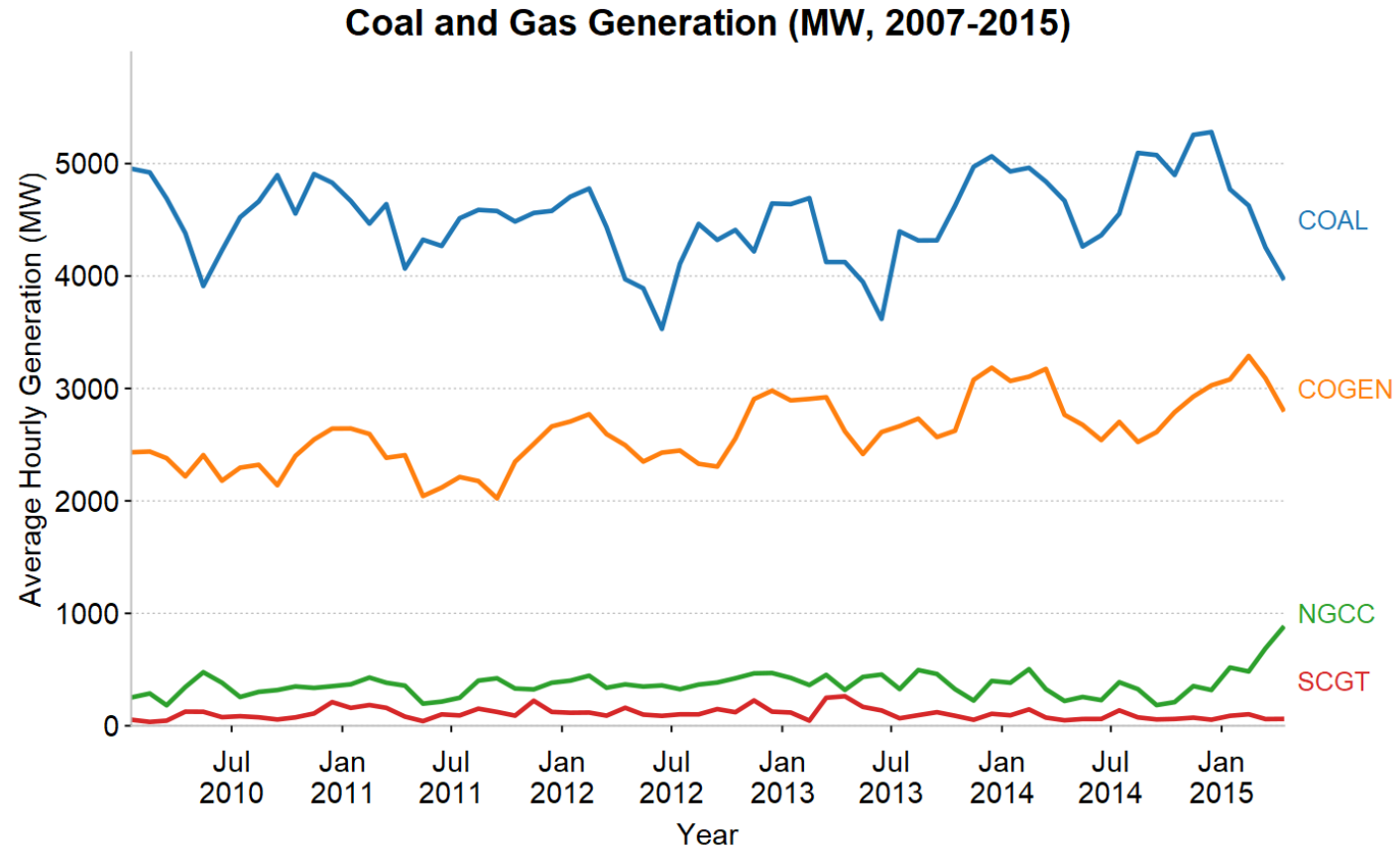


Opponents of the Keystone XL pipeline, which would move oil to the Gulf Coast, have protested at the White House for a week. J. Scott Applewhite/Associated Press

How many people came to know *of* the oil sands



What about electricity?



Source: AESO Data, accessed via NRGStream

There was a federal election on the horizon



SO, I SAID NO

University role

Watching friends navigate similar roles

Lack of political alignment with the new government

THEN I SAID YES

When the Premier/Prime Minister calls, you say yes

AB Climate Policy Fundamentals

Main components of CLP policy package

- **Carbon pricing was the backbone of the policy**
 - \$30/tonne price increasing over time
 - Separate designs for consumers and large emitters
- **Carbon-price-funded complementary policies**
 - Incentives for renewable power with projected 30% renewable generation by 2030
 - Funding for energy efficiency initiatives and transit mode-shifting
 - Methane regulations with a goal of a 45% vents reduction by 2025
 - Coal power phased out by 2030
- **Competitiveness protections**
 - *Output-based allocations* for trade-exposed sectors and electricity
 - Opt-in for smaller emitters
- **Consumer lump-sum, means-tested rebates**
- **100 Mt cap on oil sands emissions**

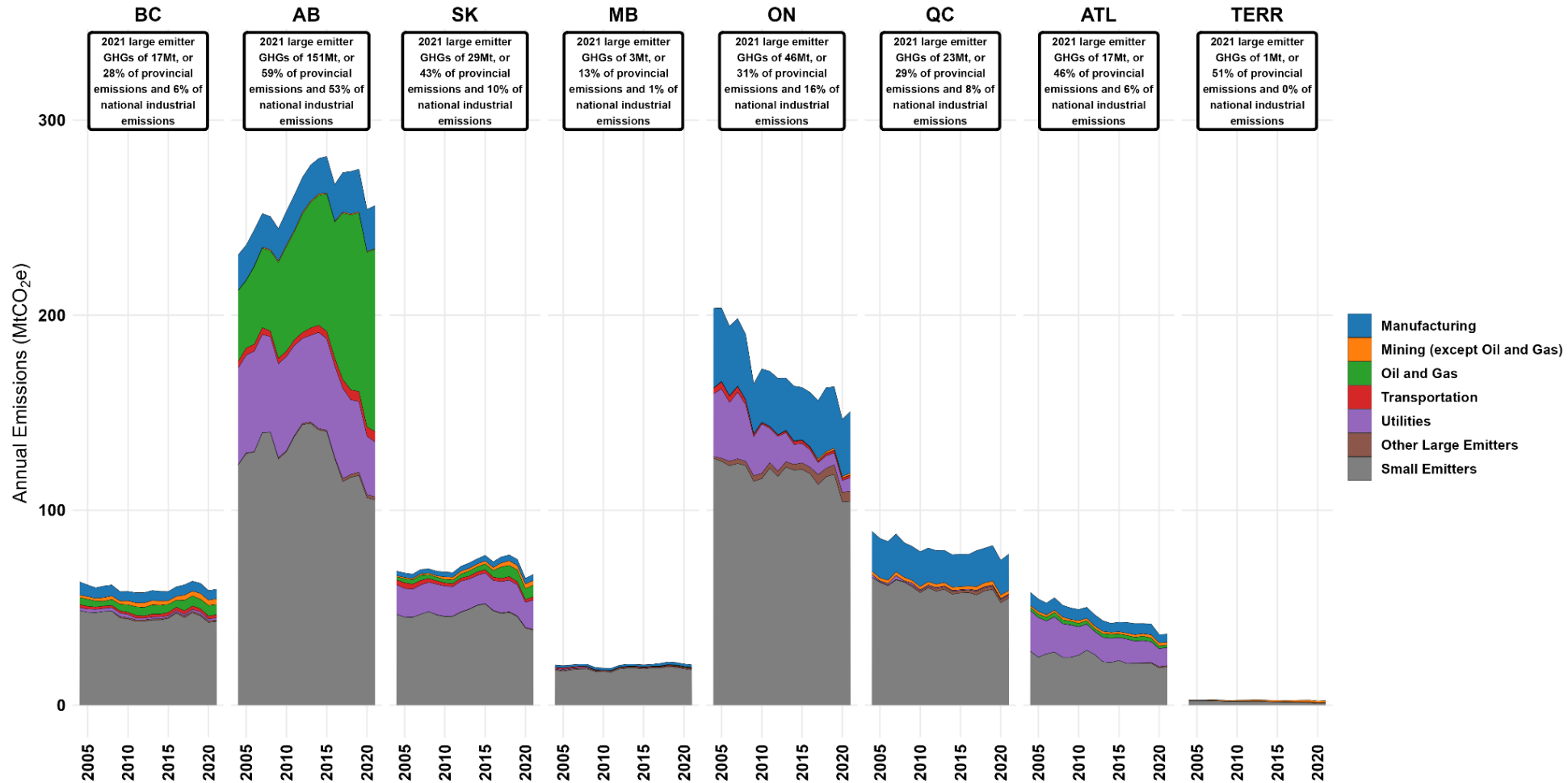
Carbon Levy and Carbon Competitiveness Regulation (CCIR)

- An economy-wide carbon price starting at \$30/tonne in 2018
- Built on the existing SGER by:
 - Making it broader
 - Extended coverage from ~50% to ~80% of emissions
 - Making it better
 - Allocate permits based on sector-level benchmarks achieving competitiveness protection while not rewarding historic emissions
 - Making it progressive
 - Consumer rebates meant ~50% of Alberta households made better off in year 1.
- Being able to build on an existing carbon was a huge advantage

Why is an economy-wide approach so important for Alberta?

2004-2021 Emissions from Large Emitters and the Rest of the Economy

Large, point source emitters (facilities with annual emissions above 10kt/yr CO₂e in any year) represented 42.6% of Canada's emissions in 2021



Source: Environment Canada data, graph by @andrew_leach



UNIVERSITY
OF ALBERTA

WHAT HAPPENED?

Federal policy



Source: Adam Scotti, PMO

There was lots of opposition

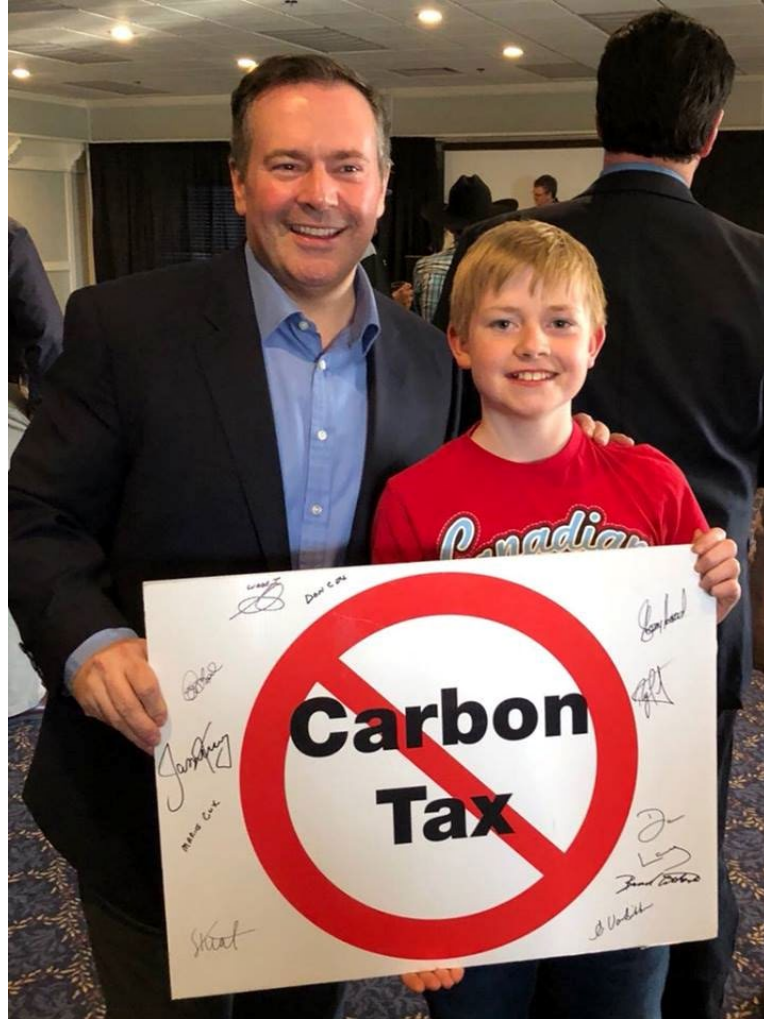


An Edmonton rally against Alberta's carbon tax, in December, 2016. (Zoe Todd/CBC)

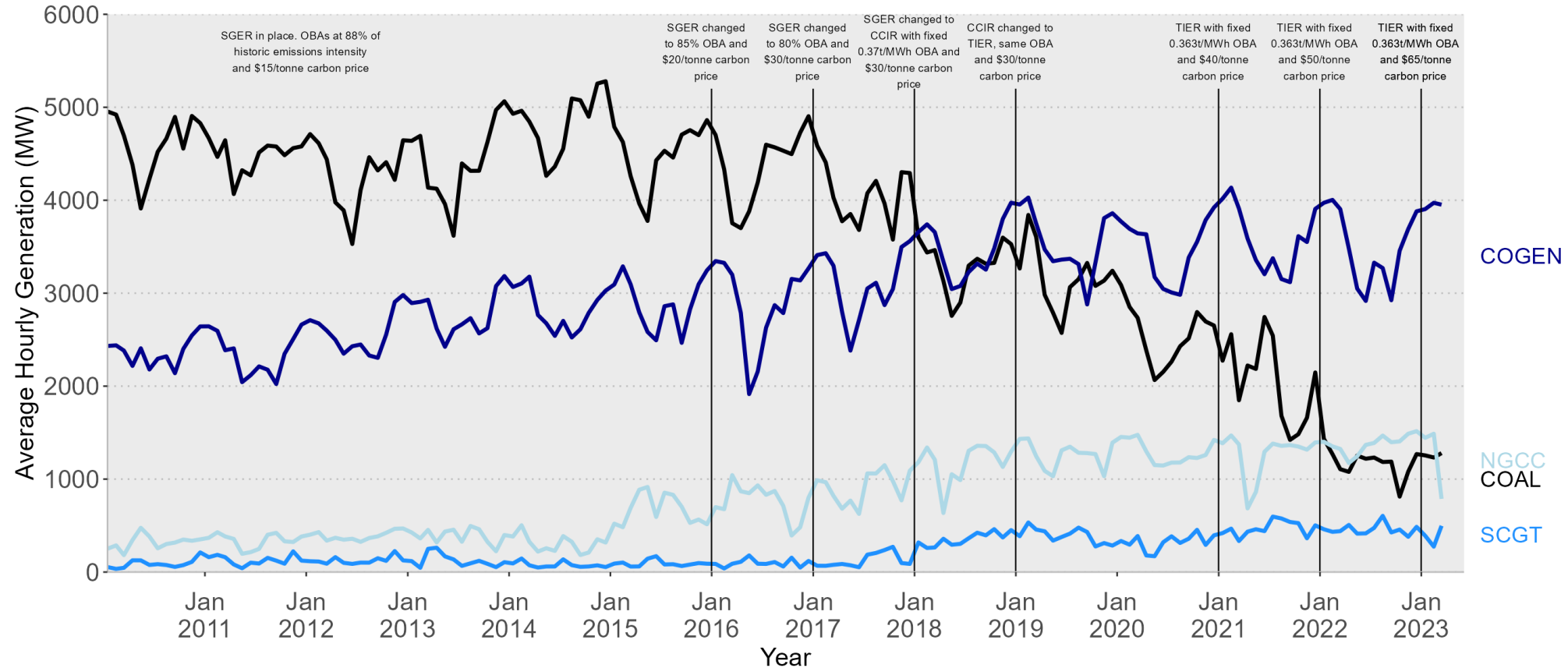
And the provincial carbon tax was scrapped in 2019



Despite the rhetoric, industrial carbon pricing remains under TIER

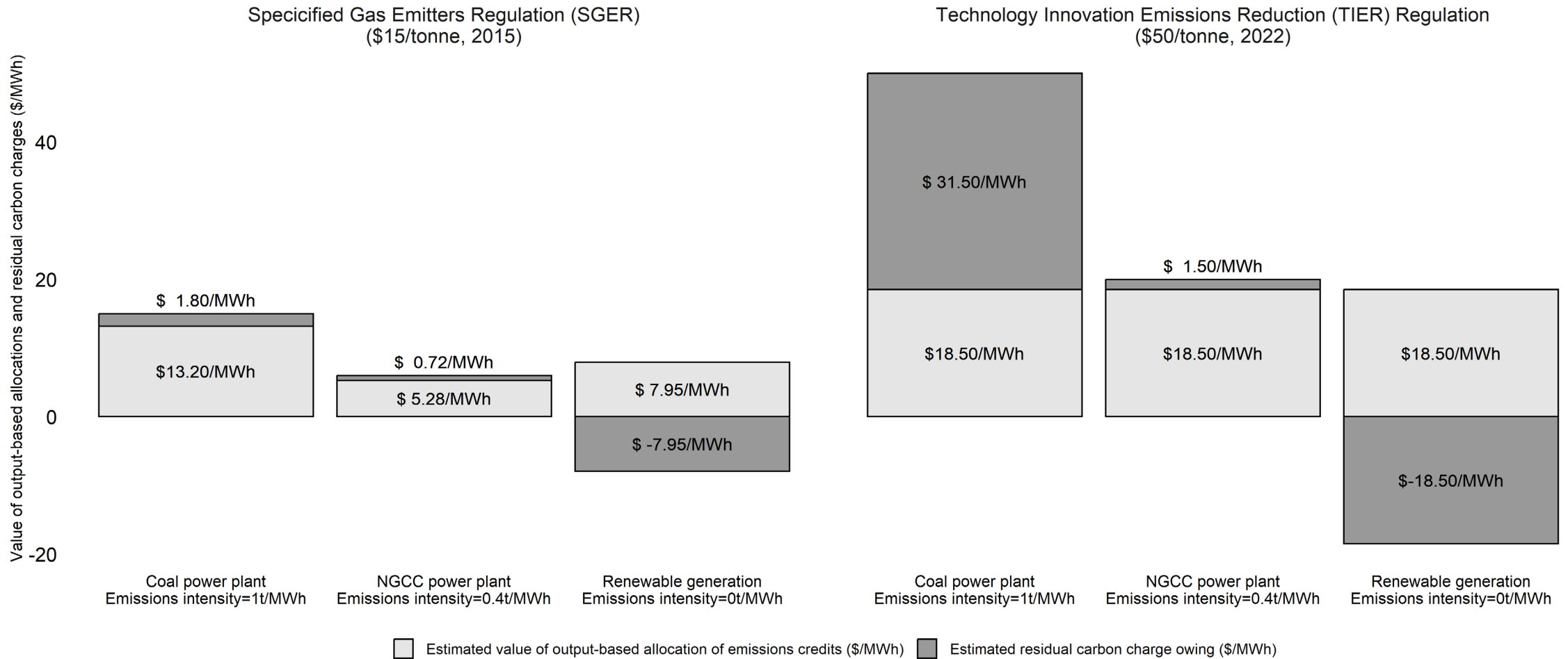


But evidence of big impacts in electricity



Source: AESO Data, accessed via NRGStream

The price really matters here:



Assumes renewable generation uses output-based pricing system under TIER, not the offset protocol. Using offsets would increase the per MWh revenue from carbon pricing to \$25.50/MWh.
 Graph by @andrew_leach.

WHAT WENT WRONG?

Is a carbon tax the right policy?

Doesn't the rebate destroy the effect of the carbon tax?

Overall economic malaise

Political circumstance

Do carbon taxes reduce emissions (enough)

In the House

Today will see debate on what's likely to be the final opposition day motion of the 42nd Parliament.

From Conservative environment critic Ed Fast:

That, given that the carbon tax will not reduce emissions at its current rate and it is already making life more expensive for Canadians, the House call on the government to repeal the carbon tax and replace it with a real environment plan.

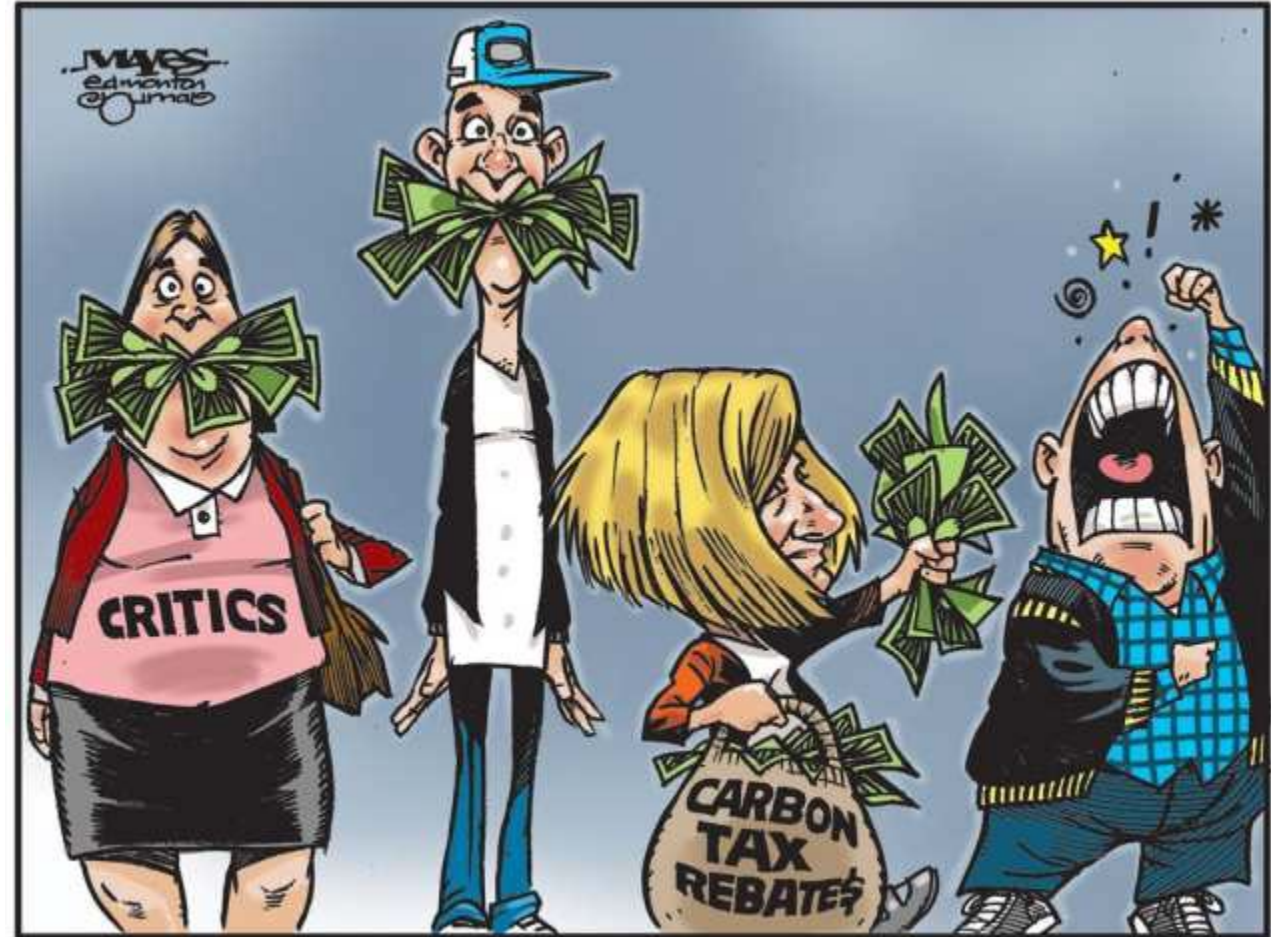
Higher carbon taxes needed to meet Paris emission targets, PBO says

CANADIAN PRESS Updated: June 13, 2019

Misunderstanding of rebates was constant

David Staples: Unfair, unfocused NDP carbon tax unlikely to reduce emissions





DAVID STAPLES, EDMONTON JOURNAL Updated: January 11, 2017



And it provided great fodder for concern trolls

 Pinned Tweet



Andrew Leach    @andrew_leach · 8 May 2018 

Opponent: "Carbon taxes are regressive. Poor people will no longer be able to heat their homes."

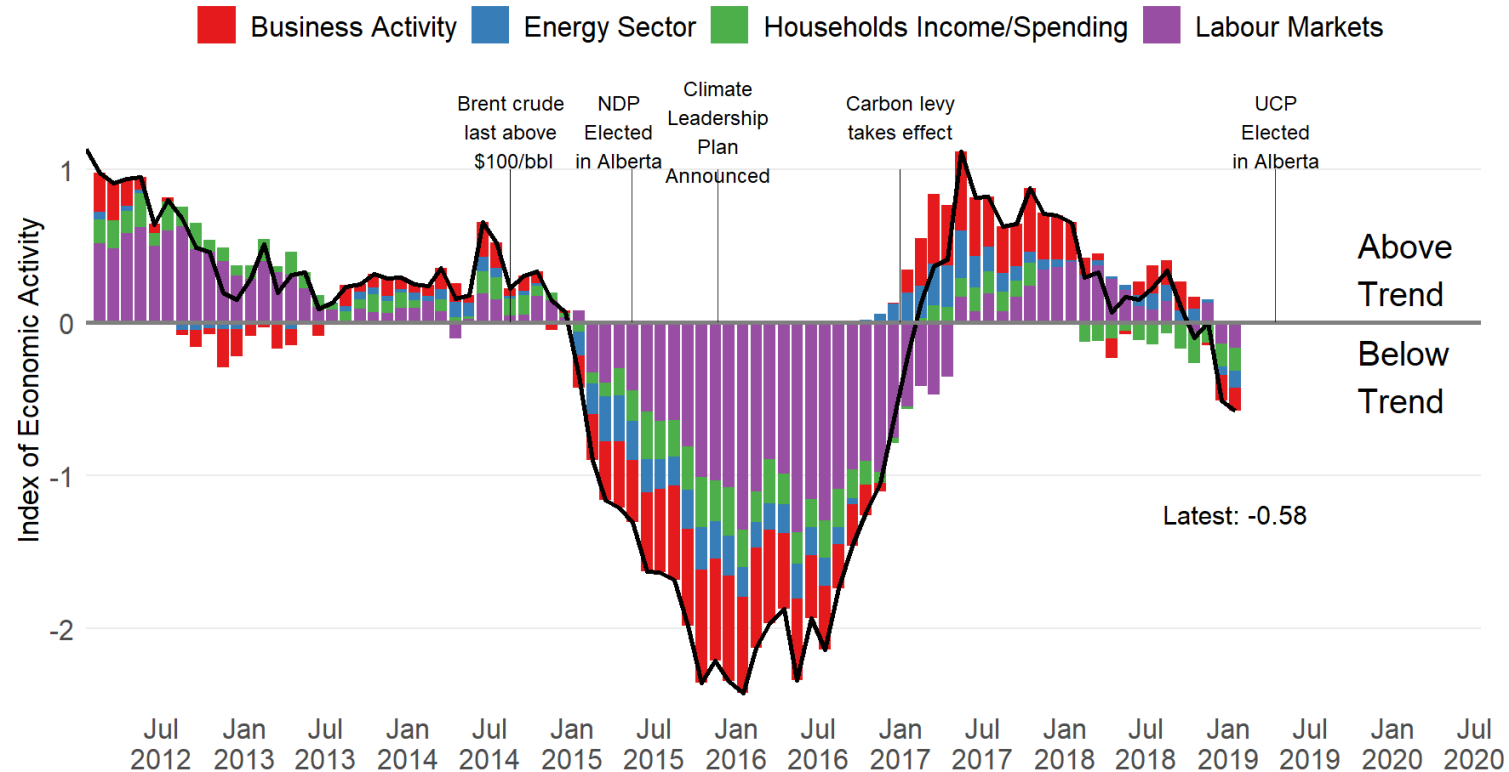
Me: "Here's a graph showing they're progressive and that almost all lower income households are better off."

Opponent: "see, carbon taxes are just a wealth redistribution scheme."

Tough Time to Implement Carbon Policy

Economic Conditions Index for Alberta (2012 to 2019)

Tombe Index of Economic Activity



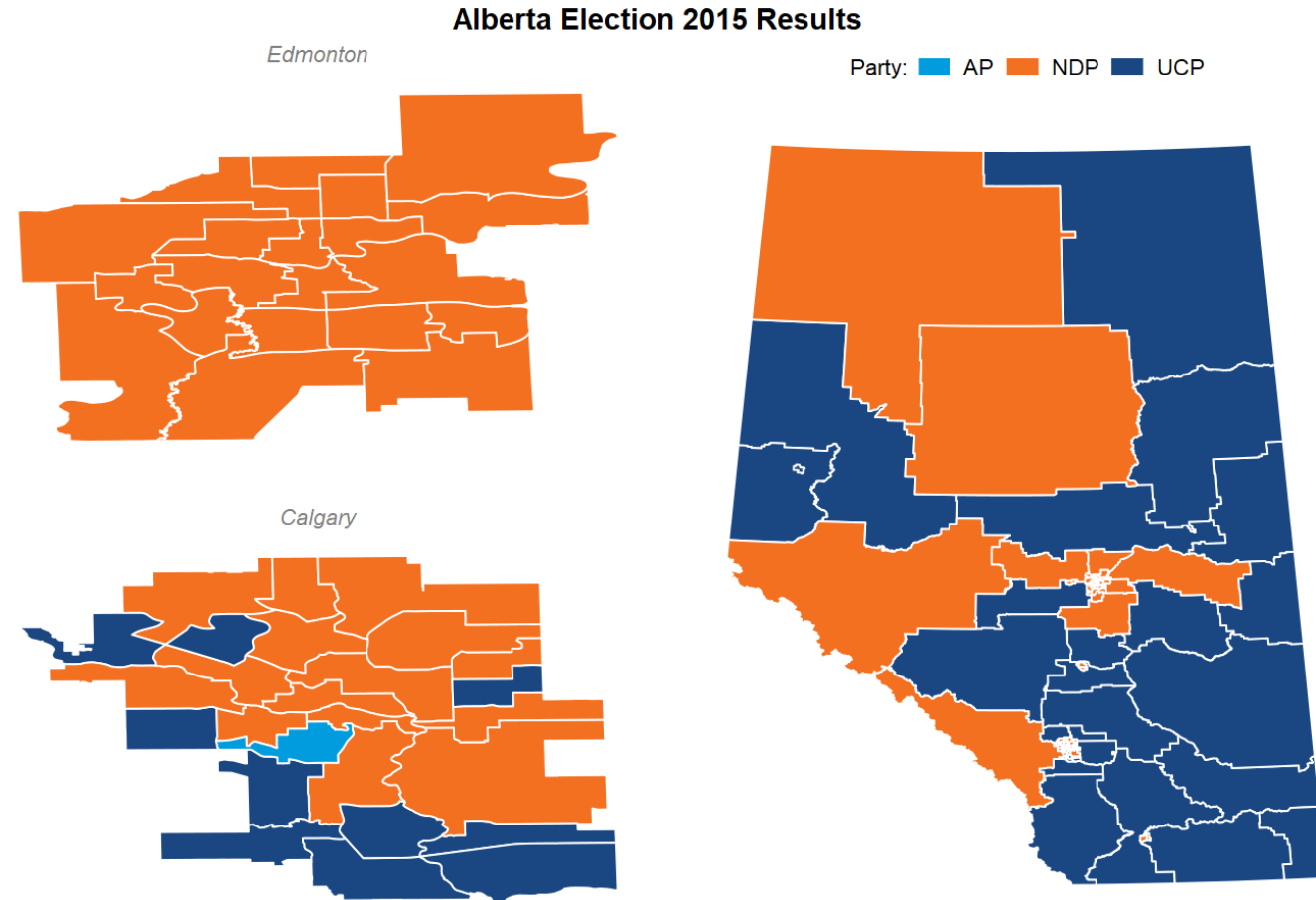
Sources: Data from Statistics Canada, code via @trevortombe. Economic activity (GDP) is available only for Canada, not for individual provinces, at monthly frequencies. Instead, this index uses the 1st principal component from 41 monthly data series, as done for the Chicago Fed National Activity Index. The index is constructed to have mean zero and unit variance. A value of +1 means YoY growth is 1 standard deviation above trend.

Was the carbon tax really on the ballot?



Premier Jason Kenney made good on his top election promise to scrap the carbon tax as Carbon Tax Repeal Act — the UCP's first bill was introduced in the Legislature on Thursday, May 30. *ED KAISER/POSTMEDIA NETWORK*

Did Alberta Really Vote Differently?



Source: Elections Alberta.

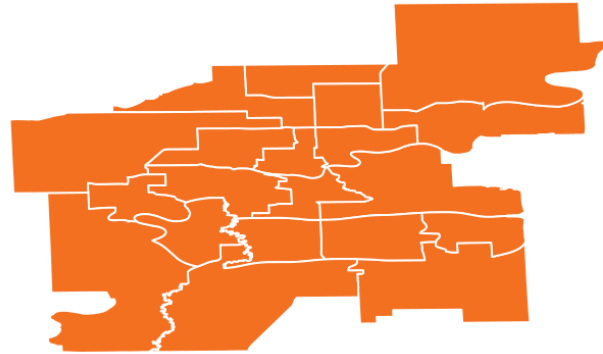
2015 data (UCP=WRP+PC) from Kyle Hutton (@kylejhutton). Graph by @trevortombe.

Did Alberta Really Vote Differently?

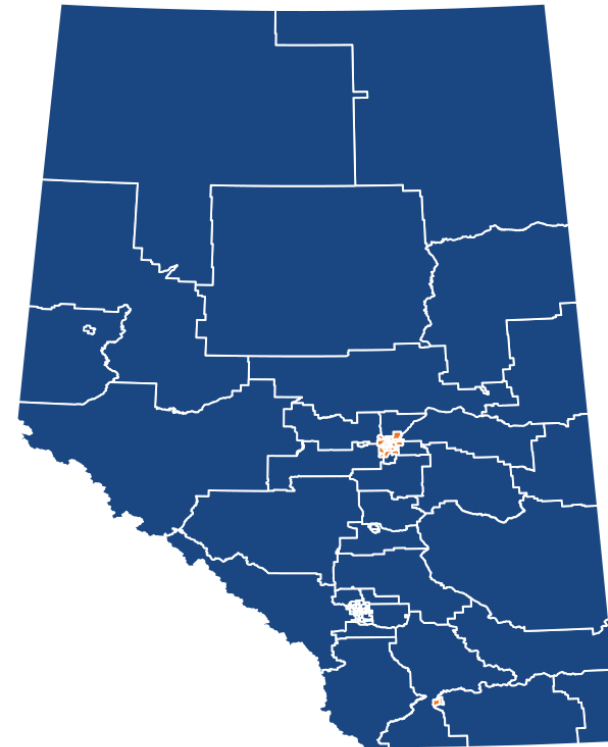
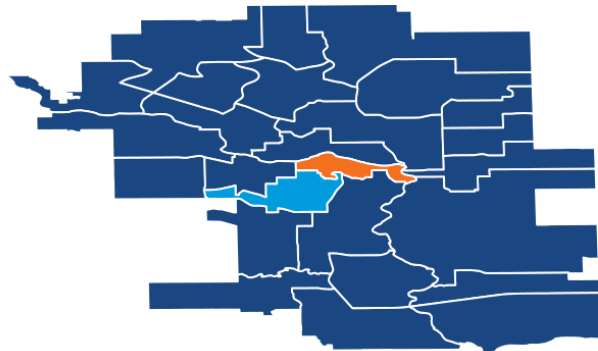
Modified Alberta 2015 Election Results (WRP votes+PC votes=UCP votes)

Edmonton

Party: ■ AP ■ NDP ■ UCP

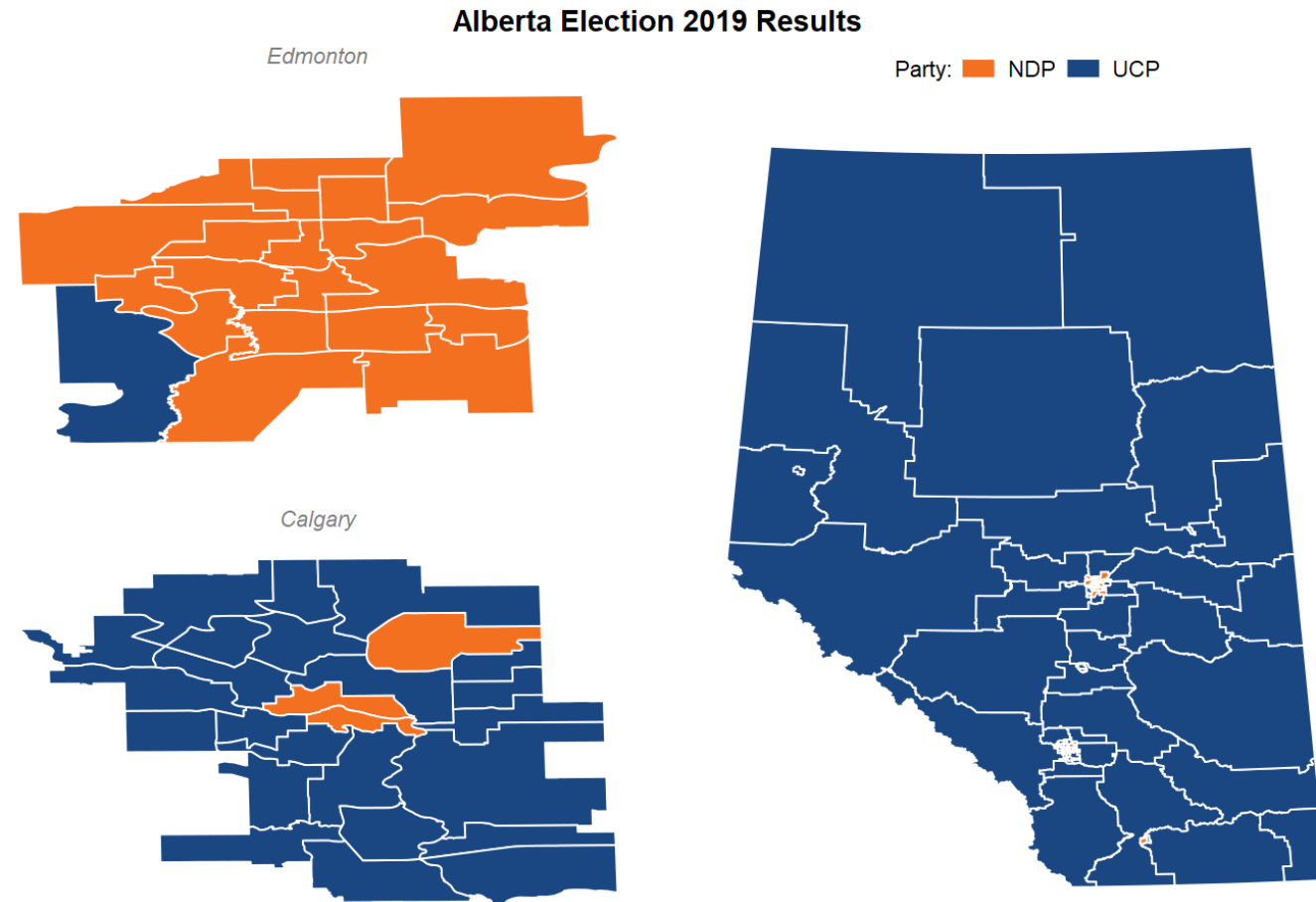


Calgary



Source: Elections Alberta data, calculations by Andrew Leach.
2015 data from Kyle Hutton (@kylejhutton). Graph by Andrew Leach.

Did Alberta Really Vote Differently?



Source: Elections Alberta.
2019 data from Kyle Hutton (@kylejhutton). Graph by @andrew_leach.

What's next for Alberta?



What's next for Alberta: more fights over provincial jurisdiction

No. 40195

IN THE SUPREME COURT OF CANADA
(ON APPEAL FROM THE ALBERTA COURT OF APPEAL)

IN THE MATTER of An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts, SC 2019, c 28 and the Physical Activities Regulations, SOR/2019-285

AND IN THE MATTER of a Reference by the Lieutenant Governor in Council to the Court of Appeal of Alberta under the Judicature Act, RSA 2000, c J-2, s 26

BETWEEN:

ATTORNEY GENERAL OF CANADA

Appellant

- and -

ATTORNEY GENERAL OF ALBERTA

Respondent

- and -

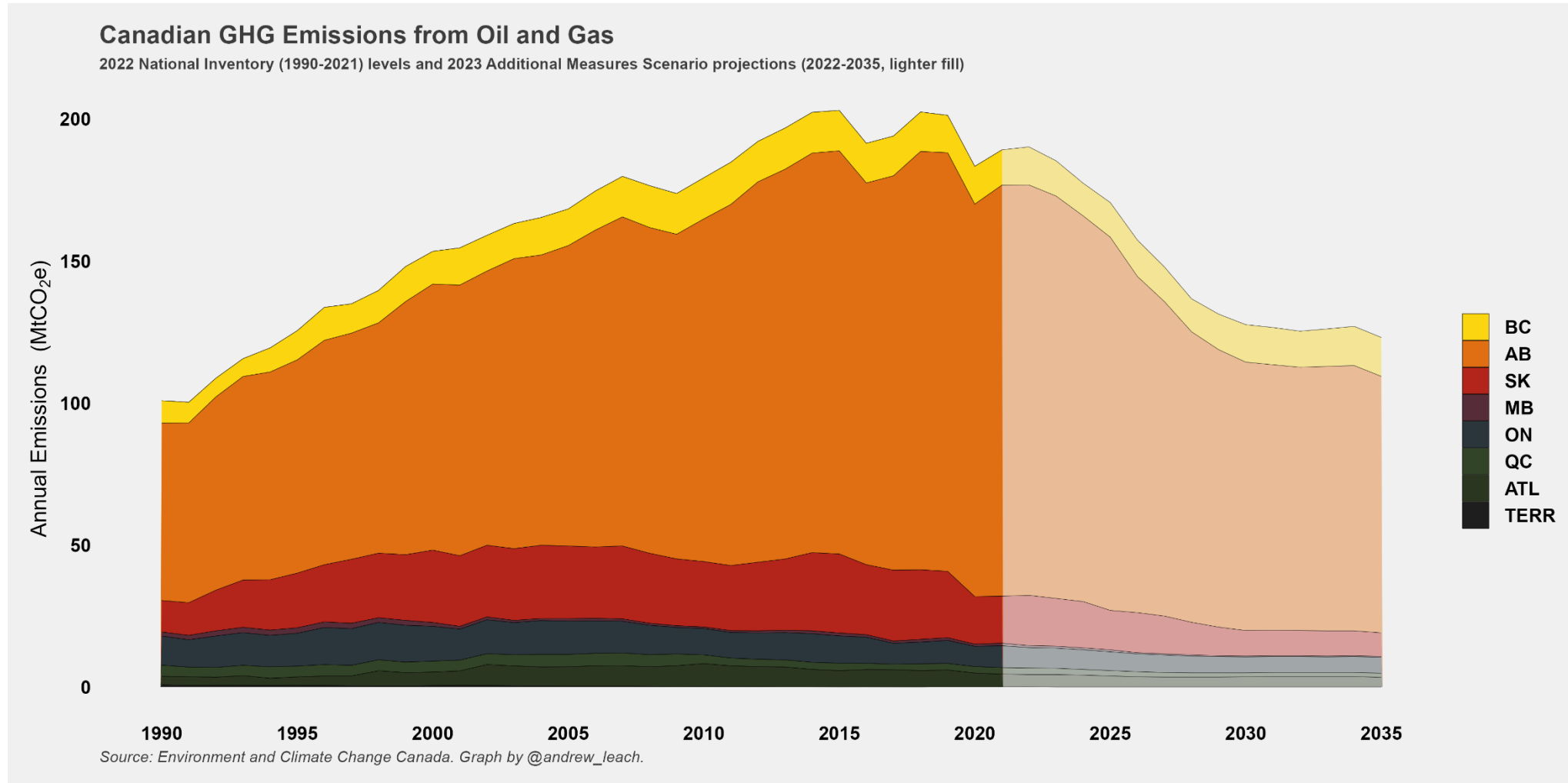
(Title of proceedings continued on next page)

FACTUM OF THE APPELLANT
THE ATTORNEY GENERAL OF CANADA

(Pursuant to Rule 42 of the *Rules of the Supreme Court of Canada*, SOR/2002-156)



What's next for Alberta: a looming oil and gas cap



What's next for Alberta: a battle for the country



Wrap up

- You should definitely take the call
- Don't forget that government work is not like academic work – peer review starts after your work is public
- Counterfactual analysis is challenging in a political arena
- Don't read too much into political outcomes
- Keep fighting for good policy

CONTACT INFORMATION

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