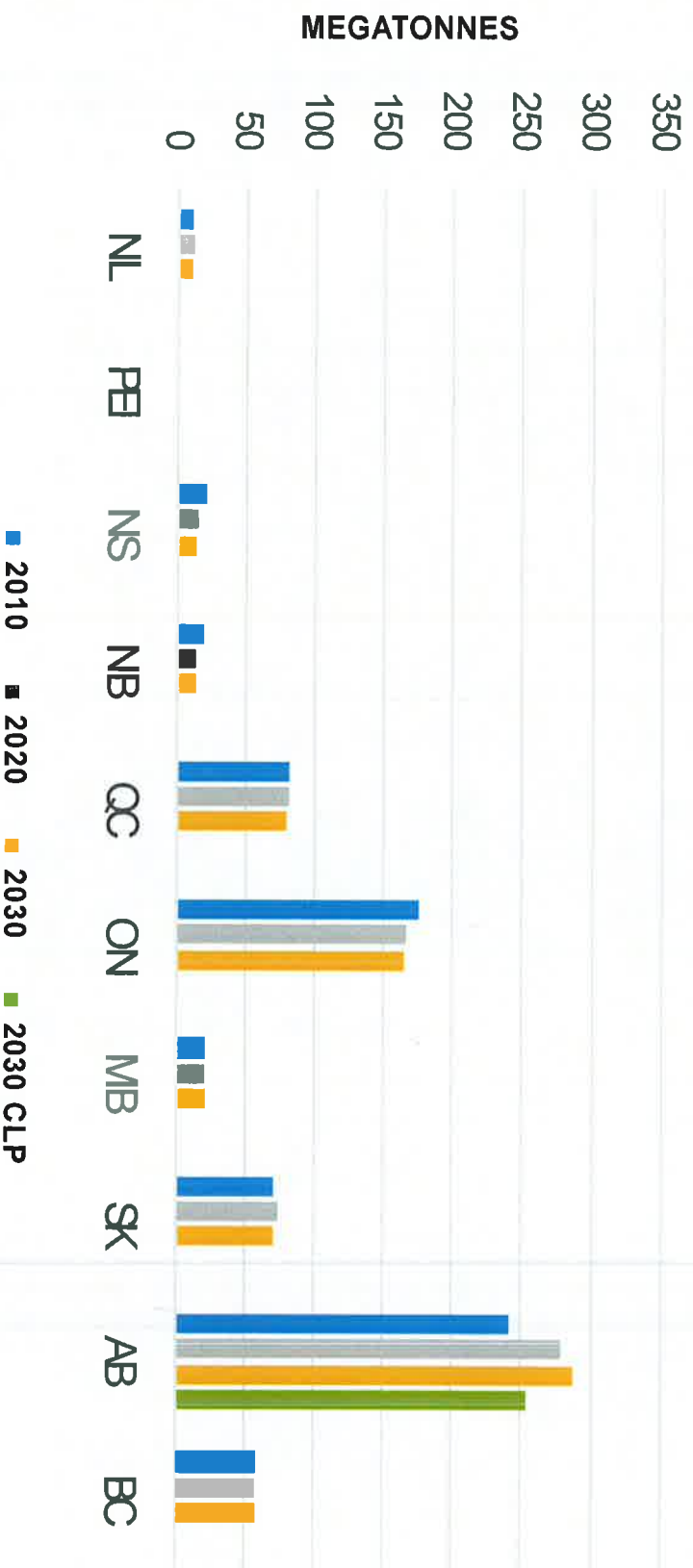


Climate Leadership in Alberta



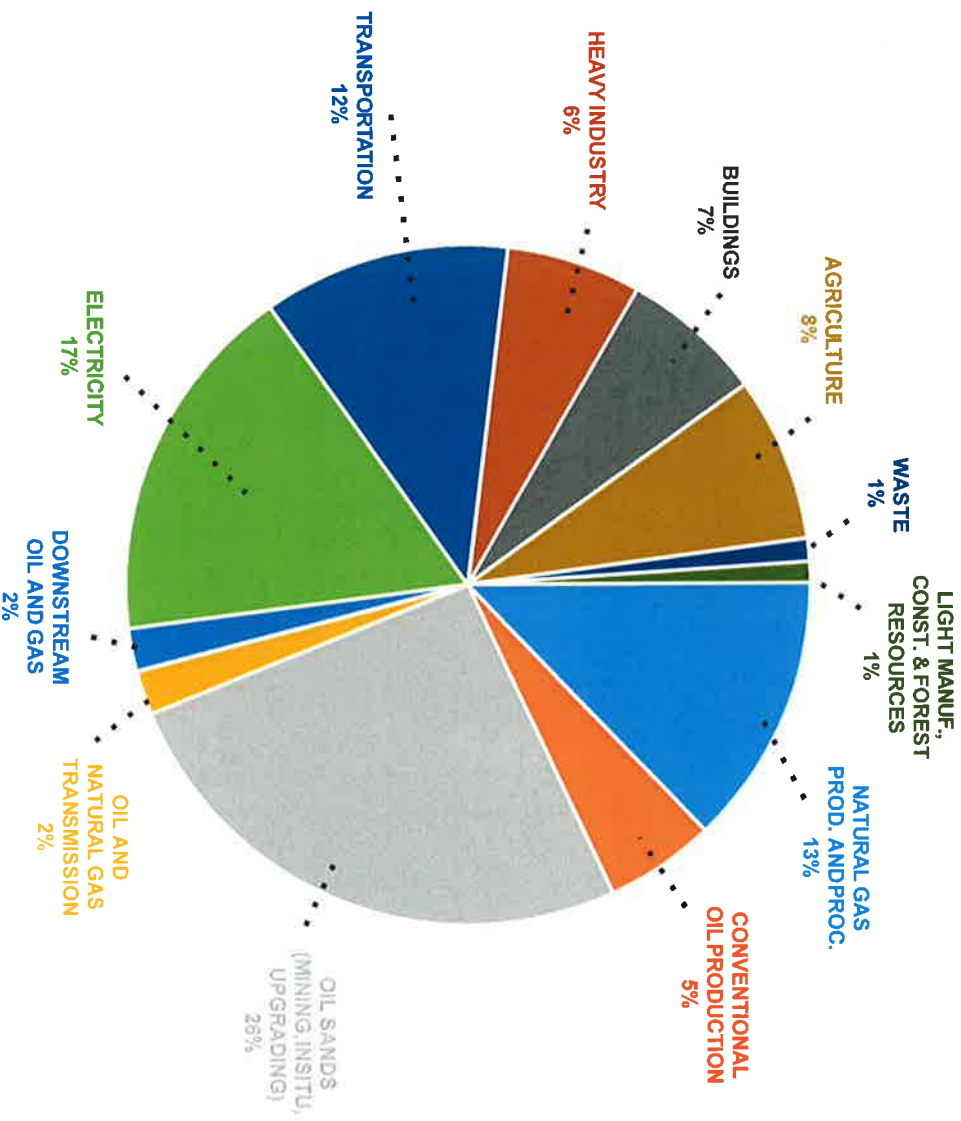
Bob Savage, Assistant Deputy Minister
Alberta Climate Change Office

Emissions Context before and after Alberta's Climate Leadership Plan



Canada's Third Biennial Report On Climate Change (2017) – note difference in projection from Alberta's Climate Leadership Plan

Context — Alberta's Emissions Profile



- 263 Mt CO₂e – total provincial GHG emissions in 2016
- 14 percent or 32 Mt – emissions growth since 2005
- 37 percent – Alberta's percentage of Canada's emissions in 2016

JW/1

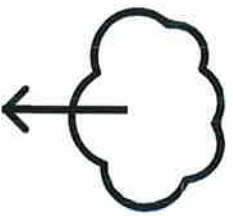
we are not the highest per capita, saskatchewan is a little bit higher
Justin Wheeler, 28/01/2019

Climate Leadership: Not New to Alberta

- **2003** Climate Change and Emissions Management Act passed
- **2004** Specified Gas Reporting Regulation
- **2007** Specified Gas Emitters Regulation
- **2008** Revised provincial Climate Change Strategy
- **2015** Amended Specified Gas Emitters Regulation
- **2015** Climate Leadership Plan
- **2017** Carbon Levy
- **2018** Carbon Competitiveness Incentive Regulation

The Climate Leadership Plan

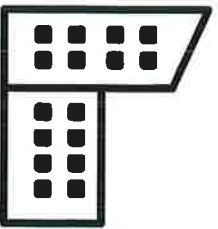
Four pillars of progress



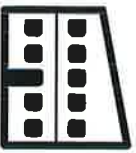
Methane emission reduction target of **45%** by **2025** for the oil and gas industry

Legislated **100 megatonne** limit on **Oil Sands Emissions**

Economy-wide carbon pricing



Industrial price that covers **13 industrial sectors** (and was created in one year)



A consumer-oriented price on carbon that reached **\$30 per tonne** in **2018**

Created Energy Efficiency Alberta

\$385 million in funding that created programs for solar installations, consumer product rebates and industrial efficiency

The Climate Leadership Plan

Four pillars of progress



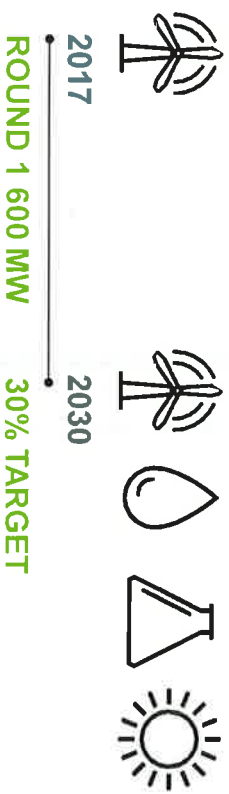
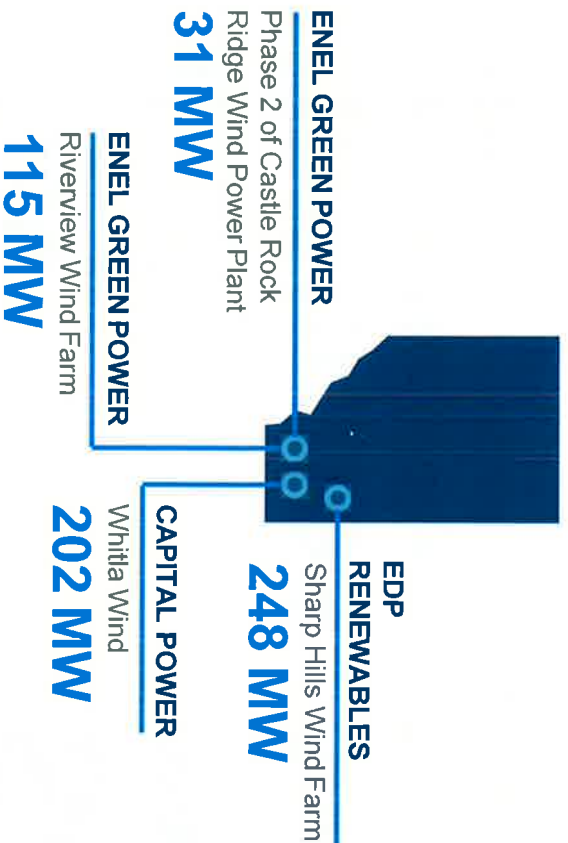
Eliminates
coal-fired electricity
by 2030

Sets 30%
renewables target by 2030

Already awarded
600 MW
at a cost of just
\$37
per
megawatt
hour

Procuring up to
700 MW more
through two new rounds of
the Renewable Electricity
Program, including one that
involves Indigenous partners

Renewable Electricity Program



\$30.90 **\$43.30** = **\$37/MWh**

range of winning bid prices *weighted average price*

Set new bar for competitive renewable pricing in Canada	Local and international developers eager to invest in Alberta	12 bidders representing 26 projects and 3,600 MW of capacity	No new transmission costs for Albertans	Aligns with the electricity market transition

A New Regulatory Approach

How the CCIR strikes the perfect balance between economy and environment

Carbon Competitiveness

Transitions facilities for improved competitiveness in a carbon constrained world

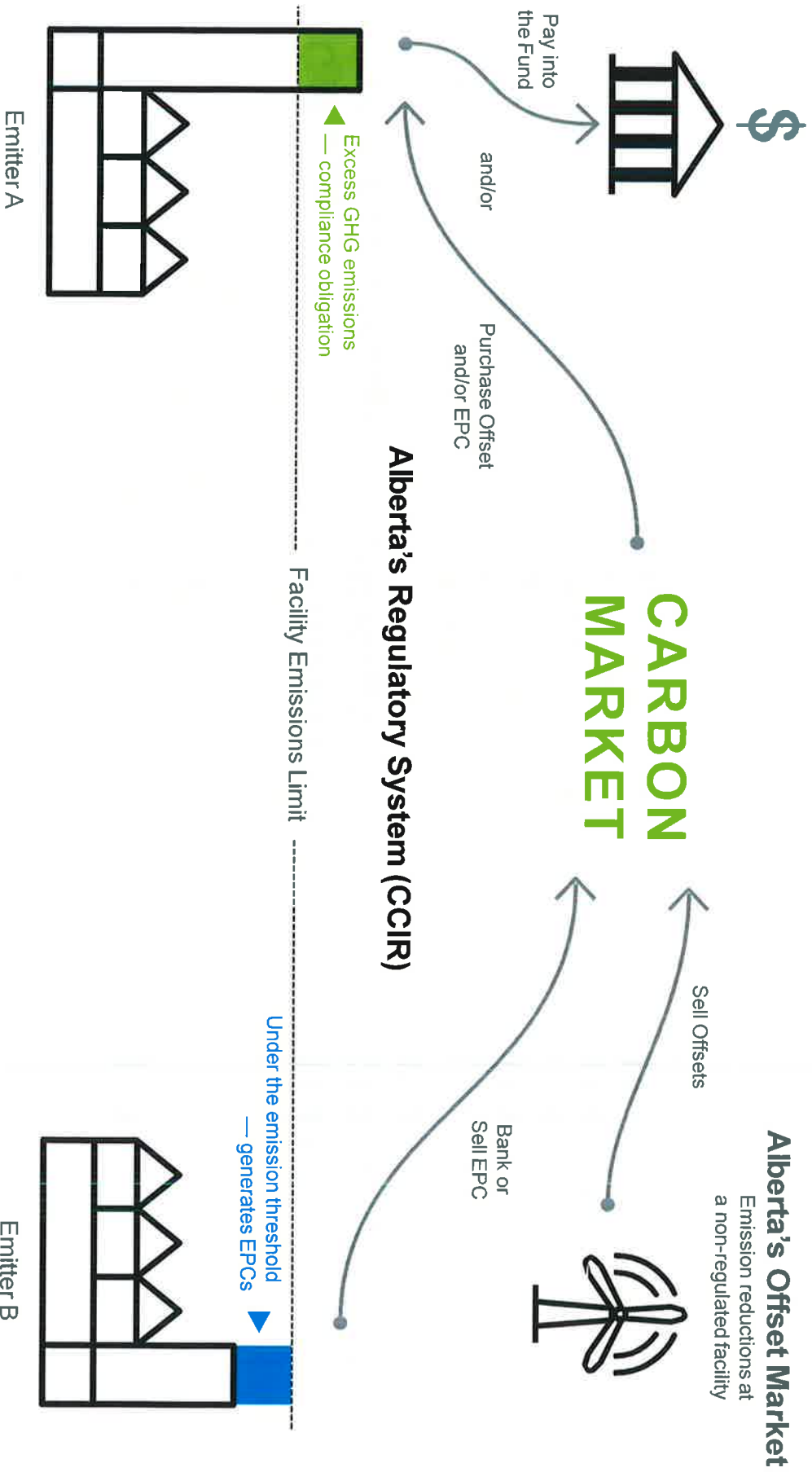
Reducing Carbon Leakage

Provides protection for those facilities that are emissions intensive and trade exposed – therefore most at risk of carbon leakage

Managing Competitiveness Risks

Facility level cost containment provisions will provide relief to facilities at threat of closure due to the policy

Alberta's Carbon Market



Major investments in green energy and clean technology



\$1.4 BILLION over the next several years

- \$440 million to Oil Sands Innovation Fund
- \$400 million to Green Loan guarantees
- \$240 million to Industrial Energy Efficiency
- \$225 million to support emissions-reducing technologies

Major investments in transit and social equity (2017-18)



- \$512 million to carbon levy rebates + small business tax reduction
 - \$209 million to public transit/LRT
 - \$137 million to Energy Efficiency Alberta
 - \$133 million to support electricity transition programming
 - \$35 million to Indigenous communities
-

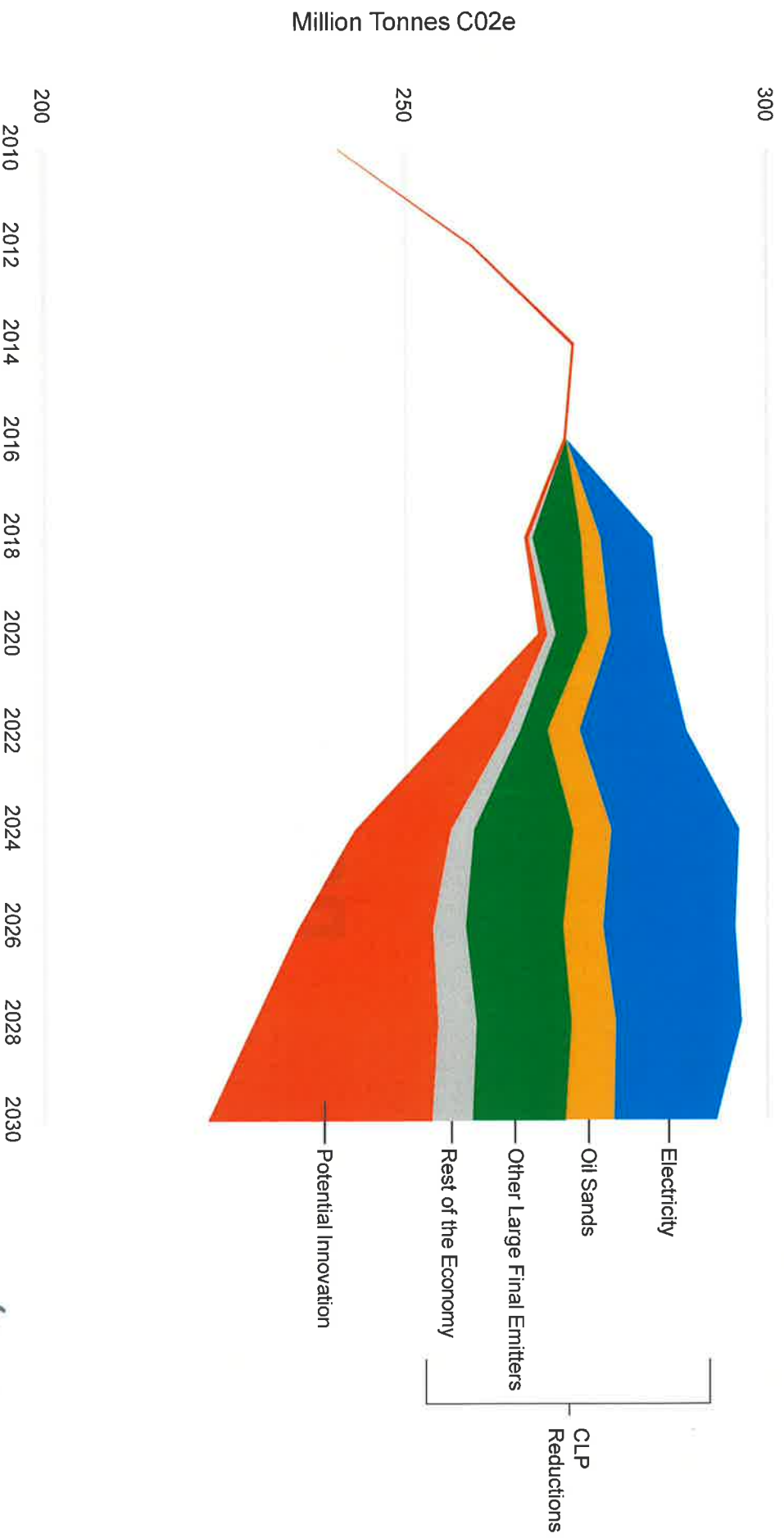
Emissions Reduction Alberta

- Emissions Reduction Alberta (ERA) works to accelerate development of innovative technologies that reduce greenhouse gas emissions.
- ERA's \$467 million portfolio is invested in 145 projects with a total value of more than \$3.5 billion.
- ERA investments will lead to 12,000 person-year jobs in Alberta and 18,000 Canada-wide by 2023.

Commercializing Carbon

- ERA Grand Challenge: CAD\$35 million in funding for the most innovative technologies that will convert CO₂ emissions into new carbon-based products and markets.
- COSIA (Canada's Oil Sands Innovation Alliance) is funding a US\$20M NRG COSIA Carbon XPRIZE.
- Five of the ten finalists are hosted at the Alberta Carbon Conversion Technology Centre (ACCTC) in Calgary, a specially designed facility for innovators around the world to test and advance carbon conversion technologies.

Alberta's GHG Emissions Before and After CLP with Reductions by Sector



Thank you

