Figures accurate as of June 25, 2025
Emissions Reduction Alberta (ERA) reports on its activities on a quarterly basis. Figures are updated following each ERA Board meeting. For detailed information on projects and funding opportunities visit *ERAlberta.ca*.

ALBERTA'S HARBOUR ENVIRONMENTAL EMBRACES ENERGY MANAGEMENT

Harbour Environmental knows a thing or two about innovation. The Alberta-based company is one of the first in Canada to separate hydro-vac slurry—a mixture of gravel, sand, water, and other minerals—into reusable byproducts.

Hydro-vac excavation blasts high-pressure water to remove soil for subsurface construction, creating a slurry of various materials. Harbour Environmental's technology sorts and recycles these materials into water, backfill for industrial sites, or gravel for dirt bike tracks.

As an industry leader, Harbour is always looking for ways to improve efficiency. This year, they signed up for ERA's Strategic Energy Management for Industry (SEMI) program.

"Our Alberta facilities have come a long way in the last eight years, but we saw SEMI as an opportunity to access outside expertise," said Sean Yaehne, VP of Business Strategy Development. "We're still a small company, so funding is necessary for us to engage with experts and upgrade our equipment."

The organization has conducted an energy audit and is working through the program's Facility Readiness Assessment. At their Calgary plant, their goal is to reduce energy usage and natural gas consumption, saving thousands of dollars from their boiler heating system.

In their older Edmonton facility, Harbour is interested in automating their processes to optimize efficiency. SEMI's energy audit and capital retrofit funding offers an opportunity to identify and upgrade low-performing equipment.

"We'd like to reduce energy consumption in our most intensive operations. The SEMI team has been really understanding of that. They've taken time to learn our goals and how the program can align with us," said Yaehne. "We're an environmental company. We'll take whatever actions we can to reduce our footprint."

ERA's SEMI program provides industrial and manufacturing facilities with knowledge, expertise, and training in energy management. SEMI helps organizations increase profitability by reducing energy costs, growing skills and capacity building, and helping cover the cost of capital retrofits.

This $50 million program, with funding provided by the Government of Alberta and Natural Resources Canada (NRCan), is helping the province's industrial and manufacturing sectors increase competitiveness, improve energy efficiency, and reduce greenhouse gas emissions.

HARBOUR ENVIRONMENTAL JOINED ERA'S SEMI PROGRAM TO OPTIMIZE ENERGY USE AND LOWER COSTS

KINITICS' ELECTRIC VALVE ACTUATOR SETS NEW STANDARD

Across North America, more than a million pneumatic devices are used at natural gas well sites and are a major source of methane emissions. Together, these devices release over 50 million tonnes of CO_2 equivalent each year, posing a significant challenge for oil and gas operations.

In Alberta's natural gas sector, Kinitics Automation is addressing this challenge by targeting emissions at the source. With $550,000 in funding from ERA through the Natural Gas Challenge, the company developed a fully electric alternative to traditional methane-venting pneumatic valve actuators.

"We responded to ERA's Natural Gas Challenge with a proposal to tackle the venting pneumatics problem that plagues Alberta's energy sector," said Dean Pick, President & CEO of Kinitics Automation. "Thanks to ERA's financial support, we were able to bring our electric spring-loaded valve actuator from concept to field-validated commercial product."

Kinitics' KVA38 actuator offers a low-maintenance, electrically powered alternative that delivers high valve positional accuracy and connects easily to either AC or DC power, making them ideal for remote sites with limited infrastructure. Unlike alternatives, it safely closes valves during a power loss, improving process control at well sites.

As part of the ERA funded project, field trials were conducted at three natural gas production facilities, where six commercial units were deployed to assess their real-world performance. In-house testing and independent validation at the NGIF Emissions Testing Centre confirmed the actuator's durability, responsiveness, and potential to reduce emissions.

"The actuator is a purely electric solution," Pick said. "We are taking something that vents methane into the atmosphere and completely eliminating it. We are going from methane release to a zero-emission solution."

Kinitics worked closely with industry partners throughout the project to integrate the actuator into existing process control systems. With the technology now fully commercialized, the company has launched its rollout across Alberta, targeting both new well installations and retrofits of existing equipment.

"We look forward to deploying this solution at scale to eliminate methane emissions while reducing operator expenses through reduced downtime and maintenance," said Pick.

With early adoption underway, Kinitics is not slowing down. The company is now exploring additional applications, including gas lift systems and retrofits of downstream facilities.

DEPLOYED ACROSS ALBERTA, KINITICS' ELECTRIC ACTUATORS ARE IDEAL FOR REMOTE SITES WITH LIMITED INFRASTRUCTURE

ERA
ERALBERTA.CA
#2503, 10088 102 Avenue NW
Edmonton, AB T5J 2Z1
#3120, 715 5 Avenue SW
Calgary, AB T2P 2X6
780 498 2068
info@eralberta.ca

ERA is a legal tradename of the Climate Change and Emissions Management (CCEMC) Corporation and receives its funding from the Government of Alberta through the Technology Innovation Emissions Reduction (TIER) Fund.
Alberta

INVESTMENT IN TECHNOLOGY INNOVATION

323 Projects*

- **EMERGING ENERGY** (60 Projects)
- **CIRCULAR ECONOMY** (38 Projects)
- **IMPROVED EFFICIENCY** (87 Projects)
- **INDUSTRIAL DECARBONIZATION** (65 Projects)
- **CARBON MANAGEMENT** (70 Projects)

*In 2012, ERA provided $7 million in funding for three adaptation projects worth $7 million in consultation with Alberta Environment and Parks.

5.9:1 LEVERAGED FUNDING FROM PUBLIC AND PRIVATE INVESTORS

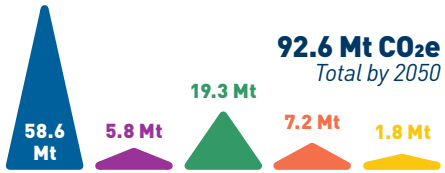
Note: To ensure accuracy of the leverage ratio, projects with high project costs are capped at $1B as these are considered an outlier.

CUMULATIVE PROJECT EMISSION REDUCTIONS

Note: GHG claims are subject to the disclaimer provided below.

33.3 Mt CO_2e
Total by 2030

92.6 Mt CO_2e
Total by 2050



Note: GHG claims are subject to the disclaimer provided below. We have estimated emission reductions for all projects with approved funding commitments and executed funding agreements and assumed the projects will continue successfully and as planned. Should circumstances change for these projects, emission reduction estimates may change materially.

ENERGY EFFICIENCY PROGRAMS

ENERGY SAVINGS FOR BUSINESS

STRATEGIC ENERGY MANAGEMENT FOR INDUSTRY

PROJECTS **2155**
INVESTED **$49.7 MILLION**
JOBS CREATED **1304**
AB GDP CONTRIBUTION **$163.8 MILLION**
EMISSIONS REDUCED **28Mt OF LIFETIME EMISSIONS**

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

**A person-year is equal to one-year of employment for one individual. Please note: economic impact is reported on a calendar year basis, not fiscal year.

FUNDING BY SECTOR