June 15th 2016
Town Hall
on Tackling Climate Change

Hillhurst United Church

Hosted by

Calgary Citizens on Climate Change

THEME - Emission Reduction Opportunities

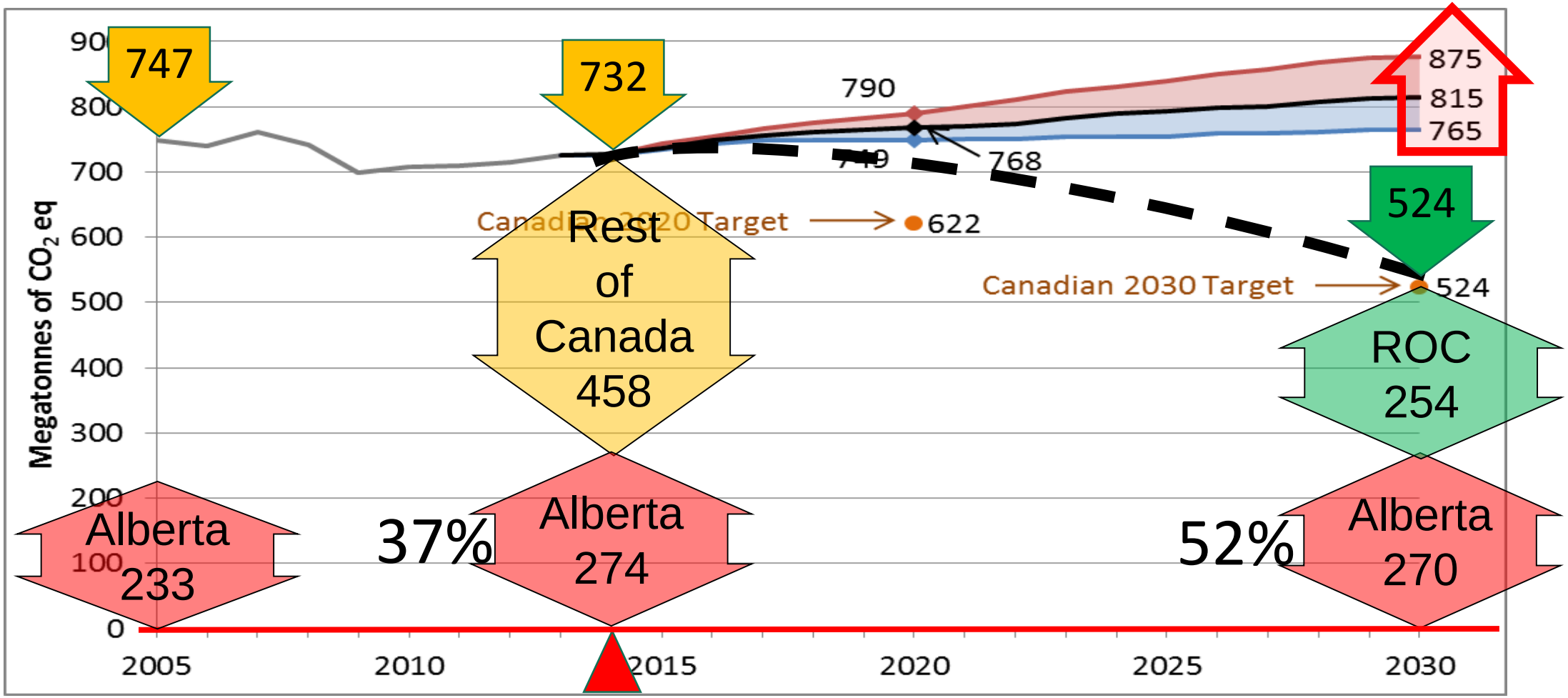
- The National Challenge
- Alberta’s Challenge
- Alberta’s Fair Share in Reducing Emissions
- Ending Electricity Generation From Coal
- Increasing Electricity Generation From Renewables

Presenter:

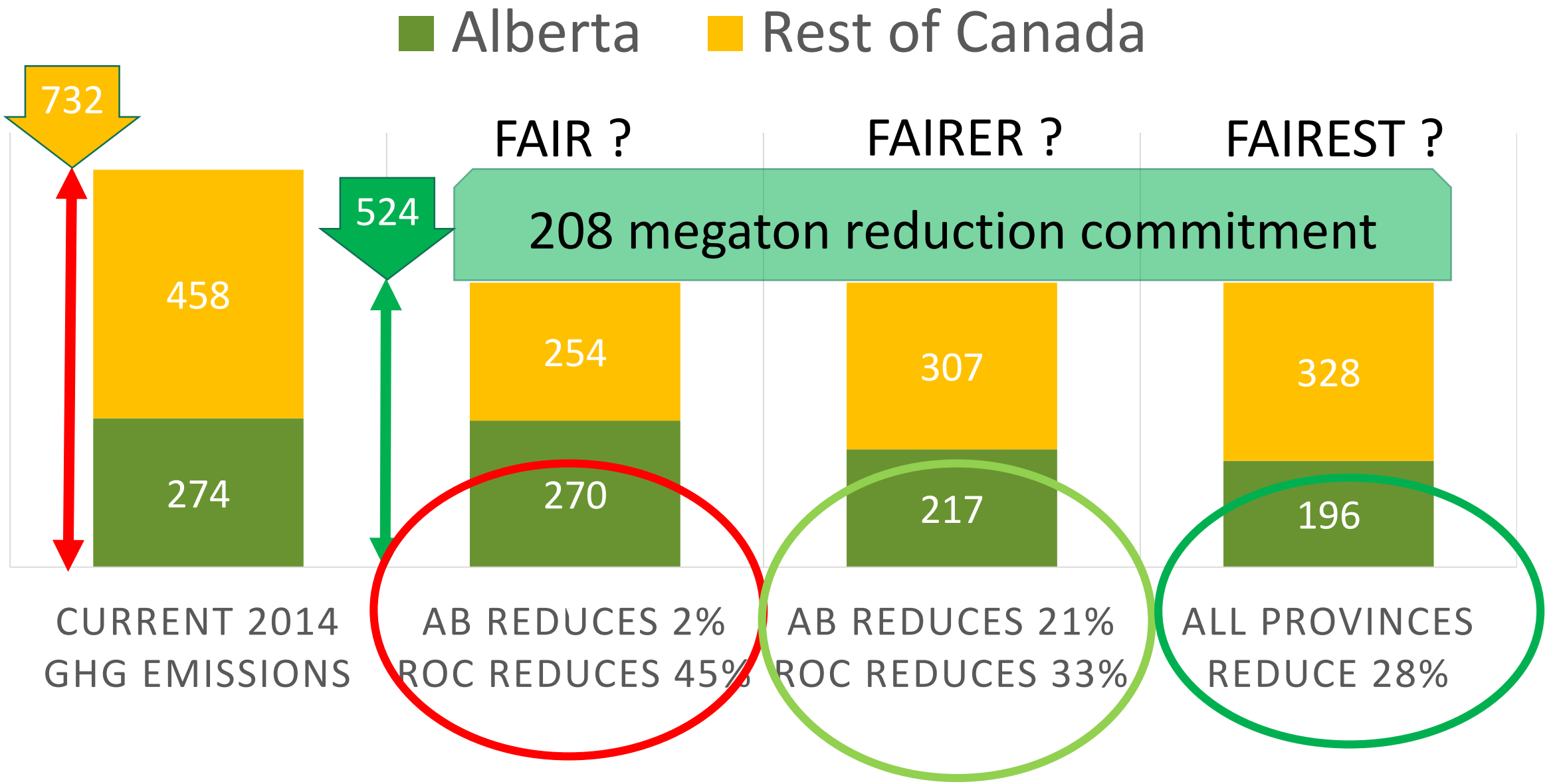
Ken Hogg M.Eng.,P.Eng. (Founder - Alberta Renewable Energy Alliance)

Canada's GHG target was confirmed in 2015 at Paris COP21

Our National target is 524 Megatonnes CO2e
= 30% below 2005 levels of 747 MT by 2030

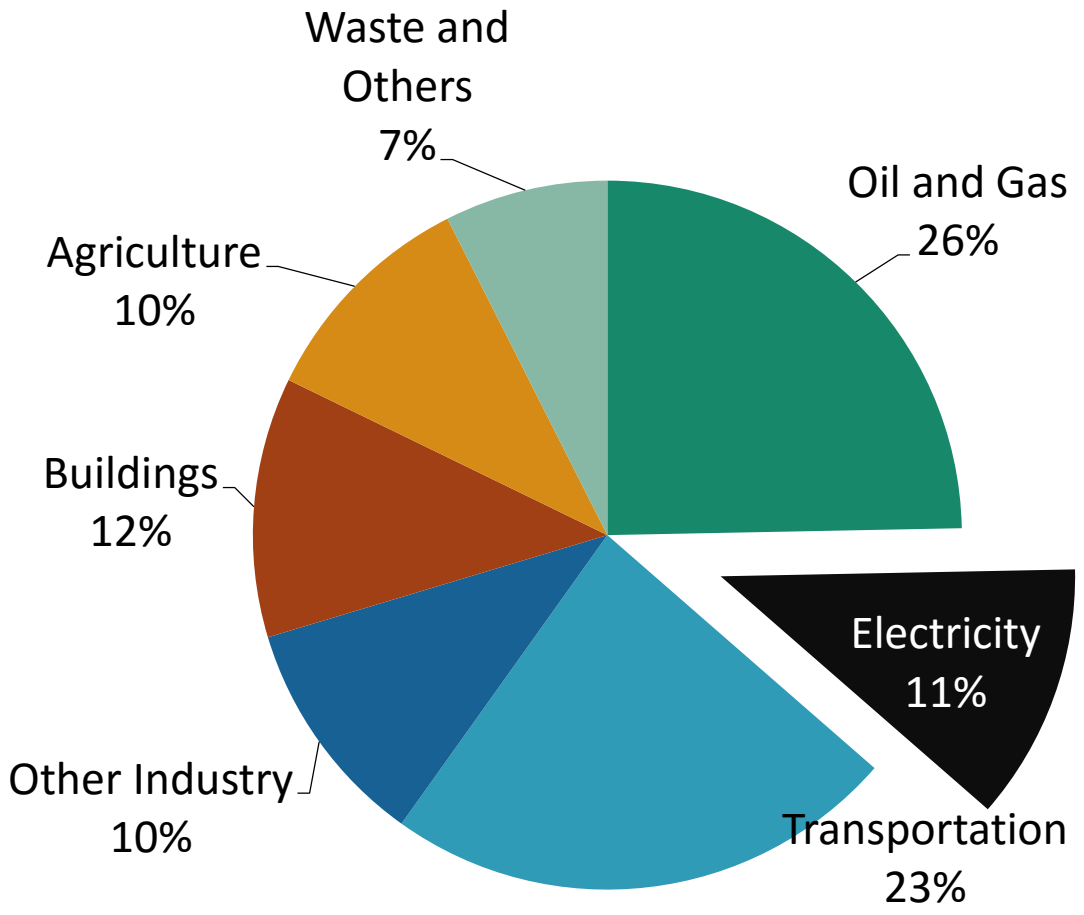


GHG REDUCTION (OUR FAIR SHARE)



Canadian GHG emissions – By economic sector

85 Million Tonnes CO2e arise from **electricity generation** annually

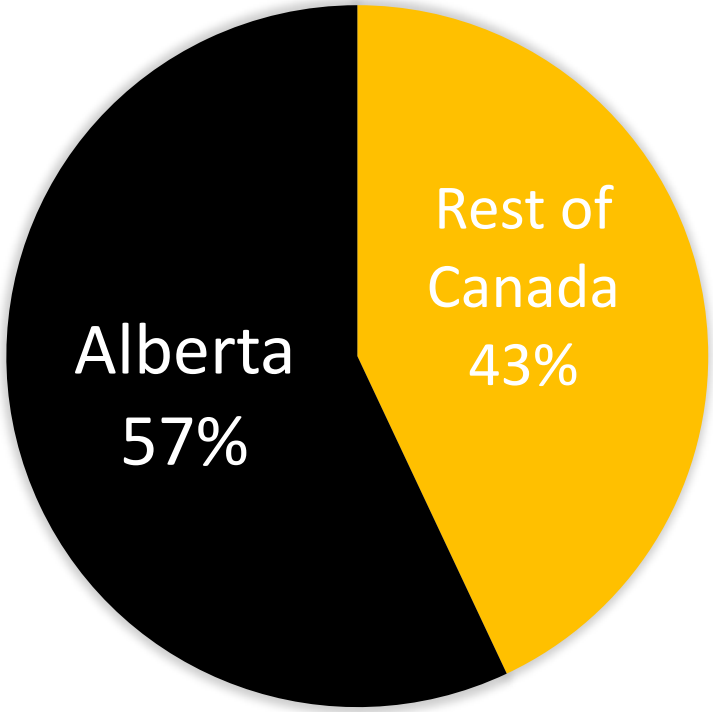


Source: Environment Canada and Climate Change (2016) National Inventory Report 1990–2014: Greenhouse Gas Sources and Sinks in Canada.

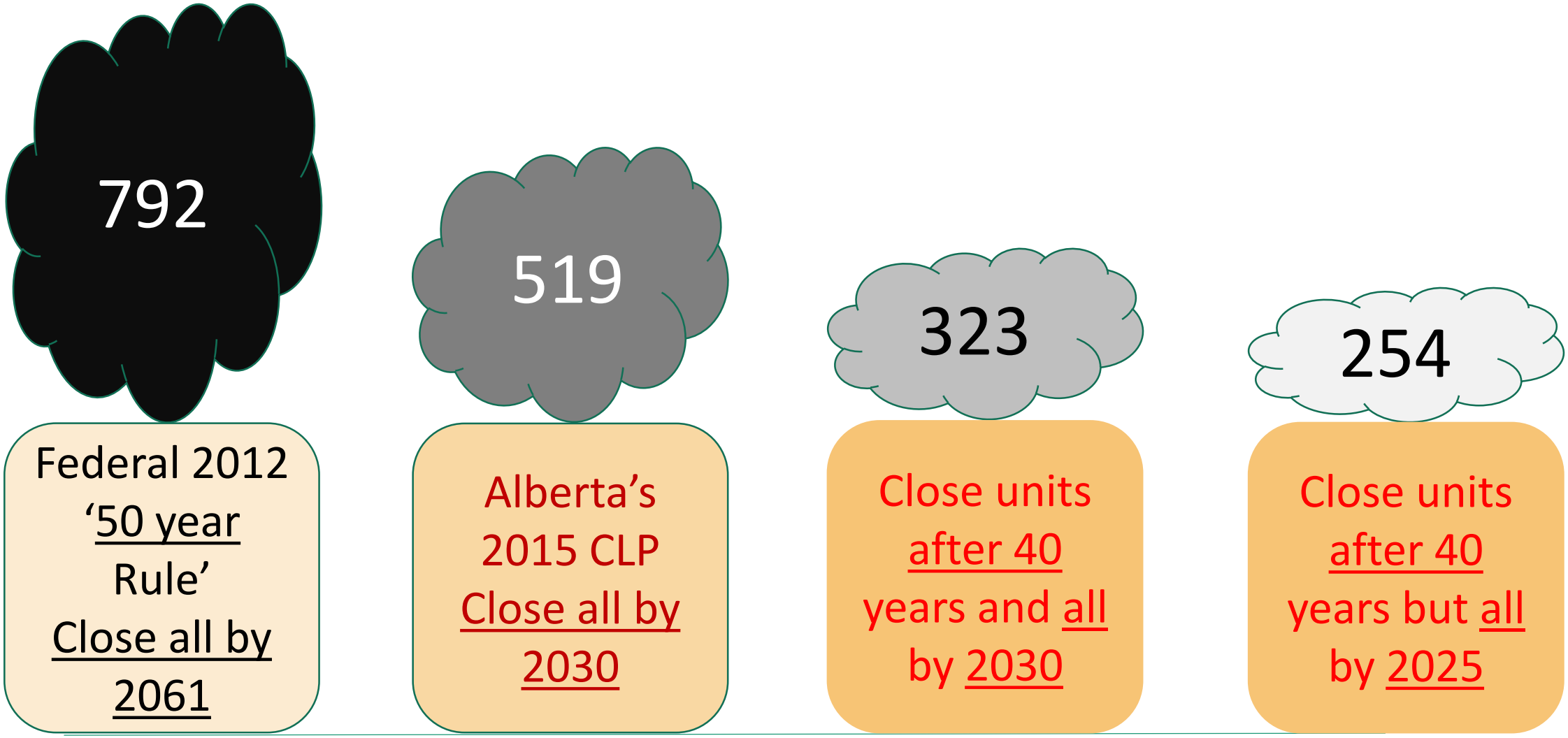
Alberta emits

57% of Canada's GHG emissions from electricity generation

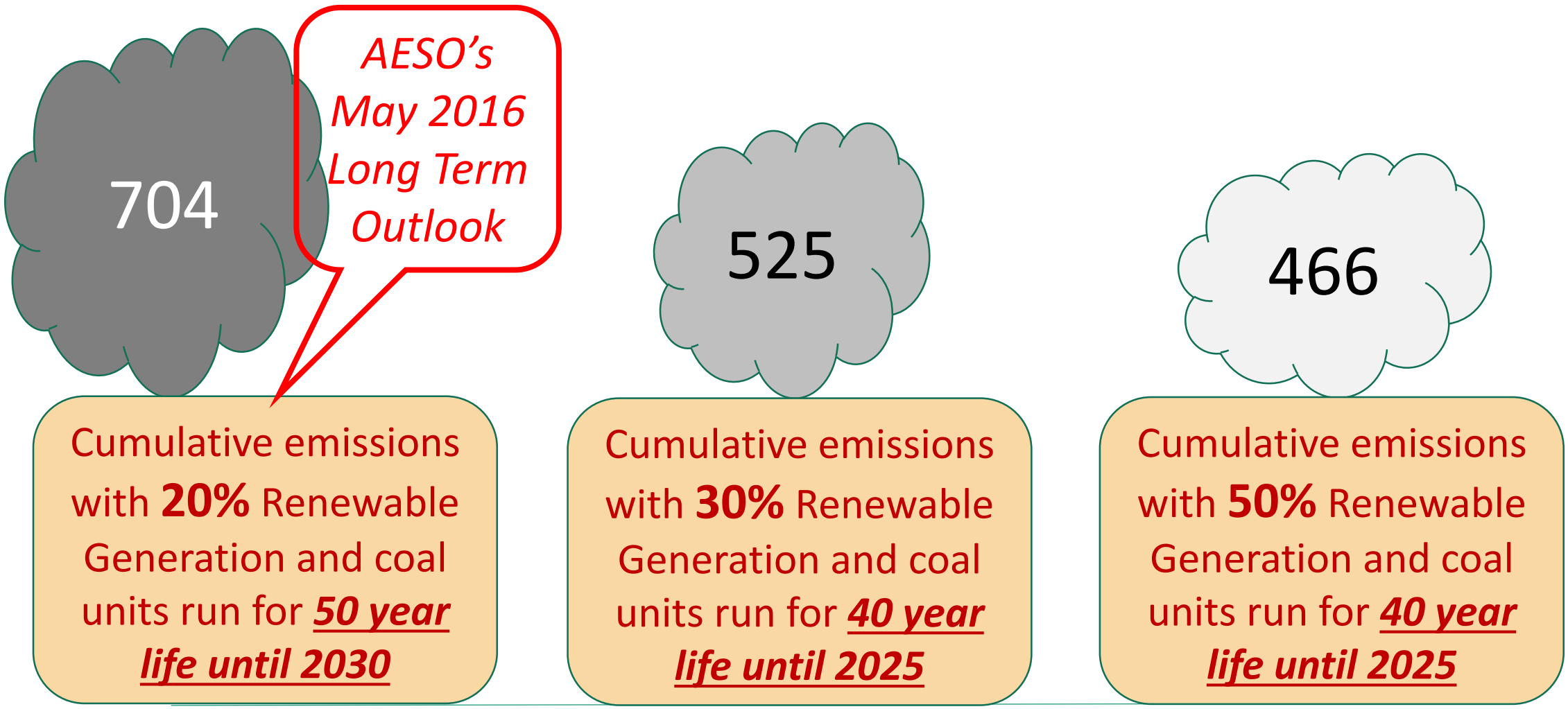
2014 CONTRIBUTION OF GHG EMISSIONS FROM ELECTRICITY GENERATION



Alberta's GHG emissions ***from coal*** (2016 to 2030) assuming various coal unit closure scenarios (Million Tonnes CO2e)



Alberta's 15 year (2016 to 2030) Cumulative Electricity GHG emissions assuming various renewable generation scenarios (MT CO2e)



How can we reduce Emissions from electricity generation in Alberta?

- Phase out coal by 2025 (in one decade)
- Close coal units after 40 years of operation
- Reduce electricity demand by 15% by 2030
- Increase renewable generation

  from current 10%

  to 20% by 2020
  to 33% by 2025
  to 50% by 2030