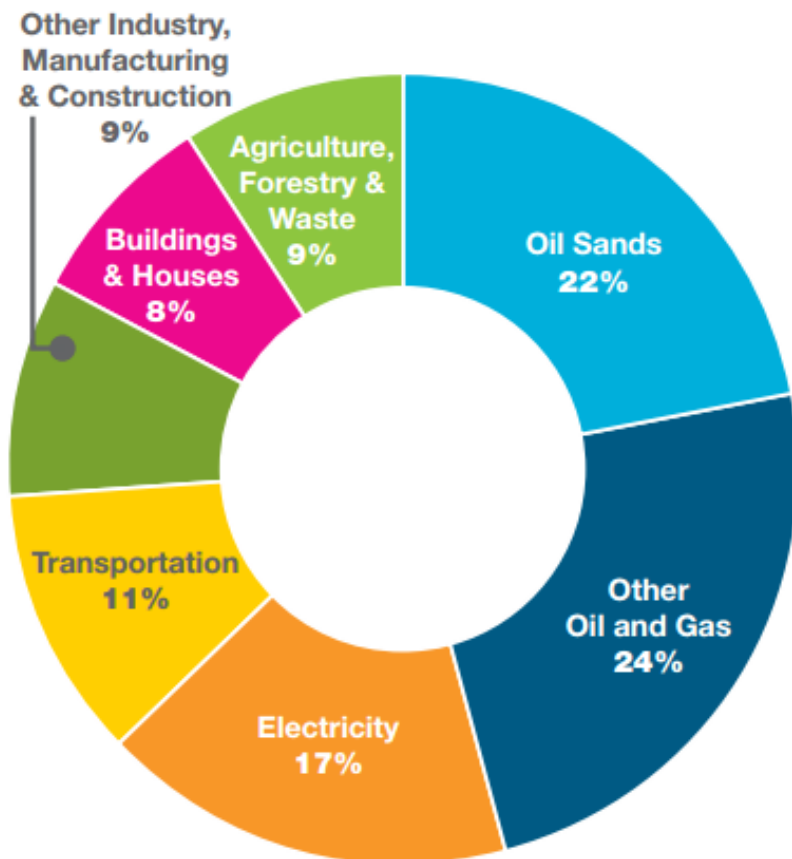


# Alberta's Climate Leadership Plan

Presentation to the Kleinman Center  
January 24, 2017

# Alberta Emissions Profile



- 267 Mt CO<sub>2</sub>e – total provincial GHG emissions in 2013
- 14 percent or 33 Mt – emissions growth since 2005
- 37 percent – Alberta's percentage of Canada's emissions in 2013

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# Timeline of Key Actions

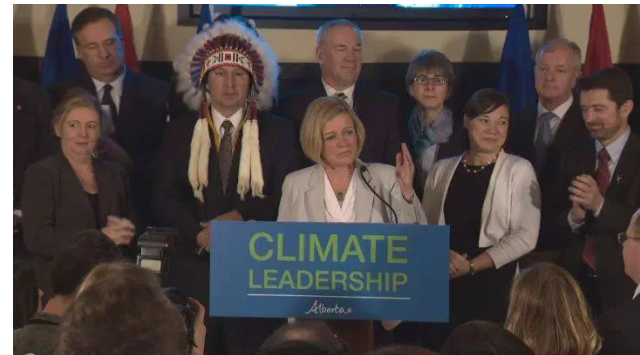
- 2002** - Released Albertans & Climate Change: Taking Action (first provincial strategy in Canada)
- 2003** - *Climate Change and Emissions Management Act* passed (first legislation to establish economy-wide price on carbon in North America)
- 2004** - Specified Gas Reporting Regulation
- 2007** - Specified Gas Emitters Regulation (first economy-wide price in Canada)
- 2008** - Revised provincial Climate Change Strategy
- 2015** - Amended Specified Gas Emitters Regulation (reduction requirements and carbon price increased)
- 2015** – **Climate Leadership Plan**



# Climate Leadership Plan

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- Released in November 2015 in response to Climate Change Advisory Panel report
- The Climate Change Advisory Panel heard from a wide range of Albertans including the public, farmers, Indigenous communities, academia, think-tanks and industry representatives on a new climate change strategy for Albertans.



# Climate Leadership Plan Highlights

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4 key areas that the Alberta government is moving forward on:

- Phasing out coal-generated electricity and developing more renewable energy
  - Coal power emissions phase out by 2030
  - 30% of generation from renewables by 2030
- Implementing a new carbon price on greenhouse gas pollution
  - Extends price to all combustion
  - Industrial emitters transition to output based allocation
- A legislated oil sands emission limit
  - 100 Mt CO<sub>2</sub>e limit, with provision for cogen emissions and new upgrading
- Employing a new methane emission reduction plan to reduce oil and gas methane emissions by 45% by 2025.

# Why Price Carbon?

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- Climate Change is already happening and the cost will rise over time
  - Societal costs associated with GHG emissions are estimated to be \$41 per tonne CO<sub>2</sub>e on a global basis in 2016 by Environment and Climate Change Canada, rising to \$55/t by 2030.
  - Could be as high as \$167/t in 2016 (95th percentile)
  - Floods, droughts, fires, extreme storms, invasive species, crop loss, etc.
- Greenhouse gas emissions are a negative externality
  - A **negative externality** occurs when an individual or firm making a decision does not have to pay the full cost of the decision.
- Carbon pricing provides a signal to all entities to reduce emissions
  - Behaviour change (change purchasing habits, drive less, turn down heat, etc.)
  - Technology change (energy efficiency, more efficient vehicles, etc.)

# Carbon Pricing

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- Alberta is aligned with the current highest price in Canada, \$30/tonne, and our emissions coverage and stringency is also as good as or better than other Canadian provinces.
- Carbon Levy on heating and transport fuels
  - All revenue collected will be **rebated to Albertans** and **reinvested in the economy** to help fund provincial efforts to reduce greenhouse gas emissions
- Output Based Allocation
  - Build on the experience of the Specified Gas Emitters Regulation (2007)
  - Drive emissions reductions while protecting trade exposed industries
  - Includes large emissions and trade exposed industry: oil sands, **electricity**, refineries, petrochemicals, cement, mining, etc.



# Carbon levy impact on major fuels

Type of Fuel	2017	2018
Diesel	5.35 ¢/L	2.68 ¢/L
Gasoline	4.49 ¢/L	2.24 ¢/L
Natural Gas	1.011 \$/GJ	0.506 \$/GJ
Propane	3.08 ¢/L	1.54 ¢/L

<http://www.alberta.ca/climate-carbon-pricing.aspx>

- Starting January 1, 2017, the carbon levy will be applied to fuels at a rate of \$20/tonne.
  - One year later, the levy will increase to \$30/tonne.
- Six of 10 Alberta households will receive a rebate that covers the average cost of the carbon levy they pay.
- Electricity covered by output based allocation, not the levy
  - Alberta Energy analysis projects no significant rate increases over base case



# Reinvesting in our economy

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- Over the next 5 years, the levy is expected to raise \$9.6 billion, all of which will be reinvested in the economy and rebated to Albertans.
- \$3.4 billion will help households, businesses and communities adjust:
  - \$2.3 billion for carbon rebates to help low- and middle-income families
  - \$865 million to pay for a cut in the small business tax rate from 3% to 2%
  - \$195 million to assist coal communities, Indigenous communities and others with adjustment
- \$6.2 billion will help diversify our energy industry and support jobs:
  - \$3.4 billion for large scale renewable energy, bioenergy and technology
  - \$2.2 billion for green infrastructure like transit
  - \$645 million for Energy Efficiency Alberta, a new provincial agency that will support energy efficiency programs and services for homes and businesses

**Thank You**

**Ongoing updates:**  
**[www.Alberta.ca/Climate](http://www.Alberta.ca/Climate)**