



INDUSTRIAL TRANSFORMATION CHALLENGE 2025

EMISSIONS
REDUCTION
ALBERTA



Alberta

Speaker introductions

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Housekeeping

- Microphones are muted
- If you called by telephone, select “telephone” and enter your audio PIN
- Type questions into the “Questions” section of the control panel
- We answer as many questions as possible after the presentation
- If you have technical difficulty during the webinar (interface or audio) contact Kevin at kduncan@eralberta.ca
- Webinar is being recorded and will be posted on our website

Agenda

- About Emissions Reduction Alberta (ERA)
- Industrial Transformation Challenge 2025 Overview
 - New this year
 - Scope and eligibility
 - Submission and evaluation process
 - Timelines
- Advice for preparing a successful submission
- Q&A

ERA-AT-A-GLANCE

VISION

Alberta has a diversified economy with competitive industries that deliver sustainable environmental outcomes and attract investment

OPERATING MODEL

Provide grants to novel, first in kind technology demonstrations & energy efficiency incentives for Alberta's businesses

MISSION

Reduce emissions & grow Alberta's economy by accelerating the development & adoption of innovative technology solutions

We support a host of technologies to achieve broad environmental and competitiveness improvements:

- Decarbonization
- Energy efficiency
- Recycling
- Water treatment
- Soil remediation



Lean, low-cost administration – providing good value for Albertans

TECHNOLOGY INNOVATION

\$970M

TOTAL INVESTMENT



306

PROJECTS

34.3

MILLION TONNES
OF CUMULATIVE
EMISSIONS
REDUCTION

BY 2030

95

MILLION TONNES
OF CUMULATIVE
EMISSIONS
REDUCTION

BY 2050

\$7.32 BILLION

TOTAL
PROJECT
VALUE



6.5:1

LEVERAGED
FUNDING FROM
PUBLIC AND
PRIVATE INVESTORS

ACCELERATING UPTAKE OF COMMERCIAL-READY TECHNOLOGIES THROUGH
THE ENERGY SAVINGS FOR BUSINESS PROGRAM

\$47M

INVESTED



2138

PROJECTS SUPPORTED
THROUGH THE ENERGY
SAVINGS FOR
BUSINESS PORTFOLIO

3.7

MT

OF LIFETIME
EMISSIONS
REDUCED



ALL PROJECTS



46,585

PERSON-YEAR
JOBS IN ALBERTA
BY 2027

\$6.99 BILLION

GDP IMPACT **TO ALBERTA**
BY 2027



63,409

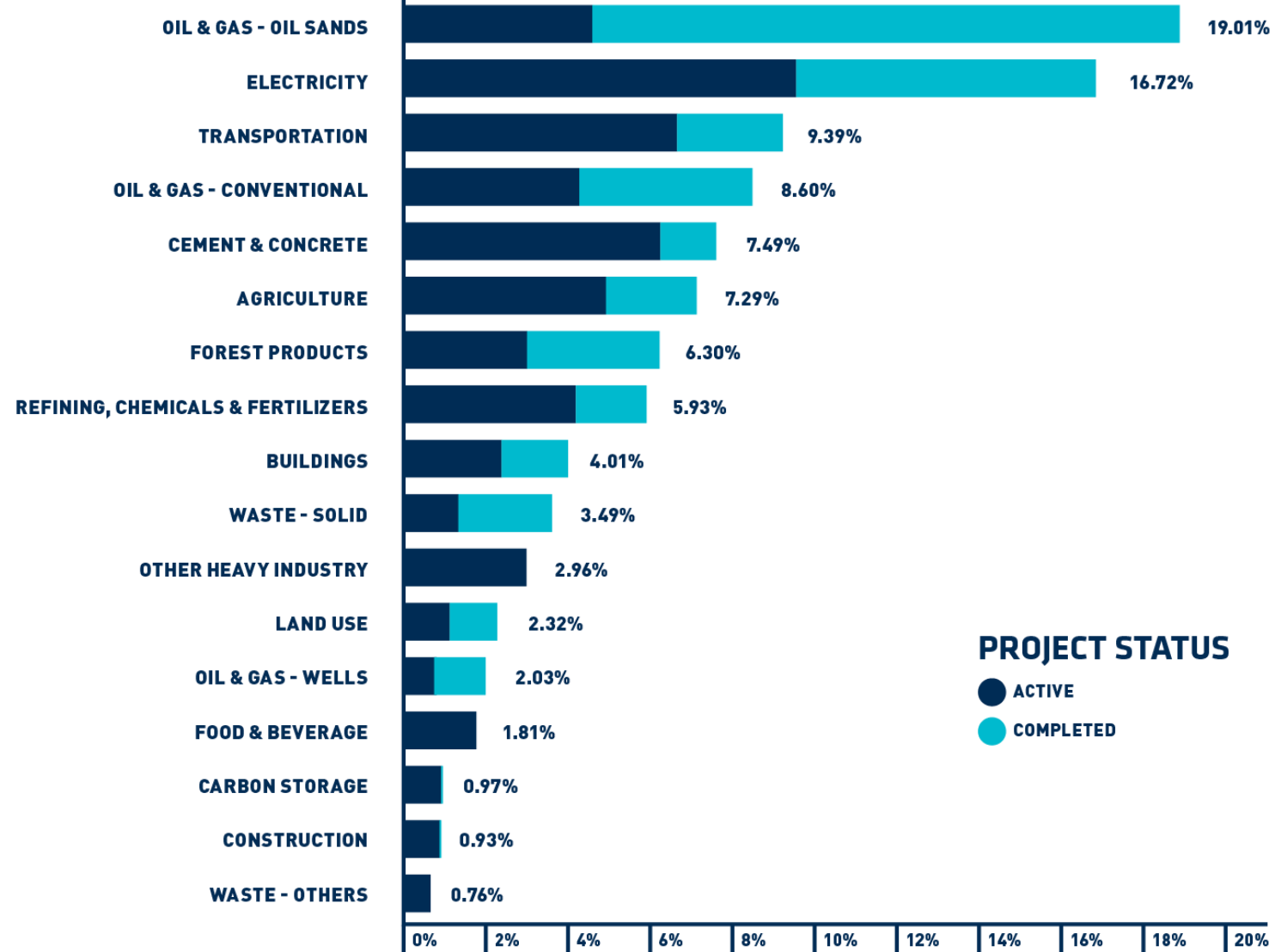
PERSON-YEAR
JOBS IN CANADA
BY 2027

\$9.26 BILLION

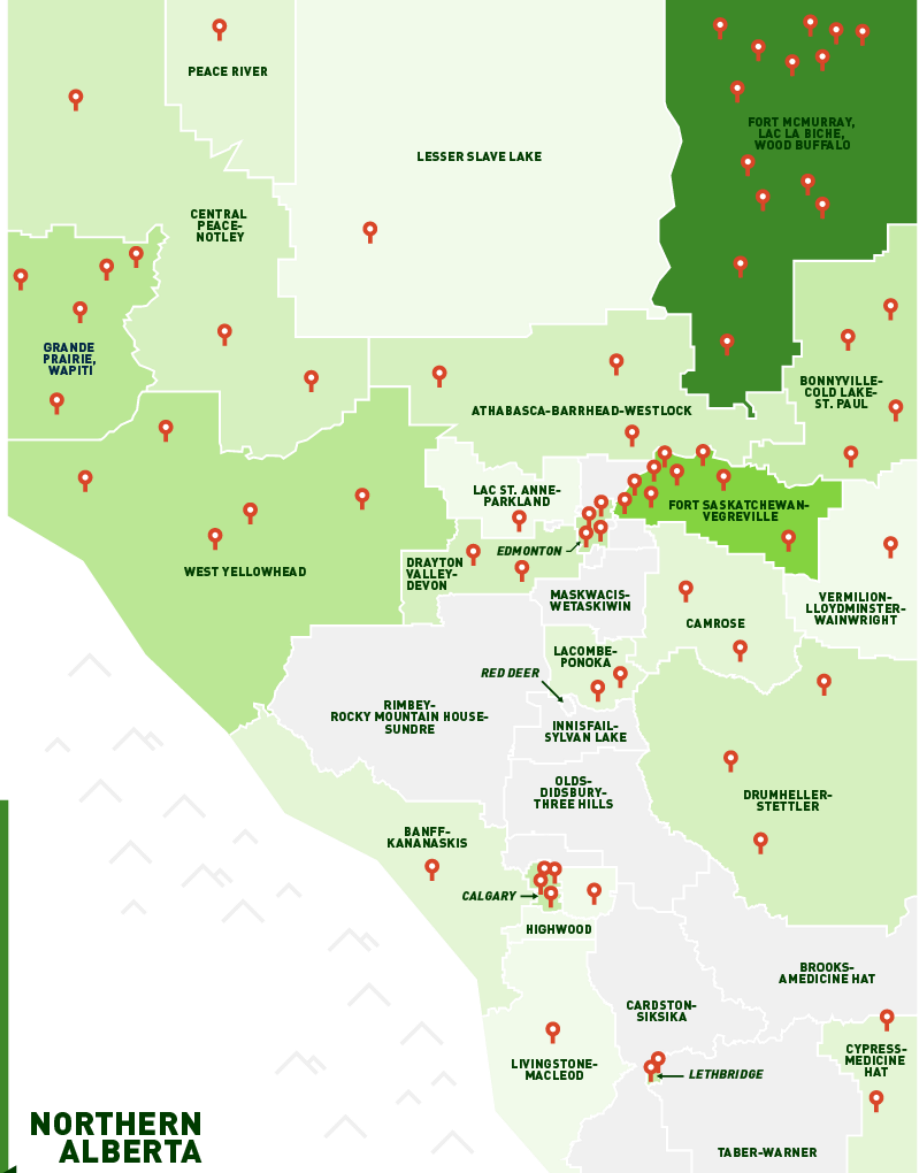
GDP IMPACT **TO CANADA**
BY 2027



BALANCED PORTFOLIO

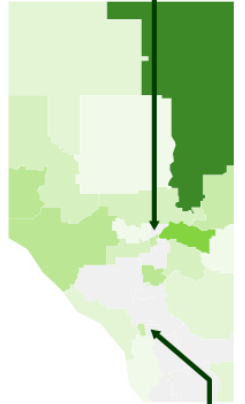


MAP OF TIER-REGULATED FACILITIES



NORTHERN ALBERTA

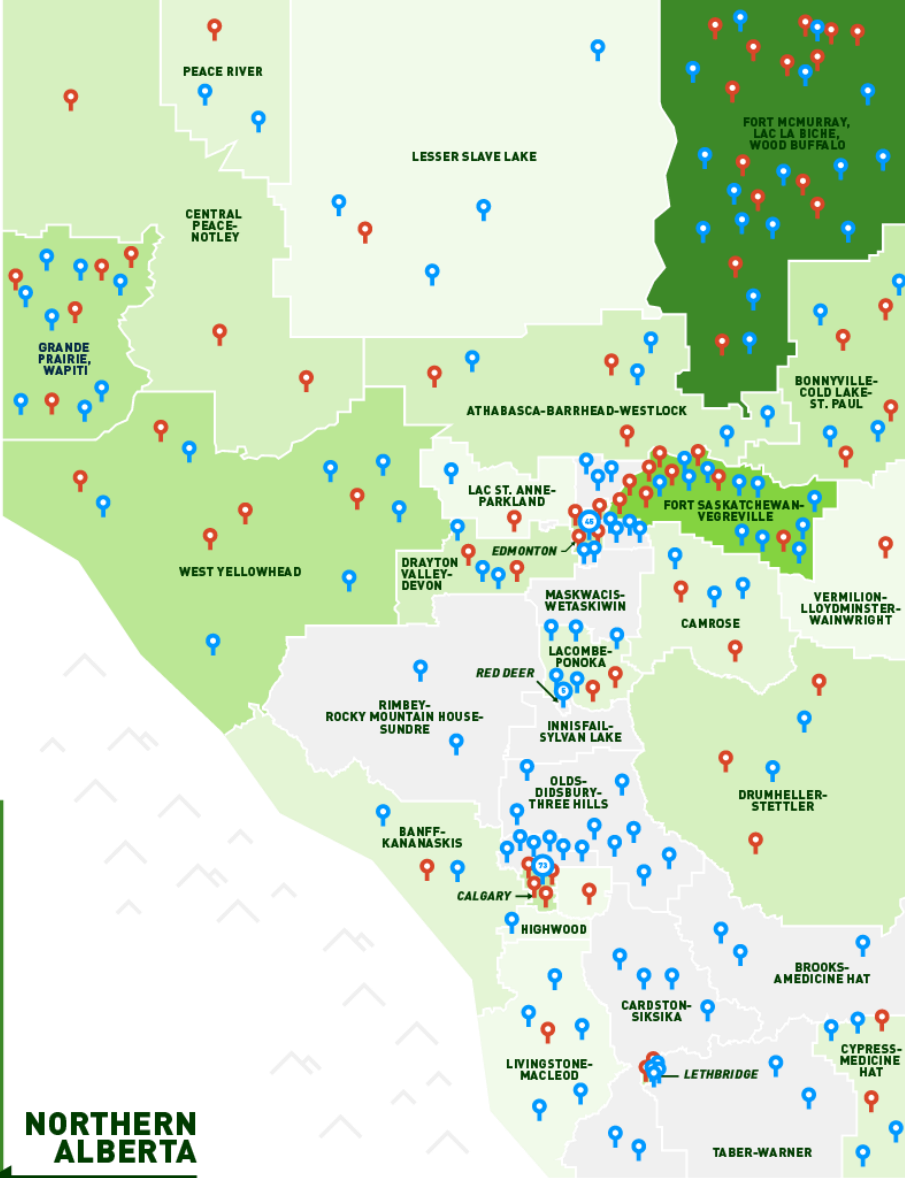
EDMONTON AND SURROUNDING AREA



CALGARY AND SURROUNDING AREA

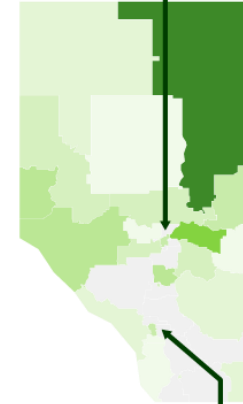
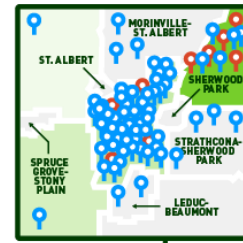


MAP OF ERA FUNDED PROJECTS



NORTHERN ALBERTA

EDMONTON AND SURROUNDING AREA



CALGARY AND SURROUNDING AREA



SITE DENSITY LEGEND



**FIFTH
EDITION**

PUBLISHED
OCTOBER 2024

EMISSIONS
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ALBERTA

**TECHNOLOGY
ROADMAP**

Alberta

Technology Focus Areas

- Carbon Management
- Improved Efficiency
- Emerging Energy
- Industrial Decarbonization
- Circular Economy

EMISSIONS
REDUCTION
ALBERTA



RESHAPING ENERGY SYSTEMS



INDUSTRIAL TRANSFORMATION CHALLENGE



ACCELERATING HYDROGEN CHALLENGE

TRUSTED PARTNERS



ERA is a key delivery partner of the Government of Alberta's TIER fund.



Natural Resources Canada
Ressources naturelles Canada





INDUSTRIAL TRANSFORMATION CHALLENGE 2025

EMISSIONS
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ALBERTA



Alberta 

Why Industrial Transformation?

- Over 60% of Alberta's emissions come from heavy industry and agriculture
- Increase global economic competitiveness
- Two successful Industrial Transformation Challenges in 2022 and 2024
- GHG-adjacent outcomes with impacts on water, land, food, air and security
- Demand for non-dilutive funding across all industries
- Supporting solutions with cross-cutting potential across Alberta's sectors

Funding overview

- Up to \$65 million in potential funding
- Maximum \$15 million contribution per project
 - ERA anticipates most projects will not receive more than \$10 million
 - Applicants must justify funding requested
- Minimum funding contribution of \$500,000
- Funding must be matched at least 1:1
- Leverage with funding partners where possible

See ***Eligible Expense and Cost Instructions*** for details regarding eligibility of costs

Eligible applicants



**LARGE INDUSTRIAL
EMITTERS**



**POST SECONDARY
INSTITUTIONS**



**RESEARCH
ORGANIZATIONS**



**SMALL AND MEDIUM
ENTERPRISES**



MUNICIPALITIES

Call Scope

Industrial Transformation

- Focused on Alberta's **natural resource** and **heavy industrial** sectors:
 - Oil & gas
 - Agriculture
 - Forestry
 - Heavy industry (pulp & paper, cement, petrochemicals, etc.)
 - Electricity
 - Manufacturing
 - And other similar energy-intensive, trade-exposed sectors
- Looking for **novel solutions** (technologies, practices, etc.)
- Must be aimed at **step-change improvements** to the **environmental footprint** and **economic competitiveness** of relevant sectors

Technology Examples

- Agricultural and forestry innovation
- Fuel switching and low-carbon industrial heat
- Novel industrial processes and products
- Major industrial facility upgrades
- Energy systems and grid innovation
- Novel fuel production
- Environmental remediation and sustainability

Novelty and Technology Advancement

- ERA funding is aimed at **advancing technology** and is **not** intended to support “business as usual” solutions or to address **only** a financial barrier to adoption
- **Novelty** of the proposed solution is a key criterion that can differentiate projects with similar outcomes potential
- ERA’s definition of novelty encompasses:
 - How the project goes beyond “business as usual”
 - Whether the project can be considered first of a kind (first ever, first in Alberta, first in a given sector...)
 - The strategic value of the project
 - The degree of technology risk associated with the proposed project

Out-of-scope technologies and projects

- GHG detection, quantification, measuring, and monitoring
- Incremental (or “business as usual”) efficiency improvements that do not go beyond legislated requirements
- Emissions/energy inventory or estimation software
- First-generation or second-generation biofuels that use well-established technologies (e.g., pyrolysis, gasification, etc.)
- Standalone pre-construction studies (e.g., pre-FEED & FEED)

Technology stage of development

- **Field Test / Pilot:**
 - Technology or innovation is ready to be field-tested in an operational environment.
 - Scale-up of prototypes to representative pilot scale and subsequent in-field testing of pilot units.
- **Commercial Demonstration:**
 - Technology or innovation is approaching the final commercial product and representative systems have been built.
 - Demonstration of near- or fully-commercial scale systems in an operational environment.
- **First-of-Kind Commercial Implementation:**
 - Technology is ready for first-of-kind commercial deployment.
 - Design, construction, and operation of the technology in its final commercial form, with the intent to operate the technology for its full commercial life.

Project structure, term, and initiation

- ERA funds “Projects” with clear objectives, milestones, timelines, deliverables and a budget
- Maximum length is three years, plus one year of operational time where applicable
- Projects must commence within 120 days of approval (potential for delayed start date of up to 12 months)
- Technologies must be demonstrated or deployed in Alberta



Timelines

Action	By whom	Timing
Expression of Interest Submission Deadline	Applicants	June 12, 2025
Expression of Interest Shortlist Notification	ERA	Late July 2025
Full Project Proposal Submission Deadline	Applicants	September 2025
Full Project Proposal Oral Presentation	Applicants	October 2025
Funding Decision Notification	ERA	December 2025

Preparing a successful submission

- Start now: <http://eralberta.ca/apply-for-funding/>
- Register on Grant Manager: <https://erims.outcome-plus.com/>
- Read the guidelines documents
 - Call for Expressions of Interest
 - Eligible Expense and Cost Instructions
- Review the evaluation criteria:
 - Innovation opportunity
 - Implementation plan
 - GHG benefits
 - Economic and environmental benefits
 - Market and value proposition

Additional tips

- Use clear language and address each point in template
- Provide complete responses
- Don't wait until the last day to submit!
- Increase your visibility through our Trusted Partners
- Content reminders:
 - Clearly demonstrate technology merit and advancement
 - Identify your project partners and site
 - Emphasize broader benefits and line of sight to commercialization

Questions?

Wrap up and next steps

- Unanswered questions?
 1. Review the guidelines and supporting materials online: www.eralberta.ca/funding-technology/industrial-transformation-challenge-2025/
 2. Email remaining questions to applications@eralberta.ca
- Begin your submission today

Thank you!