

MANDATE

To identify and accelerate innovative solutions that secure Alberta's success in a lower carbon economy.

VISION

Alberta is recognized as an innovation and technology leader in a lower carbon world.

CORE VALUES

- Leadership
- Innovation
- Collaboration
- Transparency
- Integrity

STRATEGIC PRIORITIES

1 ACCELERATE TECHNOLOGY

Seek out and fund the demonstration and deployment of impactful technology solutions.

Deliverables:

- Invest in projects aligned with ERA's Technology Roadmap, market needs, and government priorities.
- Select innovative technology through a rigorous process.
- Identify the right projects through increased technology scouting.
- Engage with stakeholders and participate in events that help ERA identify and accelerate GHG-reducing solutions.

2 DRIVE COMMERCIALIZATION

Convene the "complete solutions" needed to turn ideas into products and products into companies.

Deliverables:

- Help broker opportunities for policies and regulation to stimulate adoption of clean technology solutions.
- Act as a convener of resources that helps address specific barriers to commercialization.
- Monitor, evaluate and share learnings from funded projects.

3 MAXIMIZE IMPACT

Invest public funds wisely and responsibly through investment leverage and excellence in operations.

Deliverables:

- Maintain existing and establish new partnerships that maximize and leverage shared investment capacity and expertise.
- Incorporate learning to improve ERA's intake, evaluation and funding processes.
- Align operating activities and budget with Alberta Government priorities, policies and procedures.

ERA QUICK FACTS¹



TOTAL PROJECTS:
128



TOTAL FUNDS COMMITTED:
\$375M



TOTAL PROJECT VALUE:
>\$2.6B



CUMULATIVE GHG REDUCTIONS BY 2030:
28Mt CO₂e

CUMULATIVE GHG REDUCTIONS BY 2020:

>9Mt CO₂e



GDP IMPACT IN ALBERTA BY 2023:
\$2B



JOB CREATION IN ALBERTA BY 2023:
12,000 PERSON-YEARS²

ALBERTA GOVERNMENT CLIMATE LEADERSHIP PLAN TARGETS

- Cap oil sands emissions to 100 Mt/year
- Reduce methane emissions by 45% by 2025
- Zero emissions from coal-generated electricity by 2030
- 30% of electricity from renewable sources by 2030

¹Figures accurate as of October 2018. ²A person-year is equal to one-year of employment for one individual.

ERA TECHNOLOGY ROADMAP

The Technology Roadmap identifies four focus areas for technologies in the ERA portfolio.

	AREAS OF FOCUS	POTENTIAL INITIATIVES	
<p>Transformative technologies and innovation to reduce the GHG footprint of the fossil fuel supply chain and reduce methane emissions while reducing production costs.</p>	<p>Reduced GHG Footprint of Fossil Fuel Supply</p>	<ul style="list-style-type: none"> • Advanced recovery • Fugitive emissions • Partial upgrading 	<ul style="list-style-type: none"> • Electricity oil sands integration • Beyond combustion • Carbon capture utilization and storage
<p>Technology and innovation to reduce the GHG footprint of Alberta's electricity supply mix, add more non-emitting supply, and enable the low-emissions electricity system of the future.</p>	<p>Low Emitting Electricity Supply</p>	<ul style="list-style-type: none"> • Co-generation • Advanced grid management technology • Geothermal 	<ul style="list-style-type: none"> • Non-conventional wind, solar, hydropower • Storage • Low-carbon electrification
<p>Opportunities for biological resource optimization, including biomaterials, enhanced carbon retention, and products to support energy system transformation.</p>	<p>Biological Resource Optimization</p>	<ul style="list-style-type: none"> • Biofuels • Bioproducts - materials • Bioenergy 	<ul style="list-style-type: none"> • Carbon retention • N₂O & CH₄ emissions • Waste management
<p>Technologies to deliver GHG reductions through energy efficiency, industrial process innovation, and low-GHG chemicals and materials such as CO₂-based products.</p>	<p>Industrial Process Efficiency</p>	<ul style="list-style-type: none"> • Industrial efficiency • Process improvements 	<ul style="list-style-type: none"> • Low grade heat utilization • Products of CO₂

Some initiatives could fall under multiple areas of focus.