

Alberta 

EMISSIONS
REDUCTION
ALBERTA



15

15 YEARS OF INVESTING
IN CLEAN TECHNOLOGY

JUNE 1, 2023
MAY 31, 2024

**ANNUAL
REPORT**

15 YEARS

Since 2009, ERA's clean technology investments have helped innovators develop and demonstrate Alberta-based technologies that reduce emissions, lower costs, attract investment, and create jobs in Alberta. Here is just a snapshot of work done to date.

Climate Change and Emissions Management (CCEMC) Corporation is established as a not-for-profit organization focused on funding the development and deployment of clean technologies.

Hosted the GHG Reduction Summit in Edmonton, bringing together industry, policy, and research and development fields.

Six industrial energy-efficiency projects valued at more than \$161 million received over \$27 million.

Steve MacDonald named Chief Executive Officer.

CCEMC rebrands to Emissions Reduction Alberta (ERA).

ERA publishes the first edition of its Technology Roadmap.

Up to \$35 million is set aside for Grand Challenge: Innovative Carbon Uses; a five-year, three-round, international funding competition supporting carbon utilization.

2009

2010

2011

2012

2013

2014

2016

2017

CCEMC announces its first round of funding; \$71 million for 16 ground-breaking projects focused on renewable energy, energy efficiency, cleaner energy production, and carbon capture and storage.

Established an inventory of key knowledge networks within North America to help expand climate change knowledge and support technology advancement.

\$6 million is invested in 13 clean tech projects worth \$34 million led by small- and medium-sized enterprises (SMEs).

\$8.4 million in funding announced to reduce emissions through biological sources; another \$7 million is committed for three adaptation projects.

CCEMC and the City of Edmonton co-host international leaders and innovators at ZERO2014: A Conference for a Low Carbon Future.

ERA initiates its Partnership Intake Program.

ERA co-hosts SPARK 2017 with Alberta Innovates for cleantech innovators, researchers, government, and the business community.

\$12 million for 4 projects announced for Round 2 of the Grand Challenge: Innovative Carbon Uses.

Approximately \$30 million invested in 12 clean tech projects worth \$89 million through the Methane Challenge.

OF IMPACT

Accelerating Hydrogen Challenge provides \$34.5 million for 8 projects worth \$150 million in public and private investment.

Over \$44 million from ERA's Emerging Innovators Challenge committed to 20 projects led by small- and medium-sized enterprises worth more than \$162 million.

ERA commits over \$58 million for 20 projects from Alberta's natural gas sector worth over \$155 million.

The 4th edition of ERA's Technology Roadmap focuses on cross-cutting technologies that deployed across numerous industrial operations.

Justin Riemer named Chief Executive Officer.

Over \$40 million for 11 CCUS-related technologies that could lead to over \$20 billion in capital expenditures through the Carbon Capture Kickstart: Design and Engineering funding competition.

Over \$70 million for 9 projects valued at over \$720 million committed through the Oil Sands Innovation Challenge.

2018

2019

2020

2021

2022

2023

2024

The Industrial Efficiency Challenge supports 11 projects worth over \$265 million with \$70 million in funding.

ERA hosts SPARK 2019: Carbon Positive convening some of the world's best clean technology innovators and investors.

ERA commits \$100 million to 17 projects worth \$600 million to biotechnology, electricity, and sustainable transportation projects through the BEST Challenge.

\$10 million for 2 projects in the final round of the Grand Challenge: Innovative Carbon Uses.

New \$55 million Energy Savings for Business Program opens up applications.

More than \$175 million is committed to 16 projects worth more than \$2 billion in public and private funding through the Shovel Ready Challenge.

More than \$33 million invested in 17 projects worth \$107 million through the Food, Farming, and Forestry Challenge to advance technology innovations in Alberta's agriculture, agri-food, and forestry sectors.

Over \$60 million committed to 14 projects worth more than \$225 million through the Industrial Transformation Challenge.

ERA successfully wins the bid to co-host GHGT-17 in Calgary, Alberta on October 20-24, 2024 with the International Energy Agency.

\$58 million for projects worth \$528 million that reduce the impacts of material production, processing, and disposal through the Circular Economy Challenge.

WE ARE ERA

EMISSIONS
REDUCTION
ALBERTA



OVER THE PAST 15 YEARS, ERA HAS BEEN ONE OF THE MAIN WAYS FOR ALBERTA TO INVEST THE REVENUES FROM THE CARBON PRICE PAID BY LARGE EMITTING INDUSTRIAL FACILITIES DIRECTLY BACK INTO CLEAN TECHNOLOGY SOLUTIONS THAT REDUCE EMISSIONS, ATTRACT INVESTMENT, AND CREATE JOBS IN THE PROVINCE.

WE ARE FUNDERS.

For a decade and a half, we've supported innovators with the deepest knowledge of the clean technologies the world needs: entrepreneurs, industry leaders—big and small, researchers, investors, academics, and NGOs. The ones in their garage and the ones on a global stage. The visionaries, the trailblazers, and the doers. The ones prepared to take risks, put money on the line, put careers on the line, and get things done.

WE ARE CONVENERS.

Part of ERA's role – its superpower some say – is being a convener. We've helped develop the ideas and investments that will shape the future by convening the province's technology and innovation system. We work closely with government and industry to make sure all funding agencies know what technologies are coming down the pipe. This helps to mitigate some of the hurdles innovators will face from idea generation to commercialization. We are very purposeful with our actions, working together—government and industry—to make sure we get at the core of the problem.

WE ARE TRANSPARENT.

Whether a technology changes our lives forever, or never gets off the ground, all ERA funding recipients are required to report on project outcomes, achievements, and lessons learned including GHG reductions, job creation, and other environmental, economic, and social benefits. Innovation isn't linear. The process is two steps ahead, one step back. Sharing insights in this way ensures one technology developer can pick up where another left off.

WE ARE RIGOUROUS.

From our humble beginnings in setting up funding processes and priorities, to having our funding create meaningful impact for innovators across Alberta, we have been committed to ongoing improvements in our operational performance. Big or small, all funded projects are selected through a competitive review process. A team of experts in science, engineering, business development, commercialization, financing, and greenhouse gas quantification conduct an independent, rigorous, transparent review overseen by a Fairness Monitor, ensuring responsible stewardship of public funds.

WE ARE ERA.

For 15 years, we've been an integral part of Alberta's forward-thinking climate policy, environmental regulation, economic diversification, and innovation support.

CONTENTS

01

**MESSAGE FROM
KELLY J. OGLE,
BOARD CHAIR**

02

**MESSAGE FROM
JUSTIN RIEMER,
CEO**

03

**ABOUT
ERA**

04

**A UNIQUE
BUSINESS
MODEL**

05

**PORTFOLIO
IMPACT**

09

**2023-24
HIGHLIGHTS
AT-A-GLANCE**

11

**STRATEGIC
PRIORITIES**

12

**STRATEGIC
PRIORITY #1:
ACCELERATE
TECHNOLOGY**

23

**STRATEGIC
PRIORITY #2:
DRIVE
COMMERCIALIZATION**

25

**STRATEGIC
PRIORITY #3:
MAXIMIZE IMPACT**

35

**INNOVATION
INVESTMENT
IN ACTION**

39

GOVERNANCE

40

FINANCIALS

ACCOUNTABILITY STATEMENT

This review is documented as an annual accountability report and ensures that Emissions Reduction Alberta's (ERA) mandate is being fulfilled, its commitments in its three-year Business Plan are being executed, and it's delivering results in accordance with the Grant Agreement and Memorandum of Understanding in place with the Government of Alberta. All material economic, environmental, or fiscal implications, of which we are aware, have been considered in preparation of this report.

DISCLAIMER

While ERA makes every effort to ensure claims related to emissions performance are accurate, it does not audit underlying information or verify all source data and is not responsible or liable for any environmental claims, environmental performance metrics, or any representations, statements, or claims regarding emissions or emissions reductions contained in this Annual Report, or any assumptions or methodologies underlying any such claims.



MESSAGE FROM BOARD CHAIR

KELLY J. OGLE

Alberta's public agencies have a critical role in growing the province's economy, creating jobs, and, in ERA's case, reducing emissions. I am pleased to have joined a strong Board and team focused on achieving Alberta's greenhouse gas reduction and clean technology and innovation goals in November of 2023.

In 2024, ERA celebrates 15 years of impact. That's a decade and a half of being a driving force in supporting technologies dedicated to reducing emissions in Alberta while strengthening the economy. This commitment has fostered significant advancements in Alberta's industrial sectors and positioned the province as a trailblazer in the global clean technology economy.

In 2007, Alberta realized that government couldn't reduce emissions on its own and that getting buy-in from the private sector was needed to achieve transformative change. To that end, the province introduced a carbon levy for high industrial emitters, making Alberta the first jurisdiction in North America to implement a carbon pricing system. Rather than being just another new tax, it was a push for change. Industries could either purchase offset credits or reinvest in Alberta, and they decided to do the latter.

This forward-thinking approach by the Government of Alberta has been instrumental in achieving incredible results. It also laid the foundation for ERA. Now, 15 years later, Alberta has an innovation ecosystem respected around the world. This approach not only addresses the need to reduce emissions and meet Alberta's climate objectives, but also stimulates economic growth by creating new jobs and industries.

As a trusted delivery partner for the Government of Alberta's Technology Innovation and Emissions Reduction (TIER) Regulation, ERA provides financial support for innovators striving to drive system-wide change, ensuring that patient risk capital is available as a catalyst for innovation.

Looking back on the past year, I think about how much ERA has accomplished and, perhaps more importantly, the organization's decade and a half contribution to realizing the province's economic and environmental goals. ERA is widely regarded as a best-in-class public funding agency. Looking ahead, it is crucial to consistently evaluate and widely share our outcomes. Neither the private nor the public sector can do it alone, our track record demonstrates that working together is the key for success.

ERA continues to demonstrate there is an ongoing opportunity to support Alberta's natural resources and industrial sectors through the development and commercialization of some of the most promising innovations the province needs to reduce emissions and increase our global competitiveness.

On behalf of ERA's Board and staff, I am pleased to present our 2023-2024 Annual Report.

KELLY J. OGLE
BOARD CHAIR, ERA



MESSAGE FROM CEO

JUSTIN RIEMER

An annual report isn't just about reviewing the recent past, it's also about celebrating our history and looking forward to future opportunities. Reflecting on our accomplishments over the past 12 months has inspired us to think about where we've come from and to aim for an even bigger impact moving forward.

The 2023-24 Annual Report is a milestone occasion as it marks ERA's 15th anniversary. The success of this organization is due to the vision of the Government of Alberta, leaders in industry, technology developers, and the talented team at ERA—both past and present—who have worked tirelessly to bolster Alberta's economy, create jobs, and elevate the province's environmental and economic objectives.

Since 2009, ERA has committed nearly \$1 billion to close to 300 projects. We have significantly exceeded our minimum requirement of 1:1 private sector matching with our investments translating to approximately \$8 billion in total value – a 7:1 leverage ratio. Through these investments, we are forecasting cumulative reductions of more than 37 million tonnes of CO₂e by 2030 and over 105 million tonnes by 2050. Equally important, we are creating thousands of well-paying, sustainable jobs for Albertans all around the province.

To maintain our focused formula for success, we concentrate on advancing technology through strategic funding calls. The more than \$43 million we committed through the Emerging Innovators Challenge this year supports small and medium-sized enterprises (SMEs), the backbone of our economy, with the capital needed to create change on a massive scale.



Now an annual funding call, the \$50 million Industrial Transformation Challenge we announced this spring will provide predictable, ongoing decarbonization support to major industrial sectors across the province. These sustained investments allow innovators to build on success, commercialize, and share their learnings.

This past year, alongside our most Trusted Partner, Alberta Innovates, almost \$60 million in funding was awarded to 28 projects worth \$280 million that will advance the hydrogen economy in the province. We also co-funded four projects from their Carbon Fibre Challenge funding call. Collaboration is critical; more hands make lighter work.

The insights and outcomes we've gained over 15 years are incredible. We require our funded innovators to share their learnings and we learn as much, if not more, from projects that don't succeed as those that do. To further accelerate technology adoption, we continue to offer open access to data and insights from project proponents: what's worked, what hasn't, and the economic and environmental impacts realized. Our new open data portal helps visualize ERA's investment portfolio and allows direct access to valuable information.

It's been a 15-year journey, but we have only just begun. We look forward to continuing to work alongside the Government of Alberta to drive change and deliver results.

JUSTIN RIEMER
CEO, ERA

ABOUT ERA

MANDATE

Reduce greenhouse gas (GHG) emissions and grow Alberta’s economy by accelerating the development and adoption of innovative technology solutions.

VISION

Alberta has a diversified, carbon-neutral economy with competitive industries that deliver sustainable environmental outcomes and attract investment.

CORE VALUES



VALUE PROPOSITION

ERA invests proceeds from carbon pricing paid by TIER-regulated industrial facilities to reduce emissions and strengthen the competitiveness of new and incumbent industries in Alberta. These investments help innovators develop and demonstrate emissions-reducing technologies that will lower costs, improve competitiveness, and accelerate Alberta’s transformation to a carbon-neutral economy. ERA delivers results through a competitive, transparent, efficient, and outcomes-focused delivery model.

TIER REGULATION

ERA receives its funding from the Government of Alberta through the Technology Innovation Emissions Reduction (TIER) Regulation. TIER is at the core of emissions management in Alberta and serves as a framework that offers industrial facilities an opportunity to advance innovative approaches for emissions reduction and encourages investments in clean technology to stay competitive and save money.

A UNIQUE BUSINESS MODEL

ERA'S UNIQUE MODEL TO INVEST IN CLEAN TECHNOLOGY INCLUDES:

- Establishing a clear line of sight between the carbon price paid by industry under the TIER Regulation to investment in solutions designed to achieve provincial emissions reduction goals.
- Funding directed to accelerate innovation toward commercialization by de-risking technology in the demonstration and first-of-kind deployment stages of development.
- Non-dilutive* grant funding to accelerate the advancement and scale-up of clean technologies by allowing ERA to share innovation risk with industry and private funders through key development stages.
- A Delegated Administrative Organization (DAO) structure. That means ERA has no annual investment caps, can fund multi-year projects through development, carries funding over from year to year if necessary, can reinvest funds when projects are not completed, and allows for decisions to be made at arm's length by policy creators.

* Non-dilutive funding is defined as funding that does not require giving up ownership or shares of the company or product.

“Alberta is innovation: to invest in the province and to invest in innovation are one and the same. We are grateful for the Government of Alberta’s commitment to build a thriving economy by championing the ideas and drive of its people. Emissions Reduction Alberta is a true testament to this commitment.”

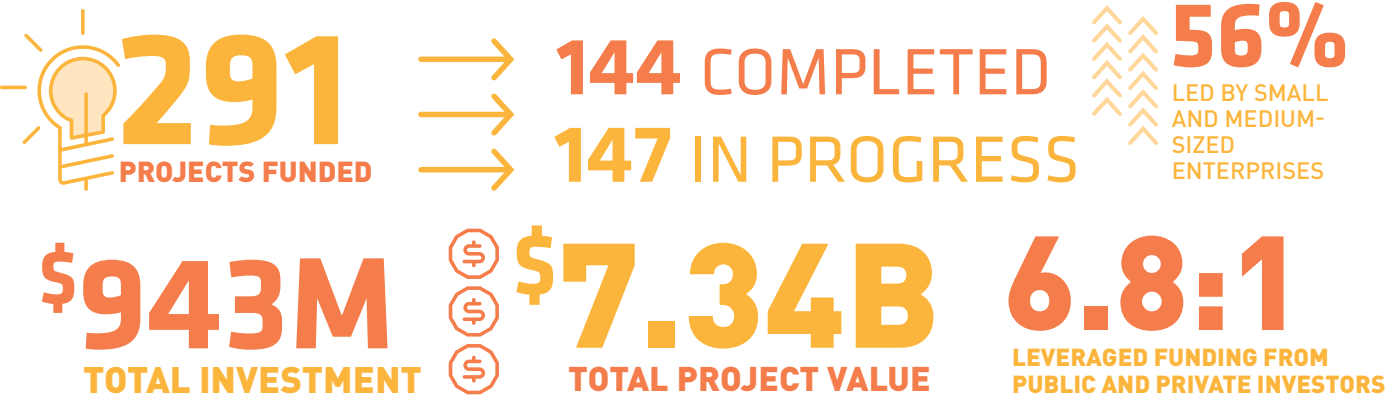
DR. JACQUELINE PETERSON

CHIEF CLIMATE OFFICER, KATHAIROS SOLUTIONS

EMERGING INNOVATORS CHALLENGE FUNDING
RECIPIENT

PORTFOLIO IMPACT

TECHNOLOGY INNOVATION FUNDING



COMMERCIAL ADOPTION INCENTIVES

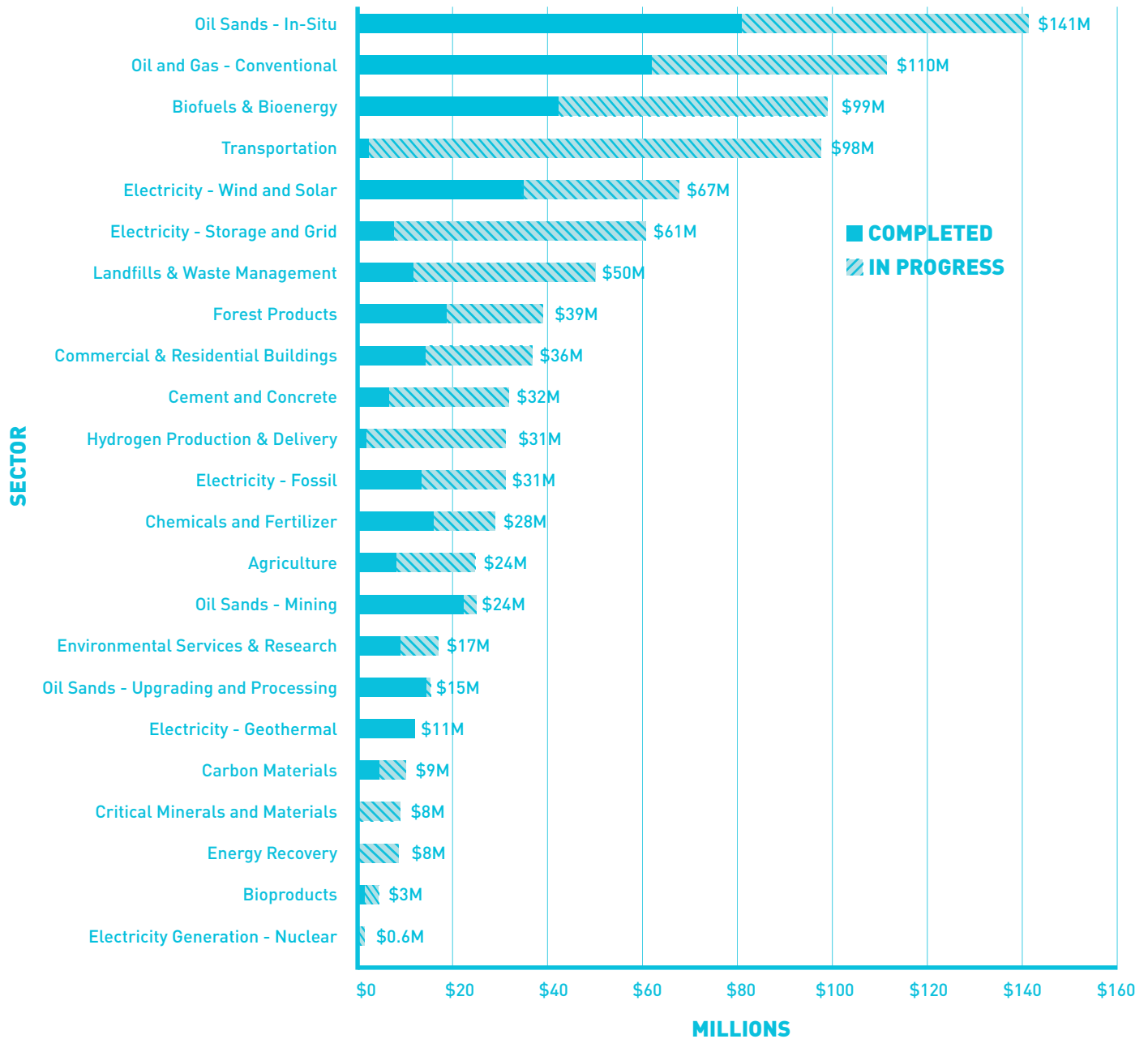


PROJECTED ECONOMIC OUTCOMES



Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

FUNDING BY SECTOR



CALCULATING GHG EMISSIONS REDUCTION

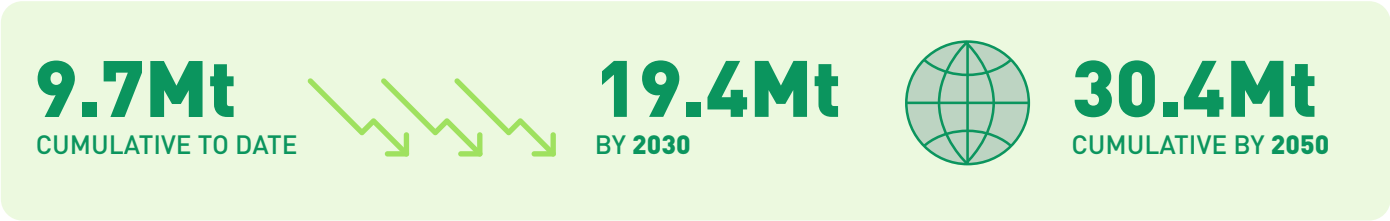
For 15 years, ERA has been investing in a diverse portfolio of transformative, sustainable technologies. To better understand how these investments make an impact, ERA measures and reports on project and market emissions reduction.

- Expected reductions from completed projects are those achieved by projects that are complete and operational. These reductions are based on expert GHG quantification and verification conducted according to international standards and represent the impacts a project has achieved and will likely achieve over its operational life based on reasonable assumptions.
- Forecasted reductions from active projects are those for projects currently underway. They represent an estimate of potential future impacts based on current assumptions. As active projects progress, their forecasted emissions benefits are updated based on new data and changes to the underlying assumptions. Upon completion, a project’s forecasted reductions will be verified and moved into the “realized” category reflecting a higher degree of certainty in the estimates.

ERA presents consolidated portfolio information and forecasted information that relies on proponent assumptions and scenario analysis. Project and operating data used to prepare assumptions that are used in the methodology to calculate GHG emissions are determined by the project recipient and reviewed for reasonableness by ERA.

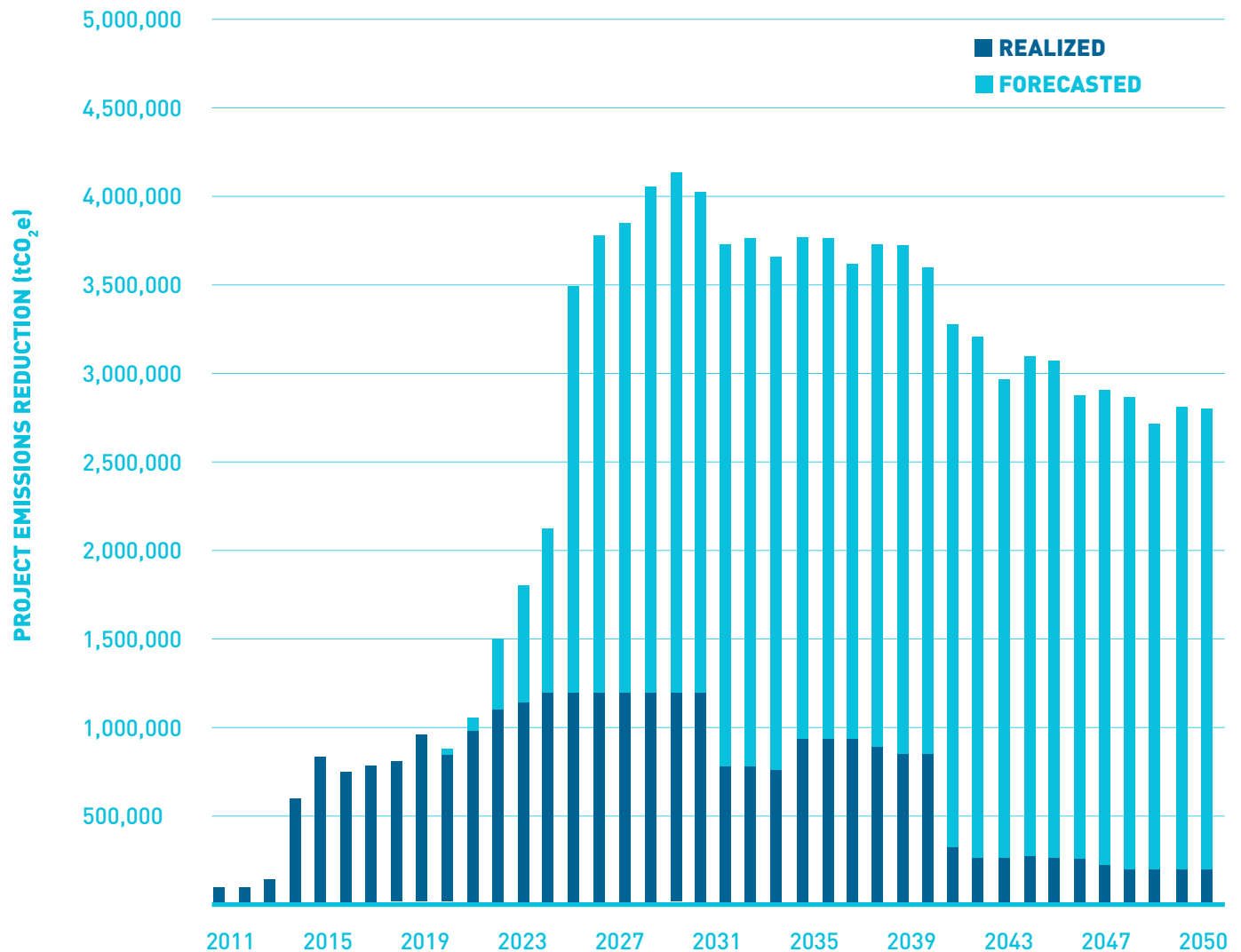
While ERA makes every effort to ensure claims related to emissions performance are accurate, it does not audit underlying information or verify all source data and is not responsible or liable for any environmental claims, environmental performance metrics, or any representations, statements, or claims regarding emissions or emissions reductions contained in this Annual Report, or any assumptions or methodologies underlying any such claims.

REALIZED EMISSIONS REDUCTION FROM COMPLETED PROJECTS



Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

REALIZED AND FORECASTED EMISSIONS REDUCTION ANNUALLY



Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

2023-24 HIGHLIGHTS AT-A-GLANCE



\$170M
IN APPROVED
INVESTMENTS



\$802M
TOTAL PROJECT
VALUE

49

NEW PROJECTS



13

COMPLETED



\$100+
MILLION

IN NEW FUNDING COMMITTED
FOR 2024/25 FISCAL YEAR

OVER 610
THOUSAND TONNES IN
ANNUAL GHG REDUCTIONS*

15+ MILLION TONNES
OF CUMULATIVE EMISSIONS
REDUCTION BY 2050*



*ESTIMATED FROM 2023-24 INVESTMENTS.
GHG CLAIMS ARE SUBJECT TO THE DISCLAIMER ON THE TABLE OF CONTENTS.

OVER 3200
PERSON-YEAR
JOBS BY 2027



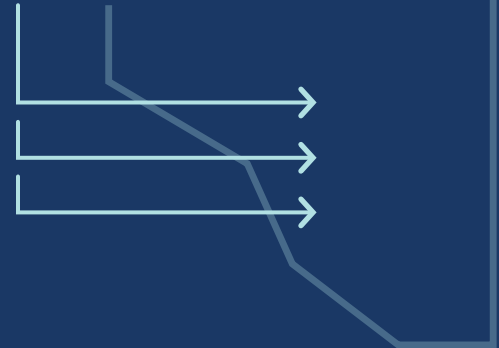
WELCOMED the Metis Settlements
Development Corporation (MSDC)
as a Trusted Partner



**STRATEGIC ENERGY
MANAGEMENT**
FOR INDUSTRY

Designed the **\$50M STRATEGIC
ENERGY MANAGEMENT FOR
INDUSTRY PROGRAM**

\$628 MILLION
GDP IMPACT IN THE
PROVINCE BY 2027



Launched the **OPEN DATA PORTAL**



Developed the **INNOVATOR
SUPPORT SERVICES** initiative

ERA  **15**
EMISSIONS REDUCTION ALBERTA

Hosted a 15 Year Anniversary
Lessons Learned Event and
produced a "15 Years of Innovation"
documentary to tell ERA's story in
a new way

STRATEGIC PRIORITIES

In 2023-24, in alignment with its Business Plan, ERA continued its focus on three strategic priorities that frame its activities:

1. ACCELERATE TECHNOLOGY

Invest in innovative technologies that help industries in Alberta achieve carbon-neutral emissions.

2. DRIVE COMMERCIALIZATION

Convene the right resources and incentives to accelerate the adoption of technology solutions that lead to economic growth and emissions reductions in Alberta.

3. MAXIMIZE IMPACT

Sharing knowledge and lessons learned and striving for operational excellence.




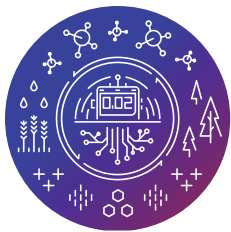
Photo: Minister of Environment and Protected Areas, Rebecca Schulz, announces over \$43 million in funding through ERA's Emerging Innovators Challenge.

STRATEGIC PRIORITY #1:

ACCELERATE TECHNOLOGY

ERA helps Alberta industries work toward carbon-neutral emissions by identifying and investing in innovative emissions-reducing technologies. ERA funds later-stage projects through competitive funding calls and its Continuous Intake Program.

In 2023-2024, ERA announced \$135 million for over 50 projects worth a combined value of \$685 million. ERA also approved more than \$100 million in funding to be allocated in the next fiscal year. The following pages outline these investments.



EMERGING INNOVATORS CHALLENGE

OVER \$44 MILLION TO HELP SMALL- AND MEDIUM-SIZED ENTERPRISES

SMEs, organizations with fewer than 500 employees, are the backbone of Alberta's economy and represent the largest portion of companies in the province. Through the Emerging Innovators Challenge, ERA invested in the scale-up, pilot, demonstration, and first-of-kind projects led by these critical organizations. To address barriers typically faced by SMEs, ERA is working with innovation-focused service providers to help these companies achieve higher commercialization success rates.

INVESTMENT



20 PROJECTS

\$44M
ERA FUNDING

\$162M

TOTAL
PROJECT
VALUE

PROJECTED IMPACT



215
THOUSAND
TONNES OF
ANNUAL
EMISSIONS

5
MILLION TONNES
OF CUMULATIVE
EMISSIONS BY 2050



**875+ PERSON-
YEAR JOBS
IN ALBERTA
BY 2027**



**\$235+
MILLION
INTO THE
PROVINCE'S
GDP BY 2027**

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

PROJECTS

ARCHER BD INC.

ERA FUNDING: \$410,000

TOTAL PROJECT VALUE: \$960,000

Demonstrate the viability of a new SAGD steam technology to offer more affordable and lower environmental footprint bitumen production potential through lab and field feasibility demonstration activities to prove commercial readiness.

ARKEABIO™

ERA FUNDING: \$2,350,000

TOTAL PROJECT VALUE: \$4,900,000

Test a novel inoculant designed to target methane-producing bacteria in cattle with the aim of reducing methane generation from the digestion process.

AROLYTICS INCORPORATED

ERA FUNDING: \$1,000,000

TOTAL PROJECT VALUE: \$2,530,000

Develop software to help oil and gas operators record, reconcile, and report methane emissions data from various sources and optimize programs to monitor, detect, and repair leaks efficiently.

DERBI CORP.

ERA FUNDING: \$620,000

TOTAL PROJECT VALUE: \$1,230,000

Demonstrate the benefits of virtual power plants for energy consumers and grid operators through a collection of software and hardware systems that work together to manage and optimize distributed energy resources at scale.

ELECTROKINETIC SOIL TREATMENT INC.

ERA FUNDING: \$1,500,000

TOTAL PROJECT VALUE: \$3,510,000

Build and operate a commercial demonstration system for a treatment technology that removes contaminants from soil including salts, hydrocarbons, and heavy metals.

ETALIM INC.

ERA FUNDING: \$1,940,000

TOTAL PROJECT VALUE: \$4,830,000

Demonstrate the cost, reliability, and efficiency of powering well-head equipment with an advanced onsite electricity generation technology using waste methane that would otherwise be vented into the atmosphere.

GREAT NORTHERN POWER CORP.

ERA FUNDING: \$450,000

TOTAL PROJECT VALUE: \$1,820,000

Demonstrate a waste heat recovery system specifically designed for the scale and type of engines used in natural gas compression.

H2NANO INCORPORATED

ERA FUNDING: \$1,850,000

TOTAL PROJECT VALUE: \$7,600,000

Deploy a floating solar catalyst technology as a low-energy treatment method for oil sands process-affected water at field pilot/pre-commercial scale.

HIGHWOOD EMISSIONS MANAGEMENT

ERA FUNDING: \$2,230,000

TOTAL PROJECT VALUE: \$4,460,000

Develop and validate a software solution that helps companies use multiple data streams to prove their true methane emissions, quantify uncertainty, manage risk, and comply with emerging methane regulations.

KATHAIROS SOLUTIONS INC.

ERA FUNDING: \$250,000

TOTAL PROJECT VALUE: \$500,000

Validate the technical and economic feasibility of a nitrogen-powered vapour recovery unit to eliminate oil tank venting in remote areas.

LANDMARK GROUP OF COMPANIES INC.*ERA FUNDING: \$1,950,000**TOTAL PROJECT VALUE: \$3,970,000*

Demonstrate an innovative, high-performance Nail-Laminated Timber (NLT) foundation in residential housing to evaluate structural performance of the mass timber product.

NTWIST INC.*ERA FUNDING: \$700,000**TOTAL PROJECT VALUE: \$1,600,000*

Use AI and Machine Learning to integrate data from multiple sources to help the resource sector optimize operations, reduce emissions, limit manual operator decisions, support sustainability of facilities, and enhance energy efficiency.

OPTISEIS SOLUTIONS LTD.*ERA FUNDING: \$5,000,000**TOTAL PROJECT VALUE: \$16,200,000*

Demonstrate the effectiveness of technology that can help significantly reduce the land footprint and GHG emissions associated with subsurface imaging programs.

RESOLVE PLASTICS RECYCLING*ERA FUNDING: \$2,000,000**TOTAL PROJECT VALUE: \$4,780,000*

Build and demonstrate a novel technology for recycling all types of post-consumer plastics using a proprietary mechanical recycling unit that can accept highly variable and mixed plastic streams.

ROKK ENERGY TECHNOLOGIES INC.*ERA FUNDING: \$5,000,000**TOTAL PROJECT VALUE: \$10,400,000*

Design, test, and produce the components of an innovative new drilling system for multilateral wells in unconventional formations—reducing costs, emissions, and surface footprint by getting greater production from each vertical well.

SIXRING*ERA FUNDING: \$5,000,000**TOTAL PROJECT VALUE: \$55,500,000*

Build a commercial pilot facility deploying SixRing's proprietary biomass processing alternative in Lethbridge County to produce a range of sustainable industrial products, including biochemicals, replacing those from fossil sources.

SMARTGRO BIOENGINEERING INC.*ERA FUNDING: \$1,600,000**TOTAL PROJECT VALUE: \$5,000,000*

Validate and demonstrate the effectiveness of AI-optimized horticultural lighting products in commercial greenhouses and vertical farms to more efficiently grow plants while reducing energy use.

SULTECH GLOBAL INNOVATION CORP.*ERA FUNDING: \$5,000,000**TOTAL PROJECT VALUE: \$13,300,000*

Demonstrate the scalability and reliability of converting sulphur waste from the oil and gas sector into plant nutrient and soil amendment products.

ULTRACOUSTICS TECHNOLOGIES LTD*ERA FUNDING: \$260,000**TOTAL PROJECT VALUE: \$620,000*

Test, validate, and complete commercial design for a technology capable of using acoustic sensors to detect pinhole leaks in industrial refrigerant systems.

WYVERN*ERA FUNDING: \$5,000,000**TOTAL PROJECT VALUE: \$18,530,000*

Pilot an approach to monitor wildfire impacts and detect methane leaks from space using high-resolution, hyperspectral satellites.



ACCELERATING HYDROGEN CHALLENGE

\$57 MILLION TO ADVANCE ALBERTA'S HYDROGEN ECONOMY

The Government of Alberta, through ERA and Alberta Innovates, committed \$57 million in technology and innovation funding for 28 projects to advance a hydrogen economy, reduce emissions, and create jobs in Alberta. Projects cover the spectrum of hydrogen production, storage, transmission, distribution, and usage. Roughly \$34 million of ERA funds were directed to eight late-stage projects through the Advancing Hydrogen Challenge; Alberta Innovates supported 20 early-stage projects with \$22.5 million. Premier Danielle Smith made the announcement at the Canadian Hydrogen Convention in April 2024.

“Hydrogen demand is growing around the world. The challenge we have is how can we maximize its use for the environment and energy security. The individuals and companies here are truly enabling Alberta’s position as a world leader in this space. Every advance has the potential to change the world for the better, and I wish you all the best in your ventures.”

DANIELLE SMITH
PREMIER OF ALBERTA

INVESTMENT

8 PROJECTS

\$34M
ERA
FUNDING

\$150M
TOTAL PROJECT VALUE

PROJECTED IMPACT



13
THOUSAND
TONNES OF
ANNUAL
EMISSIONS

493
THOUSAND TONNES
OF CUMULATIVE
EMISSIONS BY 2050



720+
PERSON-YEAR
JOBS IN ALBERTA
BY 2027



\$210
MILLION INTO
THE PROVINCE'S
GDP BY 2027

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

PROJECTS

CERTARUS

ERA FUNDING: \$1,200,000

TOTAL PROJECT VALUE: \$2,300,000

Scale up and deploy equipment for hydrogen storage, compression, and blending at an existing hub for compressed natural gas.

CITY OF CALGARY

ERA FUNDING: \$2,200,000

TOTAL PROJECT VALUE: \$4,400,000

Pilot the implementation and testing of hydrogen vehicles and equipment to determine suitability and incorporation.

CITY OF EDMONTON

ERA FUNDING: \$6,900,000

TOTAL PROJECT VALUE: \$18,000,000

Demonstrate a methanol-to-hydrogen fueling system while integrating two hydrogen vehicle technologies to test fueling and vehicle performance.

DIESEL TECH INDUSTRIES

ERA FUNDING: \$1,900,000

TOTAL PROJECT VALUE: \$3,900,000

Advance retrofit kits for diesel engines, enabling the co-combustion of both diesel fuel and hydrogen gas.

LINDE CANADA INC.

ERA FUNDING: \$7,000,000

TOTAL PROJECT VALUE: \$64,400,000

Install hydrogen production, distribution, and refueling infrastructure in Edmonton and Fort Saskatchewan to supply hydrogen for fleet vehicles.

NUVISTA ENERGY LTD.

ERA FUNDING: \$7,000,000

TOTAL PROJECT VALUE: \$40,000,000

Demonstrate a pulsed-methane pyrolysis technology to produce low-carbon hydrogen and a solid carbon byproduct.

STRATHCONA COUNTY

ERA FUNDING: \$5,000,000

TOTAL PROJECT VALUE: \$11,200,000

Install a hydrogen-fueled combined heat and power system to provide heat and power at the Millennium Place Recreation Centre.

THIOZEN INC.

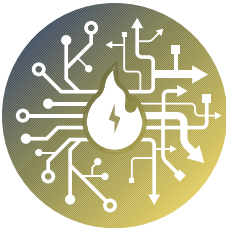
ERA FUNDING: \$3,200,000

TOTAL PROJECT VALUE: \$6,500,000

Produce hydrogen from hydrogen sulfide waste streams derived from sour gas and test at NuVista's Wembley Gas Plant.

Photo: Premier of Alberta, Danielle Smith, announces Accelerating Hydrogen Challenge funding recipients at the Canadian Hydrogen Convention in Edmonton.





RESHAPING ENERGY SYSTEMS

OVER \$33 MILLION INVESTED TO RESHAPE ENERGY SYSTEMS

In March 2024, ERA announced a significant investment to advance technologies focused on the transport, distribution, storage, and optimization of energy use to reduce emissions, create economic opportunities, and enable a more resilient, efficient, and reliable energy system. These projects will reduce emissions and contribute to a more flexible and sustainable energy grid in Alberta.

“This opportunity to accelerate the development and adoption of an innovative technology solution is a demonstration of shared vision, expertise, and a commitment to pioneering new solutions.”

MITCHELLE MILLER
CEO & FOUNDER, ATLAS POWER

INVESTMENTS



PROJECTED IMPACT



119
THOUSAND
TONNES OF
ANNUAL
EMISSIONS

2.7
MILLION TONNES
OF CUMULATIVE
EMISSIONS BY 2050



830
PERSON-
YEAR JOBS
IN ALBERTA
BY 2027



\$125
MILLION
INTO THE
PROVINCE'S
GDP BY 2027

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

PROJECTS

ALTALINK INVESTMENT LIMITED PARTNERSHIP

ERA FUNDING: \$1,500,000
TOTAL PROJECT VALUE: \$3,000,000

Evaluate the implementation of a first-of-kind large-scale transmission battery energy storage system to the Alberta electric grid.

ATLAS POWER TECHNOLOGIES, INC.

ERA FUNDING: \$6,500,000
TOTAL PROJECT VALUE: \$14,100,000

Combine a supercapacitor-based energy storage system (SC-ESS) with a hydroelectric generating facility in Alberta, to provide fast responding reliability services to Alberta's power grid.

CABLE COATINGS LIMITED T/A ASSETCOOL*ERA FUNDING: \$500,000**TOTAL PROJECT VALUE: \$1,000,000*

Apply a cooling coating to overhead electric power lines that reduces temperature, increases energy capacity, and avoids the need for upgrades or expansions.

CRUX OCM*ERA FUNDING: \$1,500,000**TOTAL PROJECT VALUE: \$3,700,000*

Pilot two software products that autonomously adjust oil and gas pipeline operations to optimize energy usage.

CRWN.AI*ERA FUNDING: \$785,000**TOTAL PROJECT VALUE: \$1,600,000*

Use ultrasonic sensors and AI to predict failures on remote electric power lines before they happen.

GRAPH ENERGY INC.*ERA FUNDING: \$2,500,000**TOTAL PROJECT VALUE: \$5,000,000*

Boost fuel efficiency and lower emissions with graphene ultracapacitor energy storage for diesel and natural gas generators.

HTEC*ERA FUNDING: \$2,100,000**TOTAL PROJECT VALUE: \$10,200,000*

Develop a high-capacity hydrogen fueling station to support an initial fleet of over 25 hydrogen fuel cell trucks to serve southern and central Alberta.

LANDMARK GROUP OF COMPANIES*ERA FUNDING: \$3,300,000**TOTAL PROJECT VALUE: \$6,900,000*

Connect a group of highly energy-efficient solar and storage homes to become a virtual power plant to improve the resiliency of the electrical grid and enable the wide adoption of net-zero homes.

ONBOARD DYNAMICS*ERA FUNDING: \$515,000**TOTAL PROJECT VALUE: \$1,000,000*

Launch a system in Alberta for capturing and recovering natural gas during pipeline maintenance operations to prevent methane releases and provide a sustainable alternative to venting and flaring.

TELSEC PROPERTY CORPORATION*ERA FUNDING: \$2,100,000**TOTAL PROJECT VALUE: \$5,500,000*

Combine geoexchange district heating, solar PV, and intelligent controls to decarbonize multi-family homes.

TERIC POWER LTD. – ELAB BATTERY PROJECT (KEYERA)*ERA FUNDING: \$6,400,000**TOTAL PROJECT VALUE: \$18,700,000*

Install a 10-megawatt battery technology at Keyera's Alberta EnviroFuels plant in Edmonton to provide energy storage and reliability benefits to both the industrial facility and the Alberta grid.

TERIC POWER LTD. – FLUIDITI BATTERY STORAGE PROJECT*ERA FUNDING: \$5,200,000**TOTAL PROJECT VALUE: \$16,000,000*

Deliver cost competitive and reliable power with reduced emissions through time-shifting renewable energy generation and providing grid operating services to the Alberta Electric System Operator.

X-ENERGY CANADA*ERA FUNDING: \$623,000**TOTAL PROJECT VALUE: \$1,300,000*

Conduct an initial feasibility study regarding the potential benefits of deploying a small modular nuclear reactor at a repurposed fossil fuel power plant site.

PARTNERSHIP INTAKE PROGRAM

NEARLY \$23 MILLION FOR ADVANCED CARBON FIBRE, STORAGE, AND ENERGY EFFICIENCY TECHNOLOGIES ANNOUNCED AT COP28 IN DUBAI

At COP28 in Dubai, the Government of Alberta announced \$22.8 million to support the development and demonstration of technology solutions including: producing carbon fibre from Alberta’s bitumen, demonstrating battery storage at a hydroelectric dam, utilizing waste heat to help decarbonize a food processing facility, and advancing an emissions-reducing novel oil extraction and upgrading process. Three of these eight projects were co-funded by Alberta Innovates through their Carbon Fibre Challenge call, part of the Bitumen Beyond Combustion (BBC) initiative.

Three additional Partnership Intake Programs were approved in the fiscal year. ERA’s Partnership Intake Program evaluates projects referred by Trusted Partners with rigorous approval processes. The Partnership Intake Program allows ERA to fund innovative projects targeting emissions reduction, broadening its support beyond the usual channels.

“Alberta is chock-full of industry visionaries eager to bring their amazing emissions-reduction ideas to life, and this funding shows just how aligned our innovation system is when it comes to advancing game-changing technologies that lead to future materials and markets.”

REBECCA SCHULZ
MINISTER OF ENVIRONMENT AND PROTECTED AREAS

INVESTMENT

●●●●●●●●●●
10 PROJECTS



PROJECTED IMPACT



280
THOUSAND
TONNES OF
ANNUAL
EMISSIONS

7
MILLION TONNES
OF CUMULATIVE
EMISSIONS BY 2050



788
PERSON-
YEAR JOBS
IN ALBERTA
BY 2027



\$258
MILLION
INTO THE
PROVINCE’S
GDP BY 2027

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

PROJECTS CO-FUNDED THROUGH ALBERTA INNOVATES' CARBON FIBRE CHALLENGE

CARBOMAT

ERA FUNDING: \$1,300,000

TOTAL PROJECT VALUE: \$5,100,000

Produce low-cost and high-value carbon fibres from low-value waste by-products, including oil sands asphaltenes.

THREAD INNOVATIONS INC.

ERA FUNDING: \$3,000,000

TOTAL PROJECT VALUE: \$8,900,000

Demonstrate scalability, viability, and consistency of a proprietary, low-cost, and efficient process for producing carbon fibre using Alberta bitumen in vacuum refinery residue (VRR).

UNIVERSITY OF BRITISH COLUMBIA

ERA FUNDING: \$1,400,000

TOTAL PROJECT VALUE: \$5,430,000

Produce carbon fibre materials from asphaltene-based feedstocks extracted from bitumen through processes such as solvent de-asphalting.

PARTNERSHIP INTAKE PROGRAM PROJECTS

NANOSTECH

ERA FUNDING: \$5,000,000

TOTAL PROJECT VALUE: \$32,000,000

Demonstrate a turnkey, on-site oil extraction and upgrading process that improves operating margins and reduces greenhouse gas emissions.

PIP LETHBRIDGE INC.

ERA FUNDING: \$3,000,000

TOTAL PROJECT VALUE: \$6,600,000

Referred by Government of Alberta, Agriculture and Irrigation

Implement an innovative Thermal Energy Storage (TES) system at PIP Lethbridge's pilot scale food processing facility to fully decarbonize its process heat.

SOLARTILITY

ERA FUNDING: \$3,100,000

TOTAL PROJECT VALUE: \$6,300,000

Establish an Agrivoltaics Research Facility to demonstrate a viable model for cattle based Agrivoltaics in Alberta. The project will co-locate a solar photovoltaics system with cattle grazing pasture to increase land productivity.

TRANSALTA

ERA FUNDING: \$5,000,000

TOTAL PROJECT VALUE: \$173,000,000

Procure, install, and operate a battery energy storage system (BESS) co-located at TransAlta's Ghost Hydroelectric site near Cochrane, Alberta.

CLEANO2 CARBON CAPTURE TECHNOLOGIES INC.

ERA FUNDING: \$350,000

TOTAL PROJECT VALUE: \$900,000

Deploy a micro-scale carbon capture and utilization system in commercial buildings to reduce carbon emissions and reclaim waste heat.

MERLIN PLASTICS

ERA FUNDING: \$2,000,000

TOTAL PROJECT VALUE: \$11,000,000

Recycling PET clamshell containers—the strong, lightweight, shatter-resistant plastic that is used as a popular take-out option for baked goods, sandwiches, salads, and more.

ROTOLIPTIC TECHNOLOGIES INC.

ERA FUNDING: \$1,500,000

TOTAL PROJECT VALUE: \$3,010,000

Demonstrate a new rotary positive displacement pump in the Alberta market to gain further knowledge and validate performance.

ANNUAL INDUSTRIAL TRANSFORMATION CHALLENGE TO REDUCE EMISSIONS, IMPROVE COMPETITIVENESS

Initially launched in 2022, the Industrial Transformation Challenge will now be an annual, predictable initiative focused on reducing emissions and enhancing the economic competitiveness of Alberta's industrial and natural resource sectors. The \$50 million program supports projects across diverse sectors, including agriculture, forestry, manufacturing, oil and gas, and other natural resource industries. In May 2024, Rebecca Schulz, Minister of Environment and Protected Areas, Government of Alberta and Justin Riemer, CEO, ERA, announced the latest round of funding.

In the inaugural Industrial Transformation Challenge (2022), ERA committed over \$51 million to 12 projects worth more than \$170 million. To ensure sustained support, 2024's Industrial Transformation Challenge commits continuous investment for technologies such as breakthrough industrial process improvements, fuel switching and electrification, thermal energy storage, emissions solutions in agriculture and forestry operations, critical minerals extraction, advanced energy materials, elimination of methane emissions, and more. Successful projects will be announced in the 2024/2025 fiscal year.



**INDUSTRIAL
TRANSFORMATION
CHALLENGE**

INVESTING \$3 MILLION IN INTERNATIONAL CLEAN TECHNOLOGY FUNDING OPPORTUNITY

ERA committed up to \$3 million to the Clean Energy Transition Partnership's (CETP) Joint Call 2023. ERA funding will focus on advancing technology solutions for renewable fuels and hydrogen, as well as carbon capture, utilization and storage (CCUS), with strong potential for commercialization in Alberta. Successful projects will be announced in 2024/2025 fiscal year.

CETP pools funds from several countries for joint research, technological development, and innovation programming to accelerate a broad variety of technologies and system solutions. Joint Call 2023 is the second co-funded call under CETP. The initiative enables 50 national and regional funding partners from 30 countries to align on priorities and co-fund annual calls until 2027. ERA joined CETP in January 2022.

ERA CONTRIBUTES TO A \$2.4 MILLION DECENTRALISED ENERGY INITIATIVE

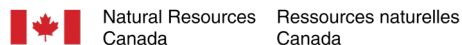
In 2024, ERA announced support for Decentralised Energy Canada's and the City of Medicine Hat's Energy Innovation Challenge, a three-year program designed to invest approximately \$2.4 million in small businesses to help them overcome commercialization obstacles and advance their decentralised energy solutions to the market.



STRENGTHENING THE TRUSTED PARTNER NETWORK

Partnerships play an invaluable role in referring projects to ERA and are essential to accelerating technology. These partnerships enable like-minded organizations to leverage funds, conduct due diligence, and share risk. Through strategic collaboration, ERA effectively harnesses funding opportunities across the Canadian innovation ecosystem to create a unified approach to reducing emissions and securing a carbon neutral Alberta.

In 2023-24, ERA welcomed the Metis Settlements Development Corporation (MSDC) to its partnership network and strengthened its relationships with its other 13 partners, leading to a significant increase in the number of project proponents participating in the referral-based Partnership Intake Program.

STRATEGIC PRIORITY #2:

DRIVE COMMERCIALIZATION

ERA works in close alignment with Alberta's innovation system to accelerate commercialization and market adoption of Alberta-based emissions-reducing technologies, support economic diversification, and create jobs in the province. In addition to providing funding, ERA reduces barriers to commercialization by providing mentorship support to its funded SMEs and delivers programming to support the market adoption of commercialized emissions-reducing technologies.

INNOVATOR SUPPORT SERVICES LAUNCHED TO ACCELERATE COMMERCIALIZATION

ERA's Innovator Support Services (ISS) program launched in 2024, with the purpose of helping SMEs overcome barriers to commercialization. The program provides ERA-funded projects access to expert mentors for advice and assistance with funding; financial management, human resources, market strategy, business scalability, product development, intellectual property, regulatory compliance, and internationalization strategy. Select companies from the Emerging Innovators Challenge will form the initial cohort.

ENERGY EFFICIENCY INTEGRAL PART OF ERA PORTFOLIO

As a key area of focus in ERA's Technology Roadmap, energy efficiency technologies and practices to improve energy productivity, optimization, conservation, and management throughout the economy are integral to its portfolio. Energy use is a major driver of costs and emissions for consumers and businesses. Optimizing operations and managing energy use will enhance Alberta's competitiveness by reducing energy costs and improving affordability, reliability, resilience, and access. A key part of this portfolio is advancing the deployment and adoption of fully commercialized cost- and energy-saving technologies for industrial facilities and Alberta businesses through the Energy Savings for Business and Strategic Energy Management for Industry programs.

Photo: Mount Norquay installed a new variable frequency drive (VFD) on its four-person, fixed-grip Cascade Chairlift with support from ERA's ESB Program.



ENERGY SAVINGS FOR BUSINESS PROGRAM WRAPS UP DUE TO HIGH DEMAND

The Energy Savings for Business (ESB) Program was fully subscribed in 2024. Through its various funding streams, the \$55 million ESB Program with \$47 million in incentives provided funding to over 2,000 projects with Alberta businesses to improve efficiency and reduce emissions. This milestone marks an important achievement for ERA and demonstrates how energy efficiency programming focused on supporting the adoption of commercially available technologies can result in significant outcomes. ERA extends its gratitude to all participants for their dedication and support in making this program a resounding success.



PROJECTS SUPPORTED
2,154



GDP CONTRIBUTION TO ALBERTA
\$141 MILLION



JOB'S CREATED
1,277



LIFETIME EMISSIONS REDUCED
3.7 Mt

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

The Government of Alberta funded up to \$30 million for ESB through TIER. Up to \$25 million in additional funds was available from the Government of Canada's Low Carbon Economy Leadership Fund.



**ENERGY SAVINGS
FOR BUSINESS**

STRATEGIC ENERGY MANAGEMENT FOR INDUSTRY PROGRAM DESIGNED

Following the success of the ESB program, in 2024, ERA began detailed design and industry engagement for its \$50 million Strategic Energy Management for Industry (SEMI) program that will support energy efficiency and management solutions in Alberta's industrial facilities. Funded by \$40 million from Natural Resources Canada (NRCan) and \$10 million from the Government of Alberta, the program will be launched in the fall of 2024 and fully implemented by March 31, 2027.

SEMI will build on the ESB program's efforts to accelerate the adoption of commercially available technologies by enhancing energy efficiency through capacity building. SEMI will also leverage previous Strategic Energy Management programming delivered by the Government of Alberta.

SEMI will support industrial facilities through four activities:

- 1. Energy Assessments and Audits**
- 2. Energy Management Information Systems**
- 3. Strategic Energy Management**
- 4. Capital Retrofits**

Results from the SEMI program will explore the strengths and challenges of different solution pathways, and will highlight the key areas where further support is required to accelerate broader implementation and reduce barriers faced by industry.

The Government of Alberta committed up to \$10 million for SEMI through TIER. Up to \$40 million in additional funds was provided by Natural Resources Canada (NRCan).



**STRATEGIC ENERGY
MANAGEMENT**
FOR INDUSTRY

STRATEGIC PRIORITY #3:

MAXIMIZE IMPACT

ERA maximizes the efficient and effective use of TIER funds by promoting knowledge and lessons learned from ERA-supported technologies to gain support for greater adoption and scale-up. ERA continually incorporates project learnings into future funding calls and projects. Together with the Government of Alberta, ERA aims to increase recognition of the province as an innovation and clean technology leader, strong environmental steward, and globally competitive clean technology investment destination.

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

SHARING KNOWLEDGE AND KEY FINDINGS FROM COMPLETED PROJECTS

ERA is delivering on its mandate and demonstrating progress by reporting on outcomes, successes, and learnings from its investments. To support knowledge sharing that could further advance innovation, each project that ERA funds must submit a project completion report that outlines key outcomes and details the unique learnings. To ensure continued transparency, these reports are shared widely and available for public review. There were 13 projects completed in 2023-24.

Note: GHG claims are subject to the disclaimer provided on the Table of Contents.

COMPLETED PROJECTS

ALBERTA-PACIFIC FOREST INDUSTRIES INC.

ERA FUNDING: \$6,000,000
TOTAL PROJECT VALUE: \$38,700,000

Deployed the first full-scale demonstration of a two-stage heat exchanger technology for a flue gas heat recovery system at the Al-Pac Kraft Pulp Mill, which utilizes waste heat to improve the efficiency of kraft pulp mill processes and increase export of electricity to the grid.

CANARY BIOFUELS INC.

ERA FUNDING: \$4,700,000
TOTAL PROJECT VALUE: \$20,000,000

Upgraded a brownfield biodiesel plant to enable it to convert local waste feedstocks to produce biodiesel through a first-of-kind process in Canada.

CITY OF EDMONTON WASTE MANAGEMENT BRANCH

ERA FUNDING: \$10,000,000
TOTAL PROJECT VALUE: \$41,700,000

Built a first-of-its-kind in Alberta High Solid Anaerobic Digestion (HSAD) Facility at the Edmonton Waste Management Centre to process and divert organic waste from landfill and produce compost by-product.

CONOCOPHILLIPS CANADA

ERA FUNDING: \$6,000,000
TOTAL PROJECT VALUE: \$15,600,000

Executed a field trial of the multilateral MLT well technology, reduced the amount of drilling well needed and achieved a reduction in GHG emissions intensity of 35.7 per cent.

CONOCOPHILLIPS SURMONT PARTNERSHIP*ERA FUNDING: \$7,400,000**TOTAL PROJECT VALUE: \$21,200,000*

Executed field pilot of steam additive co-injection and achieved GHG emissions intensity reduction in applied wells at the Surmont SAGD facility.

ENMAX GENERATION PORTFOLIO INC.*ERA FUNDING: \$7,300,000**TOTAL PROJECT VALUE: \$14,600,000*

Implemented and demonstrated Canada's first Hybrid Electric Gas Turbine at Crossfield Energy Centre, providing spinning reserves, without burning any natural gas, to the Alberta electricity grid.

ENMAX GENERATION PORTFOLIO INC.*ERA FUNDING: \$850,000**TOTAL PROJECT VALUE: \$1,700,000*

Tested fully electric cube vans, successfully demonstrating the feasibility, performance, and cost-effectiveness of medium-duty electric vehicles.

IMTEX MEMBRANES CORP.*ERA FUNDING: \$3,000,000**TOTAL PROJECT VALUE: \$9,300,000*

Demonstrated Imtex's Permylene olefin-paraffin membrane separation technology and commissioned a commercial-scale 8040 membrane system as a testing and demonstration centre in Alberta.

INNOVATIVE FUEL SYSTEMS*ERA FUNDING: \$1,200,000**TOTAL PROJECT VALUE: \$3,100,000*

Proved commercial viability of dual-fuel technology on heavy-duty trucks, displacing diesel fuel by up to 50 per cent.

LANZATECH, INC*ERA FUNDING: \$10,000,000**TOTAL PROJECT VALUE: \$25,400,000*

Manufactured and validated LanzaTech's next-generation bioreactor design, successfully demonstrating the next advance in gas fermentation technology.

QUBE TECHNOLOGIES*ERA FUNDING: \$4,000,000**TOTAL PROJECT VALUE: \$10,500,000*

Developed and tested an industrial Internet of Things (IoT) continuous monitoring device to accurately detect, quantify, and reduce methane emissions.

SBI FINE CHEMICALS INC*ERA FUNDING: \$7,100,000**TOTAL PROJECT VALUE: \$14,400,000*

Demonstrated technology that converts plant oils into renewable transportation fuels. The technology is now commercial.

WINTERHAWK WELL ABANDONMENT LTD.*ERA FUNDING: \$350,000**TOTAL PROJECT VALUE: \$700,000*

Multi-well field deployment of Winterhawk's Casing Expansion Tool CET, shown to successfully shut off surface casing vent flows (SCVF) from legacy oil and gas wellbores.

“Funding and support from ERA helped Qube to further develop a technology that uses artificial intelligence and the internet of things to help oil and gas operators reduce fugitive methane in their pursuit of environmental responsibility.”

ALEX MACGREGOR*CEO, QUBE*

SHARING 15 YEARS OF LESSONS LEARNED AT MILESTONE ANNIVERSARY EVENT

To commemorate 15 years in Alberta's innovation system, ERA hosted a sold-out, half-day knowledge-sharing event and reception at the TELUS Spark Science Centre in Calgary. The event focused on sharing lessons learned, outcomes, and remarkable successes from ERA-funded projects. Over 500 people registered for the event, including ERA-funded project proponents, industry and innovation leaders in the province, Government of Alberta representatives, and other Alberta stakeholders.

Through panel discussions, a fireside chat, keynote addresses, and more, programming for this 15-year lessons-learned event shared the compelling story of ERA and its decade and a half of advancing technologies towards commercialization. This important milestone was a great opportunity to recognize Alberta's forward-thinking climate policy, environmental regulation, and innovation frameworks.

Photos from top left to bottom right: Joan Hertz, Board Chair of ATB Financial, and ERA Board Chair, Kelly J. Ogle, after their fireside chat; Kyle Mulligan, Assistant Vice President - Operations Technology, Canadian Pacific Kansas City (CPKC), offers a closing keynote highlighting CPKC's Hydrogen Locomotive Program; panelists from across Alberta's industrial sectors discuss the importance of sustainability, innovation, and staying competitive; Heather Stephens, ERA's COO, networks during a program break; ERA's CEO, Justin Riemer, kicks off the event with a keynote address; a sold out crowd at Calgary TELUS Spark Science Centre.









DOCUMENTARY HIGHLIGHTS ERA'S 15 YEARS OF INNOVATION

ERA produced a documentary in 2023-24 that shares the inspiring journey of the organization and its impact over the past 15 years. The compelling video showcases ERA's diverse investments in revolutionary technologies—from hydrogen-powered locomotives to methane emissions monitoring from space, and carbon capture innovations that transform waste into valuable materials. It includes special appearances by former Premier, Ed Stelmach; Minister of Environment and Protected Areas, Rebecca Schulz; ERA's existing executive team and former CEO, Steve MacDonald; along with a host of project proponents, including CPKC, GHGSat, Carbon Upcycling, Eavor Technologies, and Cenovus. ERA's 15-year milestone presented a great opportunity to tell our story, and the story of Alberta's forward-thinking policies, in a new way.

Photos from top left to bottom right: Ed Stelmach, former Premier of Alberta; Stanley Opara, Solutions Architect, GHGSat; Heather Stephens, Chief Operating Officer, ERA; Rhona DelFrari, Chief Sustainability Officer & Executive Vice-President, Stakeholder Engagement, Cenovus Energy; Rebecca Schulz, Minister of Environment and Protected Areas; Justin Riemer, Chief Executive Officer, ERA.



PROGRAM DESIGN ONGOING FOR THE INAUGURAL BECCS LEADERSHIP SUMMIT

Alberta has the potential to become a global leader in Bioenergy with Carbon Capture and Storage (BECCS). Co-hosted by ERA and Alberta Innovates, the inaugural BECCS Leadership Summit takes place from October 16-18, 2024, in Banff, Alberta. The Summit will bring together over 100 leaders and decision-makers, including bioenergy and forest product producers, carbon capture and sequestration experts, prospective carbon dioxide removal credit purchasers, investors, governments, and First Nations representatives. The summit will include keynote speeches, panels, and workshops focusing on overcoming technology barriers and accelerating the adoption of BECCS technology in Alberta and Canada.



PRESENTING SPONSORS



WITH SUPPORT FROM



WHITE PAPERS SPOTLIGHT ALBERTA'S INNOVATION ECOSYSTEM, BOLSTER INDUSTRY OBJECTIVES

In 2023-24, ERA published two white papers and supported a third to share knowledge and expertise about specific aspects of Alberta's innovation ecosystem. The papers were widely distributed and can be found on ERA's website.

ALBERTA'S LOW-CARBON HYDROGEN PRODUCTION: HOW LOW CAN IT GO?

Worldwide, there is increasing emphasis on developing standards for hydrogen as a low-carbon fuel based on lifecycle carbon intensity. While Alberta and Canada don't currently have standards in place, this will become increasingly relevant to Alberta, especially if the province aims to export its hydrogen products on an international stage. ERA and Alberta Innovates co-wrote and published the white paper, [*Alberta's Low-Carbon Hydrogen Production: How Low Can It Go?*](#)

SCALING INNOVATION IN ALBERTA'S CONCRETE SECTOR

In 2023, ERA and the Cement Association of Canada (CAC) partnered to share decarbonization technologies in the white paper: [*Scaling Innovation in Alberta Heavy Industry: 10 Case Studies of Innovation & Collaboration in the Concrete Sector*](#). The white paper showcases real-world examples of technological advancements and their implementation, demonstrating the industry's progress toward reaching its carbon neutral objectives.

CCUS AND BUSINESS CERTAINTY

The International CCS Knowledge Centre, with support from ERA, released a new report titled [*CCUS and Business Certainty: Navigating policies, incentives, and credits for carbon capture and storage projects in Alberta*](#). The report is helping companies across heavy-emitting industries understand the key federal and provincial supports that are in place or proposed for CCUS in Alberta.

REFRESHING THE TECHNOLOGY ROADMAP

ERA's Technology Roadmap (TRM) outlines strategies to enable Alberta to achieve a competitive, sustainable economy, attract investment, and contribute to a lower-carbon world. The TRM focuses on cross-cutting technology investment areas that can be adapted and deployed across numerous industrial operations. This portfolio approach optimizes ERA's investment strategy, guides decision-making, and helps achieve a balanced portfolio aligned with our financial goals and risk tolerance.

In 2024, ERA began extensive engagement with government, industry, academia, and innovators to update and inform the fifth edition of the TRM. Through collaboration, engagement, and knowledge sharing, ERA will continue to build a strategic pathway to achieve Alberta's low-carbon objectives by working with partners and stakeholders. The new edition of the TRM will be released in Fall 2024.

LAUNCHING THE OPEN DATA PORTAL

As a public funding agency, ERA has a commitment and obligation to share data and make it easily accessible. In 2024, ERA launched an open data initiative designed to make investment information from technology projects easier to access. The new portal improves the experience by using dashboards to visualize ERA's portfolio of investments, allowing users to download a file directly from the website.

Users can search by sector, primary technology areas, stage of innovation and type of organization. Annual emissions reductions for active and completed projects are shared in the portal. To be as complete as possible, the data set provides projects' start and end dates, along with the total expected jobs they intend to create. The dataset covers active, completed, and cancelled projects.

WELCOMING THE WORLD AT GHGT-17

In October 2024, ERA will co-host the 17th Greenhouse Gas Control Technology Conference (GHGT-17) in Calgary with IEAGHG (a division of the International Energy Agency). In 2024, ERA and the IEAGHG received a record number of abstracts submitted—over 1,100 from 52 countries—and secured sponsorship support of over \$1.2 million.

With over 50 per cent of registrations completed and 90 per cent of exhibition booth space committed five months before the conference, GHGT-17 is on track to break several attendance records. Conference-goers will also have the opportunity to visit some of Alberta's most compelling industrial projects including the CPKC Hydrogen Train, the Alberta Carbon Conversion Technology Centre, Heidelberg Materials' carbon capture project, Blindman Brewing and more.

Along with the seven traditional technical streams, GHGT-17 is introducing a new Business Stream curated by ERA and focused on strategy to help innovators advance their technology from idea to implementation. Featuring industry leaders, policymakers, and funders, the new stream will complement the traditional, multi-faceted technical stream, forging meaningful collaborations and partnerships from across the cleantech community.



RAISING ALBERTA'S PROFILE AT STRATEGIC EVENTS

At a series of strategic conferences, workshops, roundtables, ERA worked to raise Alberta's profile as a global leader in the cleantech space through keynote speeches, panel participation, trade show booths, and more.

HIGHLIGHTS INCLUDE:

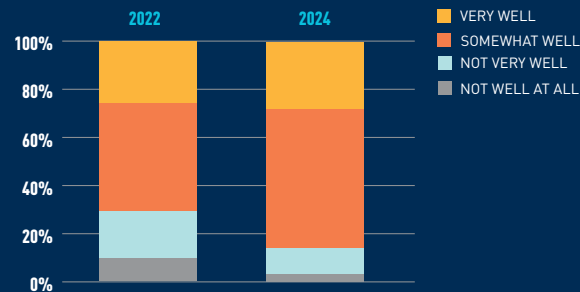


STAKEHOLDER RESEARCH

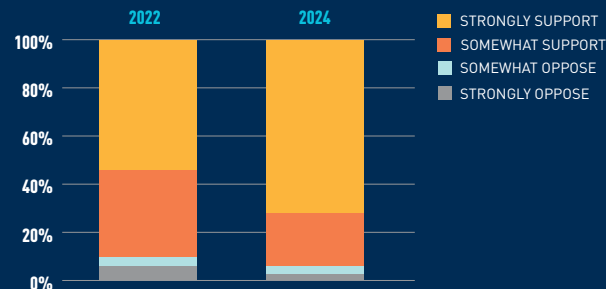
In 2024, ERA commissioned its fourth biennial, third-party stakeholder research survey. The 2024 survey saw increased scores in multiple categories from previous years, including ecosystem alignment, support for mandate, and impression of operations.

HIGHLIGHTS

ECOSYSTEM ALIGNMENT

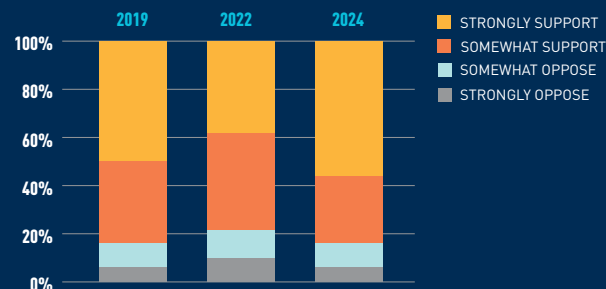


SUPPORT FOR ERA'S MANDATE



FUNDING APPROACH*

*support for distribution of TIER Funds



NET FAVOURABLE IMPRESSIONS

NET FAVOURABILITY (FAVOURABLE - UNFAVOURABLE)
WENT UP FOR ALL SIX METRICS MEASURED

STAFF **+63**

↑ ↑ ↑ UP FROM +47

COMMUNICATIONS **+48**

↑ ↑ ↑ UP FROM +35

SERVICE **+42**

↑ ↑ ↑ UP FROM +37

ACCOUNTABILITY **+38**

↑ ↑ ↑ UP FROM +21

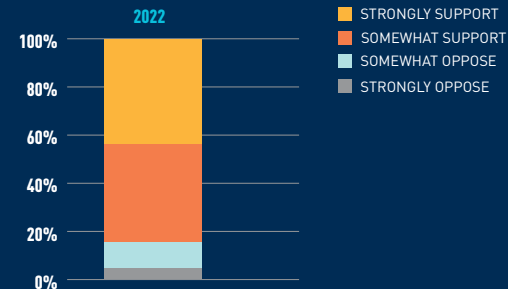
PROCESSES **+30**

↑ ↑ ↑ UP FROM +9

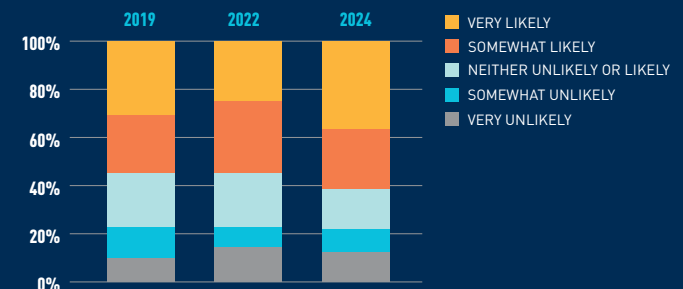
FUNDING APPLICATION PROCESS **+20**

↑ ↑ ↑ UP FROM +1

FUNDING FOCUS AREAS SUPPORT



LIKELIHOOD TO RECOMMEND



INNOVATION INVESTMENT IN ACTION



MERCER PEACE RIVER PULP MILL IMPROVES FIBRE PROCUREMENT PROCESS IN 2023

ERA FUNDING: \$7,500,000

TOTAL PROJECT VALUE: \$86,900,000

FUNDED IN 2021

COMPLETED IN 2023

Through this investment, Mercer Peace River (MPR) significantly transformed its fibre procurement process by building a state-of-the-art facility equipped with some of the most innovative debarking, chipping, and monitoring technologies, as well as establishing a fleet of high-efficiency 10-axle log trucks. By 2050, MPR is projected to have reduced fossil fuel emissions by over 900,000 tonnes of CO₂e and sequestered 2.6 million tonnes of CO₂e through forest conservation.

“The Fibre Procurement Project is not just a significant step for Mercer Peace River, but could be a game-changer for the forestry sector. ERA’s support has been instrumental in the project’s success, which is reducing emissions and waste, creating several new jobs, and ensuring Canada’s competitiveness on world markets.”

CAL DAKIN

DIRECTOR OF INNOVATION, MERCER PEACE RIVER

HUNDREDS OF THOUSANDS OF TONNES OF CONSTRUCTION MATERIAL DIVERTED FROM CALGARY LANDFILLS IN 2023

ERA FUNDING: \$8,800,000

TOTAL PROJECT VALUE: \$20,000,000

FUNDED IN 2021

COMPLETED IN 2022

About 20 per cent of waste entering Calgary landfills comes from the construction and demolition industry. In 2023, Calgary Aggregate Recycling, an Indigenous-owned concrete, asphalt, and aggregate recycling business, successfully diverted over 125,000 tonnes of soil and hydrovac slurry from local landfills through their fully operational, first-of-its-kind in Canada soil reuse facility. With that, almost 7,000 metric tonnes of GHG emissions were also removed from the environment.

“With the support from ERA and the Government of Alberta, we are pleased to disrupt the out-of-date practices in the construction industry with economical and viable solutions to position Alberta as a leader in sustainable and responsible construction.”

TRAVIS POWELL

PRESIDENT, CALGARY AGGREGATE RECYCLING





ERA-FUNDED METHANE EMISSIONS TECHNOLOGY TAKING OFF GLOBALLY

ERA FUNDING: \$175,000

TOTAL PROJECT VALUE: \$537,000

FUNDED IN 2017

COMPLETED IN 2018

Insight M, formerly known as Kairos Aerospace, announced in February 2024 that it secured over \$52 million in Series D funding to expand globally, allowing the company to bring their cost-effective, emissions-reduction technology to industrial facilities around the world. Mounted on light aircraft, the technology rapidly and cost-effectively scans industrial facilities and large areas of land to detect leaks, allowing Insight M to easily monitor spaces inaccessible to traditional methods.

“We are excited to have the support of our investors - both new and current - as we scale our value proposition, expand our global footprint, and invest in additional outstanding talent in order to assist the oil and gas industry with near- and long-term challenges and opportunities.”

GREGG ROTENBERG

CEO, INSIGHT M

CPKC SELLS ALBERTA-BUILT HYDROGEN CONVERSION KITS TO CSX TRANSPORTATION

ERA FUNDING: \$15,000,000

TOTAL PROJECT VALUE: \$33,500,000

FUNDED IN 2021

COMPLETED IN 2024

In April 2024, CSX Transportation, a leading supplier of rail-based freight transportation in North America, unveiled its first hydrogen-powered locomotive, using technology developed by CPKC after the organizations announced a joint venture for the building and deployment of hydrogen locomotive conversion kits for diesel-electric locomotives. ERA funding enabled CPKC to increase the number of hydrogen locomotive conversions in its Hydrogen Locomotive Program and add hydrogen production and fueling facilities.

“This innovative collaboration expands our hydrogen locomotive program beyond a single railroad and represents an exciting next step in proving the long-term viability of hydrogen as a solution to emissions reduction for our industry.”

KEITH CREEL

PRESIDENT AND CHIEF EXECUTIVE OFFICER, CPKC



GOVERNANCE

ERA remains accountable to the Government of Alberta. As a Delegated Administrative Organization, ERA operates under an independent Board of Directors and is required to report annually on progress, operations, and outcomes delivered.

This structure allows ERA to:

- Respond quickly to the needs of Alberta's innovation system
- Provide independent oversight when selecting the most impactful projects for funding
- Carry unallocated funds from one budget year to the next
- Support the feasibility of multi-year projects
- Reinvest funds when projects do not progress

A commitment to best-in-class governance, operational excellence, internal controls, and continuous improvement ensures ERA functions efficiently and independently.

BOARD OF DIRECTORS

- **Kelly J. Ogle, Board Chair**
- **Céline Bak**
- **Kevin Birn**
- **Mark Blackwell**
- **Kate Chisholm**
- **Jamie Curran**
- **Johannes Dyring**
- **Clive Mather**
- **David Moss**
- **Dale Swampy**

EXECUTIVE

- **Justin Riemer**, Chief Executive Officer
- **Heather Stephens**, Chief Operating Officer
- **Christophe Owtttrim**, Executive Director, Technology & Innovation
- **Craig Werner**, Executive Director, Strategy & Engagement
- **Kevin Duncan**, Executive Director, Marketing & Communications

FINANCIALS

FINANCIAL PERFORMANCE

As a trusted delivery agent for the Government of Alberta and other public funders, ERA actively manages its operations to maximize cost effectiveness and efficiency. The budget is approved by the Board of Directors and demonstrates ERA's commitment to financial responsibility. Fiscal year 2024 was the second year of a multi-year commitment by the Government of Alberta of \$50 million core grant funding per year. ERA maintains strong alignment with the policies and priorities of the Government of Alberta and has the capacity to deliver funding calls exceeding this annual funding commitment. To address project attrition, ERA has increased both the number of funding calls in the fiscal year and the amount of funding allocated to approved projects. The majority of funds held are committed to innovative technologies including approved projects and commitments for ongoing active funding calls. Financial commitments for the entire project portfolio are highlighted in the commitment note in the following financial statements.

REVENUE

The Government of Alberta committed to \$50 million of core grant funding in 2023/24. In addition to this core grant, ERA received its final contribution from the Federal Low Carbon Economy Leadership Fund (LCELF), under the executed Delivery Entity Agreement. A total of \$87.2 million has been received over the term of the agreement, with \$1.9 million recorded as revenue in fiscal year 2024. ERA increased its portfolio of low-risk investments this fiscal year to take advantage of the strong interest rate environment. This, coupled with a change to its primary financial institution, led to a significant increase in interest revenue for the year.

EXPENDITURES

ERA continues to demonstrate a highly efficient operating model. This year's operating expenditures were \$9.2 million with administration costs for the ESB program removed. The ESB program is in the process of winding down and incurred administrative costs of \$765,000 for the year. ERA expanded its internal team over the fiscal year to facilitate the increase in call activity while decreasing its reliance on external service providers. The augmented team will enhance the stewardship of the larger project portfolio and enable ERA to increase support to both the Government of Alberta and industry in catalyzing investments in priority funding areas. ERA is also investing more heavily on developing knowledge sharing tools and collateral to ensure the impact of ERA's investments and the technology development outcomes are shared widely.

A key metric for ERA continues to be the overall administrative costs compared to total funds under administration, which remained at 2.5% for fiscal 2024, consistent with the prior fiscal year. This demonstrates a track record of operational efficiency while delivering on our key outcomes.

ERA has a robust internal control framework ensuring that project payments are subject to the terms laid out in executed contribution agreements. This includes adhering to schedules which lay out required milestone tasks and deliverables to be completed prior to claiming reimbursement from ERA. ERA withholds a standard per cent of each payment until the project is completed, a final financial report is reviewed, and a final outcomes report is shared publicly. ERA's portfolio is experiencing project attrition and project delays from continued challenges of supply chains, evolving economic conditions, policy/regulatory uncertainty and competing capital allocation decisions for organizations, resulting in a higher balance in funds under management. ERA is working with all funding recipients to expedite projects where possible and enforce contractual terms where necessary to ensure funds are distributed in a timely and well controlled manner. In addition, ERA has implemented a number of enhancements to its processes and contracting template to allow for more streamlined project administration and flexibility with proponents when needed. Funding allocations have been increased to account for anticipated attrition based on historical portfolio performance.

Summary Financial Statements of

EMISSIONS REDUCTION ALBERTA

(Emissions Reduction Alberta is a registered trade
name of Climate Change and Emissions Management
(CCEMC) Corporation)

Year ended May 31, 2024

**KPMG LLP**

2200, 10175 – 101 Street
 Edmonton, AB T5J 0H3
 Canada
 Telephone 780-429-7300
 Fax 780-429-7379

INDEPENDENT AUDITOR'S REPORT ON THE SUMMARY FINANCIAL STATEMENTS

To the Board of Directors of Emissions Reduction Alberta

Opinion

The summary financial statements, which comprise the summary statement of financial position as at May 31, 2024, and the summary statement of operations for the year then ended, and related notes, are derived from the audited financial statements of Climate Change and Emissions Management (CCEMC) Corporation (operating as Emissions Reduction Alberta) ("ERA") for the year ended May 31, 2024.

In our opinion, the accompanying summary financial statements are a fair summary of the audited financial statements, in accordance with the criteria disclosed in Note 2 to the summary financial statements.

Summary Financial Statements

The summary financial statements do not contain all the disclosures required by Canadian accounting standards for non- for-profit organizations. Reading the summary financial statements and our report thereon, therefore, is not a substitute for reading ERA's audited financial statements and our report thereon.

The Audited Financial Statements and Our Report Thereon

We expressed an unmodified audit opinion on the audited financial statements in our report dated September 23, 2024.

Management's Responsibility for the Summary Financial Statements

Management is responsible for the preparation of the summary financial statements in accordance with the criteria disclosed in Note 2 to the summary financial statements.

***Auditor's Responsibility***

Our responsibility is to express an opinion on whether the summary financial statements are a fair summary of the audited financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, "Engagements to Report on Summary Financial Statements".

A handwritten signature in black ink that reads 'KPMG LLP'. The signature is written in a cursive, stylized font. Below the signature is a single horizontal line.

Chartered Professional Accountants

Edmonton, Canada

September 23, 2024

EMISSIONS REDUCTION ALBERTA

Summary Statement of Financial Position

As at May 31, 2024, with comparative information for 2023

	2024	2023
Assets		
Current assets:		
Cash	\$ 157,646,344	\$ 360,866,670
Accounts receivable	104,678	45,968
Grant receivable (note 3)	50,000,000	121,547,541
Interest receivable	9,183,384	3,359,518
Prepaid expenses	205,996	83,358
Short-term investments	330,000,000	80,000,000
	547,140,402	565,903,055
Non-current assets		
Property and equipment	90,798	53,388
	\$ 547,231,200	\$ 565,956,443
Liabilities		
Current liabilities:		
Accounts payable and accrued liabilities (note 4)	\$ 6,558,532	\$ 12,595,678
Deferred Revenue	18,500	-
	6,577,032	12,595,678
Net assets		
General fund - unrestricted	\$ (201,883)	(89,561)
Restricted fund	540,856,051	553,450,326
	\$ 540,654,168	553,360,765
Commitments (note 4)		
	\$ 547,231,200	\$ 565,956,443

See accompanying notes to summary financial statements.

On behalf of the Board of Directors:



Director



Director

EMISSIONS REDUCTION ALBERTA

Summary Statement of Operations

For the year ended May 31, 2024, with comparative information for 2023

			2024	2023
	General Fund	Restricted Fund	Total	Total
Revenue				
Grant revenue (note 3)	\$ -	\$ 51,880,976	\$ 51,880,976	\$ 82,810,673
Interest income	-	29,693,191	29,693,191	19,190,404
	-	81,574,167	81,574,167	102,001,077
Project expenses (note 4)	-	84,345,763	84,345,763	84,392,184
Deficiency of revenue over project expenses	-	(2,771,596)	(2,771,596)	17,608,893
Operating expenses				
Program management	-	7,738,877	7,738,877	7,753,916
Consulting contracted services	-	922,779	922,779	664,026
Corporate costs	-	1,032,687	1,032,687	794,548
Amortization	-	32,335	32,335	30,636
Conference expenses	112,322	-	112,322	89,561
Board remuneration and expenses	-	96,001	96,001	128,122
Total operating expenses	112,322	9,822,679	9,935,001	9,460,809
(Deficiency) Excess of revenue over expenses for the year	\$ (112,322)	\$ (12,594,275)	\$(12,706,597)	\$ 8,148,084

See accompanying notes to summary financial statements.

EMISSIONS REDUCTION ALBERTA

Notes to Summary Financial Statements

Year ended May 31, 2024, with comparative information for 2023

1. Authority:

Climate Change and Emissions Management (CCEMC) Corporation ("CCEMC") is an Alberta-based, independent, not-for-profit organization incorporated under the Canada Corporations Act on February 17, 2009, and continued under the Canada Not-for-profit Corporations Act on October 14, 2016; its operations commenced on June 1, 2009. On October 21, 2016, CCEMC registered the trade name of Emissions Reduction Alberta ("ERA") and uses this as its operating name. ERA's mandate is to identify and accelerate innovative solutions that secure Alberta's success in a lower carbon economy. The Technology Innovation and Emissions Reductions Fund (formerly the Climate Change and Emissions Management Fund) (the "Fund") is established under the Emissions Management and Climate Resilience Act, SA 2003, c. E-7.8 (formerly the Climate Change and Emissions Management Act) (the "Act") by the Government of Alberta to support investment in innovation and clean technologies that will reduce Alberta's emissions of specified gases and support its ability to adapt to climate change. The Fund provides the primary source of revenue for ERA.

The Government of Alberta and ERA entered into an Agreement dated and effective March 8, 2017, together with an Amending Agreement dated April 21, 2023, for the period up to and including March 31, 2025, with respect to funding under the Emissions Management and Climate Resilience Act. Subsequent to year end, the Government of Alberta and ERA executed an amendment to the Grant agreement, which extended the current grant period up to March 31, 2026.

As a not-for-profit organization, ERA is exempt from tax in accordance with Section 149(1)(l) of the Income Tax Act (Canada).

2. Basis of presentation:

The summary financial statements do not contain all the disclosures required by Canadian accounting standards for not-for-profit organizations. The statement of changes in net assets, the statement of cash flows, and certain note disclosures have been omitted. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of ERA.

ERA is committed to full accountability and transparency in all we do. Our audited financial statements for the year ended May 31, 2024, including all disclosures required by Canadian accounting standards for not-for-profit organizations, can be found on ERA's website at www.eralberta.ca.

3. Grant revenue:

Funds are granted from the Government of Alberta to ERA on an annual basis through a Grant Agreement. The current Grant Agreement was executed on March 8, 2017, amended on April 21, 2023, and is effective until March 31, 2025.

On March 18, 2024, ERA received a letter confirming an allocation of \$50 million for fiscal year 2023-24. These funds are to be used to execute ERA's business plan, as well as for the purposes stated in the Grant Agreement and the memorandum of understanding. The balance is included as a grant receivable as at May 31, 2024 and was received on July 3, 2024.

EMISSIONS REDUCTION ALBERTA

Notes to Summary Financial Statements

Year ended May 31, 2024, with comparative information for 2023

3. Grant revenue (continued):

On January 28, 2021, ERA executed an amendment to the original Delivery Entity Agreement dated February 22, 2019, with respect to funds that are committed to ERA under the Federal Low Carbon Economy Leadership Fund ("LCELF"). Under the amended agreement, the Government of Alberta committed up to \$99.8 million in funding to ERA to support various initiatives including Food, Farming, and Forestry Challenge, Shovel Ready Challenges, Partnership Intake Program (PIP), Energy Savings for Business (ESB), and the Industrial Efficiency Challenge previously committed to in the original Delivery Entity Agreement. Fiscal year 2023-24 was the final year ERA was able to make a claim under the LCELF program and eligible costs claimed under the agreement totaled \$87.2 million. The variance from the original commitment is due to a lack of eligible project spending in the PIP and Shovel Ready - Greenfield programs in the timeframe required for the LCELF funding. In the current fiscal year, ERA has recognized \$1.9 million of LCELF grant revenue (2023 – \$7.8 million). ERA received reimbursement of \$21.2 million (2023 - \$27.3 million) in the current year.

Subsequent to year end, the Government and ERA executed amendments to both the Grant agreement and Memorandum of Understanding ("MOU"). Amendments to the Grant agreement extended the current grant period up to March 31, 2026 and noted that interest amounts earned in a given fiscal year are to be reported to the Government of Alberta and future grant amounts may be adjusted for interest earned in the prior period. The amended MOU provides additional clarity around the roles of both parties.

4. Commitments and guarantees:

During the year, ERA approved funding for 49 projects, 5 projects were cancelled, 6 projects were terminated, and 9 projects were not initiated. 5 out of the 9 never initiated projects were approved in fiscal year 2023 and remained at the approved status at 2023 year end. Terms used for projects include: Never initiated - cancelled projects without an executed Contribution Agreement; Cancellation - cancelled projects with an executed Contribution Agreement, however no payments are made; Terminated - cancelled projects with an executed Contribution Agreement and payments made for at least one completed milestone.

As at May 31, 2024, ERA has 261 (2022 – 237) executed contribution agreements and has commenced or completed funding for 223 (2022 – 209) of these approved projects. Funding for 38 of the 261 executed projects has not commenced. Total committed funds for executed projects is the difference between the total funding approved for executed contribution agreements and project expenses incurred to date or contribution agreements cancelled. A summary of these amounts (excluding the ESB program) is outlined as follows:

	2024	2023
Total committed funds for executed projects – Beginning of year	\$ 331,013,300	\$ 374,836,902
Total funds for executed projects approved or adjusted during the year	125,876,696	55,334,336
Project expenses incurred during the year	(63,212,043)	(76,557,938)
Contribution agreements cancelled or terminated during the year	(53,751,984)	(22,600,000)
Total committed funds for executed projects – End of year	339,925,969	331,013,300
Total funds for projects approved but not yet executed	41,829,275	34,058,356
Total commitments	\$ 381,755,244	\$ 365,071,656

EMISSIONS REDUCTION ALBERTA

Notes to Summary Financial Statements

Year ended May 31, 2024, with comparative information for 2023

4. Commitments and guarantees (continued):

Funds allocated to the executed contribution agreements are subject to ERA's review and approval prior to disbursement to ensure full compliance with the terms of the contribution agreement. The actual financial commitment could therefore differ materially from \$339,925,966 but will not exceed that amount. Project expenses incurred during the year decreased due to the timing of milestone deliverable completion on active projects. Sufficient funds are held in cash and short-term investments as at May 31, 2024, to service these commitments, approved projects and other initiated commitments. Total project expenses noted above of \$63,212,043 (2023 - \$76,557,938) includes \$3,062,090 of accrued liabilities (2023 - \$2,781,020) and \$2,114,843 accounts payable (2023 - \$8,536,818) at year-end. There are 10 projects totaling \$41,829,275 (2023 - \$104,881,299) that have been approved for funding by ERA's Board of Directors but for which contribution agreements have not yet been executed as of May 31, 2024.

Subsequent to year-end on June 19, ERA approved an additional 28 projects, 22 of the projects were approved through the Emerging Innovators Call and 6 through the Partnership Intake Program. Total dollar value approved was \$73,859,848 (2023 - \$34,479,275). These have not been reflected in the above table and are in addition to the total commitments of \$381,755,244.

Five of the previously executed projects have been terminated or cancelled, and three approved projects will not proceed, totaling \$37,890,866. Ten approved projects, totaling \$27,352,775, now have executed contribution agreements. As at September 23, 2024, ERA has 25 projects remaining, totaling \$75,995,848, which have been approved for funding by ERA's Board of Directors but for which contribution agreements have not been executed.

In addition to the commitments noted above, ERA has approved incentive funding under the ESB program. This program was launched in November 2020 and is now closed to intake. Projects will complete up to December 2024 and remaining incentive amounts will be paid upon successful completion of the projects. Program close out activities are currently underway. A summary of the ESB funding is outlined below:

	2024	2023
Total incentive funding pre-approved	4,790,802	10,097,581
Total incentive funding post-approved	7,115,675	4,043,223
Total Commitments – End of year	\$ 11,906,477	\$ 14,140,804

Total project expenses of \$84,345,763 includes \$21,133,719 (2023 - \$7,834,246) of payments related to the ESB program. This amount includes \$790,194 accounts payable (2023 - \$109,785) at year-end.

Subsequent to year-end, post-approved funding has decreased by \$4,636,017 for the ESB program as projects got paid and pre-approved funding has decreased by \$2,274,940.

On June 24, 2024, ERA signed an agreement with Natural Resources Canada (NRCan) related to a \$40 million grant for the Greening Industrial Facilities and Manufacturing Program (GIFMP). GIFMP provides financial assistance to support the implementation of energy efficiency and energy management solutions in industrial facilities. This program will be augmented by \$10 million already provided by the Government of Alberta to ERA from the Fund. Design work for this program has been initiated and it is expected that the program will launch in the fall of 2024 and will run to March 31, 2027.

ERA indemnifies its directors against claims reasonably incurred and resulting from the performance of their services to ERA. No amounts are reflected in the financial statements related to these indemnifications.

EMISSIONS
REDUCTION
ALBERTA



Alberta 