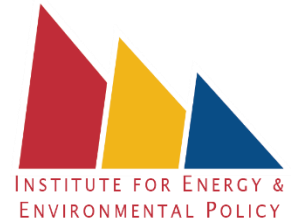


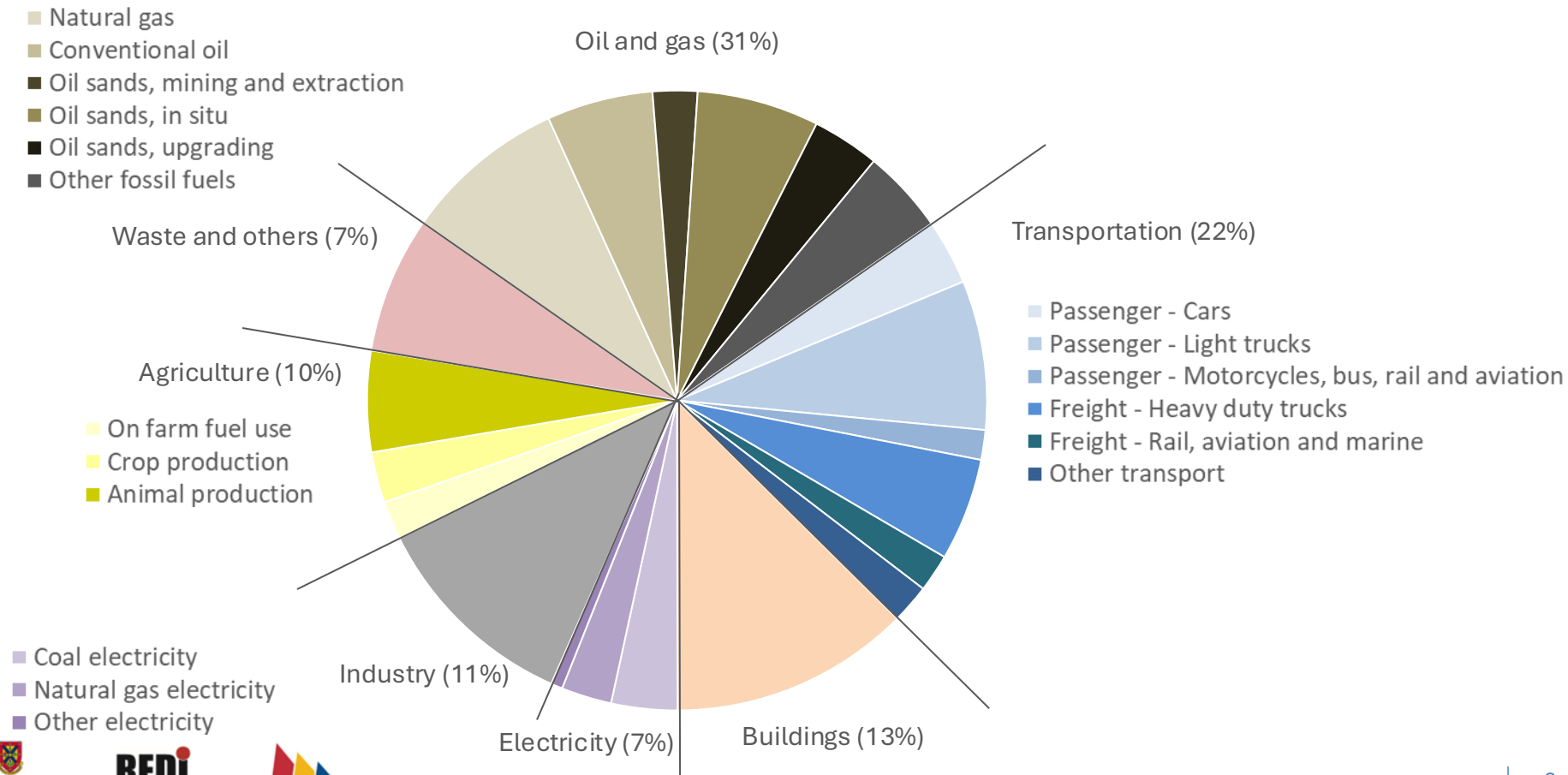
Biofuel policy challenges

Warren Mabee, Queen's University
WPAC 2025 – Halifax 24 September 2025



Climate change

Canada 708 Mt (2022)



Since 1990

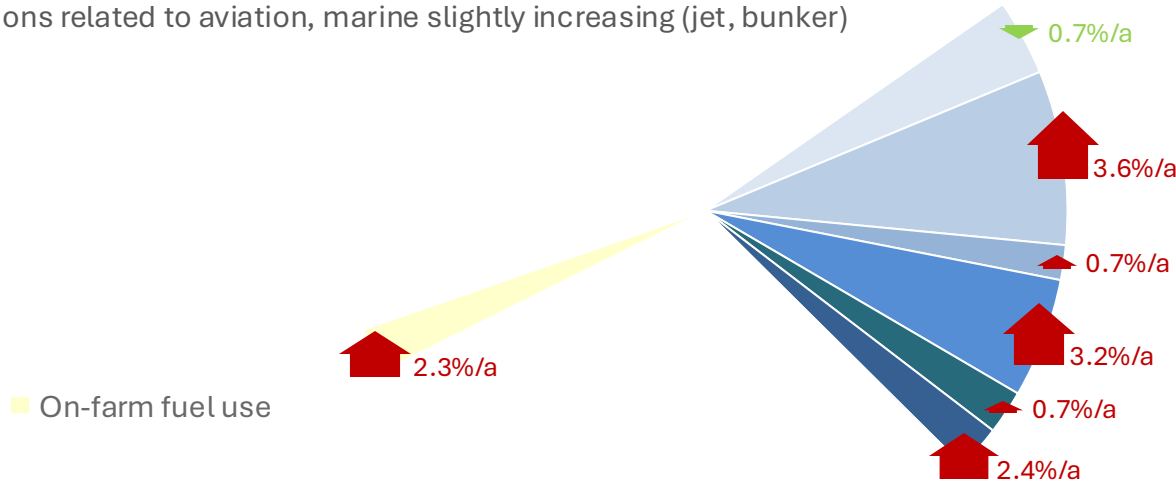
Policy has helped reduce passenger car emissions (mostly electrification)

Fastest-growing transport emissions: light-duty trucks (gasoline)

Emissions related to freight, heavy equipment, farming increasing fast (diesel)

Emissions related to aviation, marine slightly increasing (jet, bunker)

- Passenger - Cars
- Passenger - Light trucks
- Passenger - Motorcycles, bus, rail and aviation
- Freight - Heavy duty trucks
- Freight - Rail, aviation and marine
- Other transport

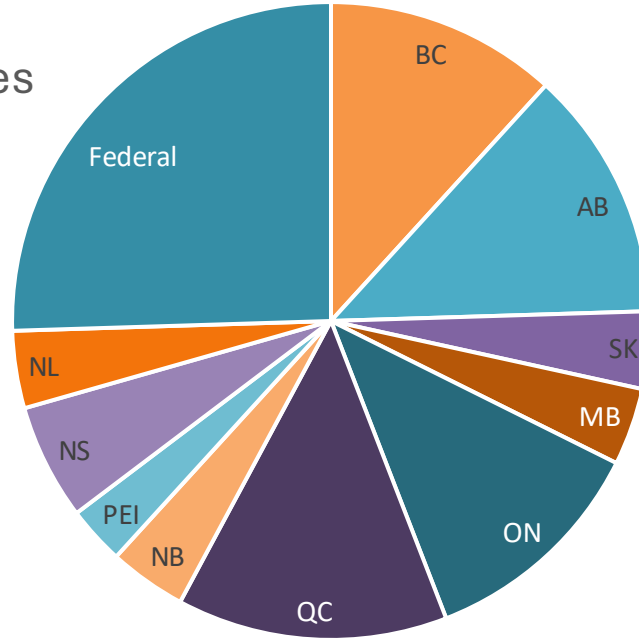


Since 2000

Every province has been active in developing policy to support biorefining activities

103 individual policies can be identified across Canada as shown in the figure

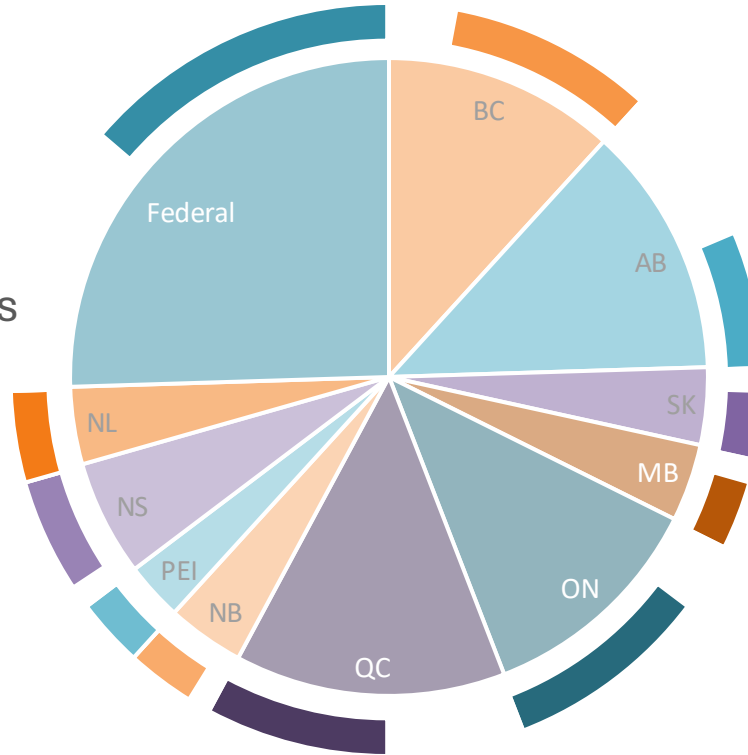
Policies include RD&D, infrastructure funding, and market development



Since 2000

As of June 2025, there are 67 policies in effect

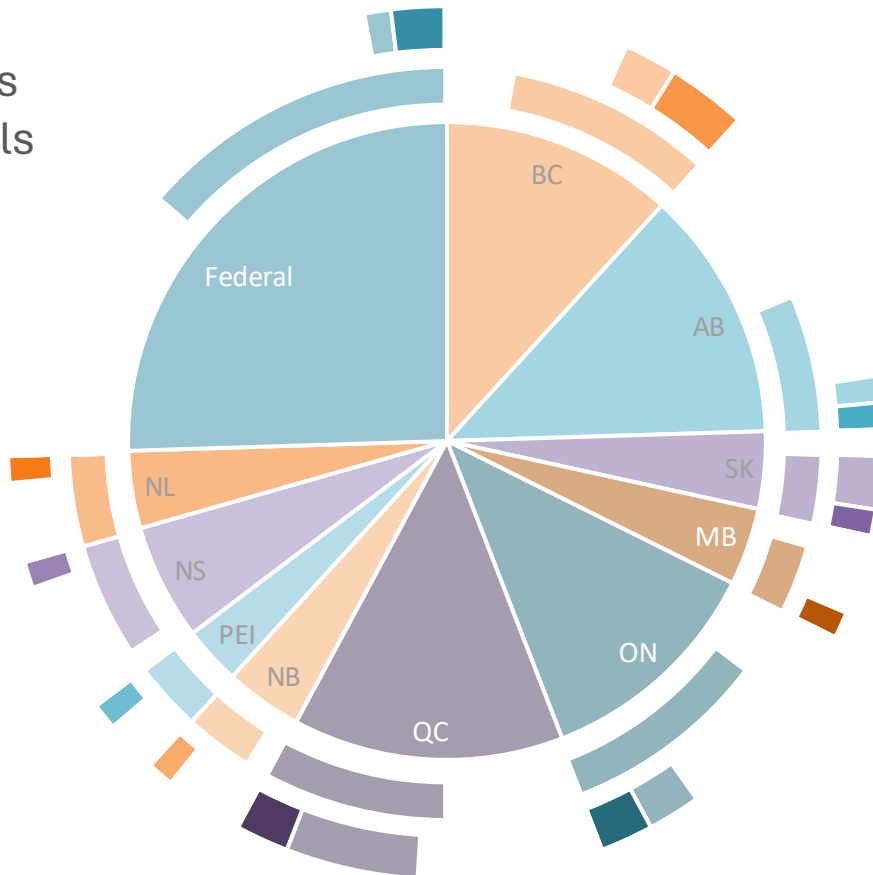
These range from provincial-scope strategies and incentives through national programs (e.g., Clean Fuel Standard)



Since 2000

Relatively few policies have an energy or fuels focus, as shown here

Policies have a wide range of goals and there is no single unified vision for bioenergy use across Canada



Issues

There is a real need for bioenergy options, particularly in the liquid fuel space where difficult-to-address sectors (diesel-fueled) continue to be problematic

Policies to support the broader bioeconomy can work at counter purposes to bioenergy development

The lack of a defining vision for the sector means that program emphasis changes regularly from year to year