

Alberta

2024 - 2027 BUSINESS PLAN

BUSINESS PLAN

EMISSIONS
REDUCTION
ALBERTA



2024

2027



LAND ACKNOWLEDGEMENT

In the spirit of reconciliation, we have the privilege of living, working, and investing on traditional territories, which include Treaty 6, Treaty 7, and Treaty 8 Nations; Metis Nations (Region 3 and 4); Inuit; and all others who live and care for these lands. We are dedicated to promoting a culture of collaboration and meaningful engagement.

CONTENTS

P3

MESSAGE FROM THE CHAIR
KELLY J. OGLE

P4

MESSAGE FROM THE CEO
JUSTIN RIEMER

P5

EMISSIONS REDUCTION ALBERTA OVERVIEW

P9

BUSINESS PLAN AT-A-GLANCE

P11

STRATEGIC PRIORITY 1
ACCELERATE TECHNOLOGY

P15

STRATEGIC PRIORITY 2
DRIVE COMMERCIALIZATION

P19

STRATEGIC PRIORITY 3
MAXIMIZE IMPACT

P23

BUDGET

Cover Image: Calgary Aggregates Recycling, Soil Reuse Facility Expansion

MESSAGE FROM THE CHAIR

Since its inception, Emissions Reduction Alberta (ERA) has proven to be an effective tool for the Government of Alberta to drive innovation and economic development while decreasing its emissions footprint. I am honoured to have been appointed as the new Board Chair of ERA by the Government of Alberta and proud to join the well-oiled machine that is ERA.

Alberta has an established and globally recognized record of enabling emissions reduction technologies that go hand in hand with the development of our energy resources. The province has an effective, common-sense, and innovative approach to reducing emissions while keeping energy reliable, secure, and affordable through its historic and first-of-kind carbon price on industry and its Emissions Reduction and Energy Development (ERED) Plan. Launched last year, ERED is the next chapter in Alberta's long environmental leadership history. It clearly charts our course for cutting emissions through innovation, attracting investment and supporting good-paying jobs.

Alberta's publicly funded organizations have a critical role in growing the province's economy, creating jobs, and, in ERA's case, reducing emissions. ERA is uniquely positioned within the province's innovation system to help deliver on the Government of Alberta's commitment to achieving a carbon-neutral economy by 2050. With its strong technological expertise, extensive investment experience, and sound industry connections, ERA is helping Alberta accelerate its desired emissions reduction outcomes, supporting innovators in de-risking their technologies, and delivering positive reputational and economic impacts for Albertans.

As we celebrate our 15th year, we must take a moment to celebrate the great achievements we have made and recognize we need to strive for even greater impact in the future. That's why we've developed this Business Plan; one that builds on our successes and explores new areas of opportunity.

Our efforts will continue to benefit industries and organizations of all sizes, across all sectors, targeting innovation in the oil sands; electricity; heavy industry; waste and the circular economy; food farming, and forestry; nuclear; carbon capture, utilization, and storage (CCUS); hydrogen; and more.

Carbon-neutrality will not be achieved easily or overnight, but we will, in true Alberta fashion, roll up our sleeves and doggedly pursue this aspiration while prioritizing affordable, reliable, and secure energy while protecting our economy. I look forward to supporting ERA's pragmatic and strategic Business Plan and the benefits it will bring to our environment, and our economy today and into the future. It is a privilege to be part of a team that tangibly supports the ingenuity, talent, expertise, and the incredible entrepreneurial spirit of Alberta's industries.

Sincerely,

KELLY J. OGLE
Chair, Emissions Reduction Alberta

MESSAGE FROM THE CEO

For 15 years, ERA has supported the Government of Alberta in achieving its environmental and economic goals by stewarding late-stage technology investments across multiple sectors. In our decade and a half of existence, we can safely say, the pace of technological innovation has never been faster and the need to reduce emissions, lower costs for businesses, attract investment, and create jobs in Alberta has never been greater.

Since 2009, we've committed \$929 million to 277 projects worth \$8.8 billion. These projects are estimated to deliver cumulative GHG reductions of 42.5 million tonnes by 2030 and 117.6 million tonnes by 2050. Our investments are also putting people to work. These projects will lead to more than 35,000 person-year jobs by 2027 and contribute over \$5.4 billion to Alberta's GDP. This is only the beginning—the real win is scaling up these projects so they can be deployed across the globe.

To help get us there, ERA will continue to provide at least two competitive funding opportunities a year, which help advance the cross-cutting technology areas critical for emissions reduction and economic growth. These include the potential following calls:

- ▶ Industrial Decarbonization,
- ▶ Energy Efficiency & Affordability,
- ▶ Clean Energy, Advanced Materials, and
- ▶ Next-Generation Carbon Capture

As always, our Partnership Intake Program will be utilized to fill gaps in our portfolio to ensure high-potential and strategically important projects get the support they need to see scale-up success. ERA will also launch the Green Industrial Facilities and Manufacturing (GIFM) program with \$50 million in funding focused on energy efficiency and energy management solutions.

We will also expand our reach, working closely with the XPRIZE Foundation on a Lithium-focused funding competition in partnership with the State of Wyoming.

To make sure our investments continue to be relevant, ERA will refresh its Technology Roadmap and publish the 5th edition in 2024.

As a convener, ERA will continue to work with our partners to identify and alleviate barriers to commercialization. We'll collaborate with partners in the innovation ecosystem to launch our Innovator Support Services Program, pairing ERA proponents with service providers that can help strengthen business success by offering strategic support to increase commercial readiness and commercialization success.

We're working closely with government, industry, and innovators to ensure alignment with the province's policy direction and to support promising technologies sought by the market. We work hard to put the right delivery mechanisms in place — an efficient business model, a balanced project portfolio, robust performance metrics, and the stable, predictable funding needed to support the best and the brightest ideas.

Sincerely,

JUSTIN RIEMER
CEO, Emissions Reduction Alberta

EMISSIONS REDUCTION ALBERTA OVERVIEW



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



INNOVATION



COLLABORATION



TRANSPARENCY



INTEGRITY

VALUE PROPOSITION

ERA invests proceeds from carbon pricing paid by Technology Innovation Emissions Reduction (TIER)-regulated facilities to reduce greenhouse gas (GHG) emissions and strengthen the competitiveness of industries in Alberta. These investments help innovators develop and demonstrate GHG-reducing technologies. These technologies 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.

STRATEGIC FUNDING

ERA delivers its mandate through a Grant Agreement with the Government of Alberta. ERA receives its funding from the Government of Alberta through the TIER Fund, the Province's industrial carbon pricing and emissions trading system. TIER is the core of emissions management in Alberta. It helps industrial facilities find innovative ways to reduce emissions and invest in clean technology to stay competitive and save money.

ERA also receives funding from the federal government through the Low Carbon Economy Leadership Fund (LCELF) and other federal funds. This funding supports both technology demonstration projects and ERA's Energy Savings for Business (ESB) suite of funding.

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

BUSINESS MODEL

While many jurisdictions have a mechanism to invest in clean technology, ERA's model is unique:

- ▶ It offers a clear line of sight from the carbon price paid by industry under the TIER regulation to investment in the solutions needed to achieve GHG reductions.
- ▶ Funding is directed at accelerating innovation toward commercial deployment and adoption by de-risking technology in the crucial pilot, demonstration, and first-of-kind deployment stages of development.
- ▶ Non-dilutive* grant funding allows ERA to reduce innovation risk with industry and private funders to accelerate the development of clean technologies.
- ▶ Its Delegated Administrative Organization (DAO) structure means ERA has no annual investment caps, can fund multi-year projects, carry funding over from year to year, and reinvest funds when projects do not progress.
- ▶ ERA requires 1:1 matching of its investments with private dollars. For projects funded to date, for every dollar invested by ERA, \$7.20 has been leveraged from public and private funders.

BOARD AND GOVERNANCE

ERA is a not-for-profit organization that reports to an independent Board of Directors. ERA remains accountable to the Government of Alberta through the TIER Fund Administration Regulation, a Memorandum of Understanding, and a Grant Agreement. Through this accountability framework, ERA has two primary reporting requirements to the Alberta Ministry of Environment and Protected Areas:

- ▶ Delivery of an annual rolling three-year Business Plan to highlight priorities and planned activities.
- ▶ Completion of an Annual Report to highlight achievements and outcomes from each fiscal year.

The governance role of ERA's Board involves strategic planning, organizational oversight, risk management, standards of business conduct, and reporting to the Government of Alberta. They are also responsible for selecting and evaluating the performance of ERA's CEO in alignment with organizational goals.

ERA's Board makes the final investment decision on funded projects and provides advice to inform Alberta's overall efforts to achieve environmental and economic objectives. With highly accomplished backgrounds across industry and government, ERA's Board provides tremendous expertise and leadership to the organization.

The Board includes:

- ▶ Kelly J. Ogle – Chair
- ▶ Céline Bak
- ▶ Mark Blackwell
- ▶ Kate Chisholm
- ▶ Jamie Curran
- ▶ Johannes Dyring
- ▶ Clive Mather
- ▶ David Moss



TAQA, North Crossfield Gas Plant

PROJECTED PORTFOLIO IMPACT

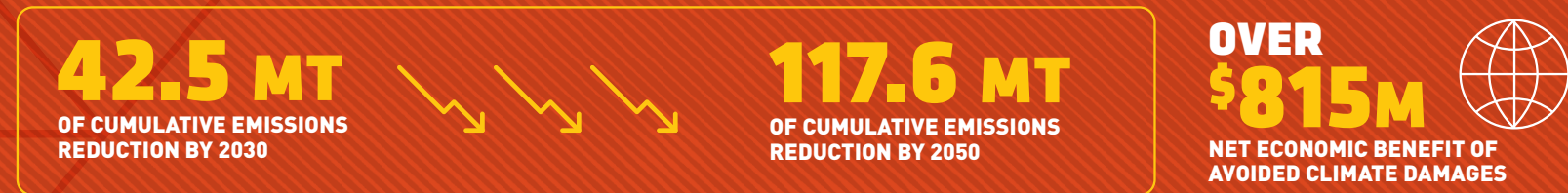
TECHNOLOGY SUPPORTED



ECONOMIC OUTCOMES



ENVIRONMENTAL IMPACT



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

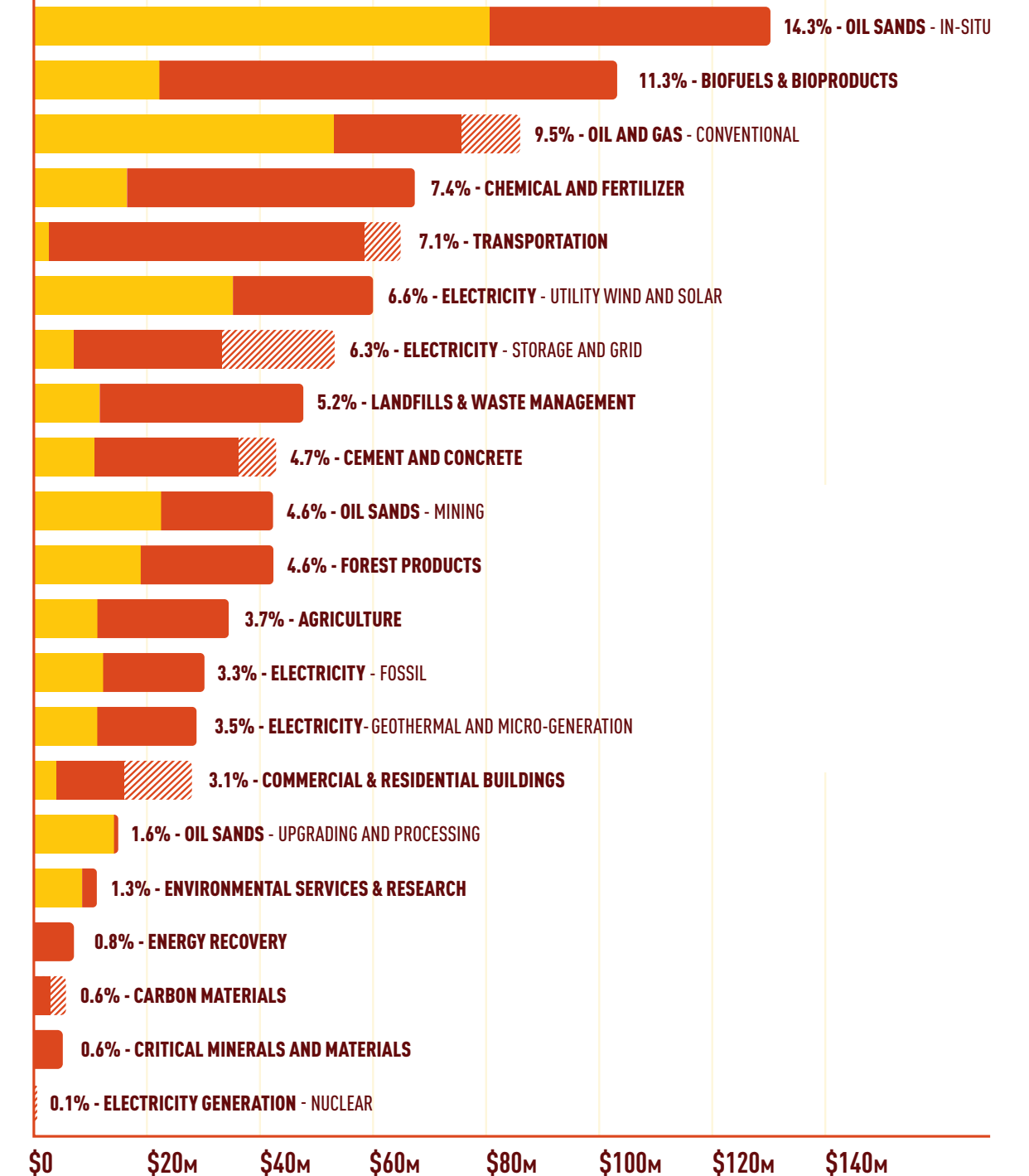
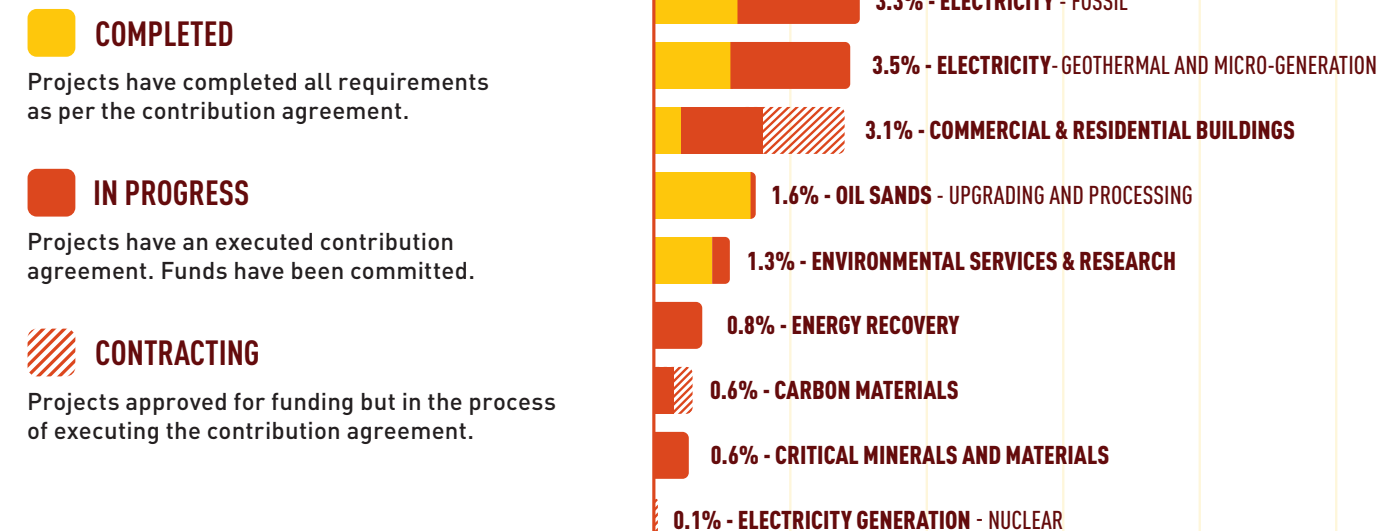


Note: Data accurate as of April 2024

BALANCED PORTFOLIO

The 2024-27 Business Plan considers ERA's portfolio approach to technology investment. ERA's approach acknowledges the importance of investing in technologies for near-term cost and GHG reductions that will maintain the competitiveness of Alberta's existing industries.

The oil sands industry is the largest and fastest growing source of greenhouse gases in Alberta, therefore is the largest part of ERA's portfolio. However, ERA's Technology Roadmap (TRM) takes a technology platform approach, which acknowledges that decarbonization solutions often have the potential to benefit multiple sectors. The ERA approach to knowledge sharing ensures that advances and successes in one sector can benefit and create progress in another. It is important to note that more than half of the projects ERA funds are led by small- and medium-sized enterprises. A diverse portfolio that includes projects from various sectors and technologies is critical for success.



BUSINESS PLAN AT-A-GLANCE

STRATEGIC PRIORITIES

ERA has three strategic priorities to deliver on its mandate and vision for Alberta. These priorities serve as the framework for deliberate initiatives that ERA will operationalize over the next three years to deliver the technologies the province and the world needs to reduce emissions and achieve a carbon-neutral economy by 2050.

1. ACCELERATE TECHNOLOGY

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

2. DRIVE COMMERCIALIZATION

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

3. MAXIMIZE IMPACT

Maximize ERA's impact beyond technology support by sharing knowledge, promoting lessons learned, and striving for operational excellence.

1. ACCELERATE TECHNOLOGY

OBJECTIVES

1. Identify high-potential opportunities and gaps where technology investment can accelerate clean technology solutions that can drive Alberta toward a carbon-neutral economy.
2. Support efforts by Alberta's businesses to accelerate innovative clean technologies toward commercialization and deployment in Alberta and beyond, resulting in increased employment and investment attraction in Alberta's clean technology sectors.

1.1 STRATEGY

Manage and invest in a balanced portfolio directed by the ERA's Technology Roadmap (TRM).

Initiatives

- 1.1.1 Identify solutions that reduce emissions for Alberta industries, build on our strengths, and help create new business opportunities.
- 1.1.2 Deliver competitive funding calls and continuous intake programming.

2. DRIVE COMMERCIALIZATION

OBJECTIVES

1. Accelerate commercialization and market adoption of Alberta-based emissions-reducing technologies within Alberta, across Canada, and around the world.
2. Share technological learnings and project knowledge to accelerate commercial deployment of technologies.
3. Leverage investments to create larger pools of capital for innovation and technology.
4. Foster economic benefits (direct and indirect) in Alberta from projects funded by ERA.

2.1 STRATEGY

Reduce barriers to commercialization through thought leadership and knowledge sharing.

Initiatives

- 2.1.1 Leverage federal funding and programming.
- 2.1.2 Increase and strengthen strategic partnerships.
- 2.1.3 Strengthen international partnerships.
- 2.1.4 Uncover and alleviate barriers to commercialization.
- 2.1.5 Engage ecosystem supports.

2.2 STRATEGY

Deliver programming to support the market adoption of commercialized emissions-reducing technologies.

Initiatives

- 2.2.1 Complete Energy Savings for Business (ESB) program.
- 2.2.2 Launch Green Industrial Facilities and Manufacturing (GIFM) program.
- 2.2.3 Innovator Support Services program.

3. MAXIMIZE IMPACT

OBJECTIVES

1. Promote widespread dissemination of knowledge and lessons learned from ERA-supported technologies among innovators to gain support for greater adoption and scale-up.
2. Increase awareness of innovation system.
3. Incorporate project learnings into future implementation and projects across the province.
4. Increase recognition of Alberta as an innovation and clean technology leader, strong environmental steward, and globally competitive clean technology investment destination.
5. Demonstrate the efficient and effective use of public funds.

3.1 STRATEGY

Refresh the Technology Roadmap (TRM).

Initiative

- 3.1.1 Engage with government, industry, and innovators on investment priorities.

3.2 STRATEGY

Elevate awareness of ERA's impact.

Initiatives

- 3.2.1 Host and participate in strategic events, workshops, and conferences.
- 3.2.2 Develop ERA impact stories to engage new and existing audiences.
- 3.2.3 Secure media coverage.
- 3.2.4 Engage with project proponents.
- 3.2.5 Build internal awareness and alignment.

3.3 STRATEGY

Provide the Government of Alberta with opportunities to share ERA's success and lessons learned.

Initiatives

- 3.3.1 Government of Alberta participation in funding announcements, workshops, roundtable meetings, and key ERA-hosted events.
- 3.3.2 Host regular, proactive briefings and knowledge sharing events.

3.4 STRATEGY

Strengthen ERA's performance management framework.

Initiatives

- 3.4.1 Refine ERA's strategic dashboard to better identify lessons learned.
- 3.4.2 Quantify and report GHG reductions.
- 3.4.3 Launch open data portal.
- 3.4.4 Quantify and report economic impact.

3.5 STRATEGY

Continuous improvement of operations and governance.

Initiatives

- 3.5.1 Seek out and implement ongoing operational efficiencies.
- 3.5.2 Continue to foster an equity, diversity, and inclusion culture.

1.0 ACCELERATE TECHNOLOGY

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

OBJECTIVES

1. Identify high-potential opportunities and gaps where technology investment can accelerate clean technology solutions that can drive Alberta toward a carbon-neutral economy.
2. Support efforts by Alberta's businesses to accelerate innovative clean technologies toward commercialization and deployment in Alberta and beyond, resulting in increased employment and investment attraction in Alberta's clean technology sectors.

KEY INDICATORS

- ▶ Total project investment and total dollars invested.
- ▶ Direct, market, and enabled GHG reductions.
- ▶ Technology Readiness Level (TRL)* progression of projects.
- ▶ Jobs created.
- ▶ GDP impact.
- ▶ Measurable non-GHG environmental, social, and other benefits.

*Technology readiness levels are a method for estimating the maturity of technologies.

STRATEGY:

1.1 Manage and invest in a balanced portfolio directed by ERA's Technology Roadmap
The Technology Roadmap (TRM), ERA's investment strategy, aligns with the Government of Alberta's Emissions Reduction and Energy Development Plan's priorities and innovation needs. ERA's TRM serves as a catalyst for its technology investments and is all-encompassing in terms of sectors in Alberta. Primarily, it guides ERA's investments and lays out the pathways for Alberta to become a global hub for innovation and technology.

It focuses on cross-cutting technology areas of investment that can be adapted and deployed across numerous sectors of the economy. These include:

- ▶ Carbon Sequestration
- ▶ Future Fuels
- ▶ Energy Efficiency
- ▶ Industrial Transformation
- ▶ Circular Economy

To achieve a balanced portfolio, ERA will execute the following initiatives. The latest edition of the TRM can be [found here](#).

INITIATIVES:

1.1.1 Identify solutions that reduce emissions for Alberta industries, build on strengths, and create new business opportunities
Alberta industry has a track record of driving the discovery and adoption of clean technology. ERA will continue to help bring ideas to Alberta for environmental and economic benefits by enhancing its technology scouting capacity. ERA will leverage its network of Trusted Partners and provincial, national, and international strategic partners to identify shared challenges and opportunities and tap into global innovation activity.

1.1.2 Deliver competitive funding calls and continuous intake programming
ERA's funding is delivered through targeted, competitive funding challenges and continuous intake programming. ERA's rigorous and transparent processes and systems are well-regarded and designed to fill a significant need for de-risking technologies that have been proven in concept and prototype and need to be scaled up for field piloting, demonstration, and first-of-kind commercial deployment. In addition, ERA will further explore opportunities to support feasibility and front-end engineering design (FEED) studies for strategically important future emissions reduction technology projects, and where significant opportunities exist to best leverage ERA support prior to a final investment decision on major projects of interest.

ERA understands that technology investment across multiple focus areas and sectors is needed to create a carbon-neutral economy. ERA continues to be committed to an approach that is flexible and not technology-prescriptive to allow for the best solutions for emissions reductions to come forward. ERA's TRM deliberately moved away from a sector-by-sector focus and towards a technology platform approach, which better reflects the reality that decarbonization solutions are often cross-cutting with the potential to deliver benefits across multiple sectors. In the same spirit, the 2024-27 Business Plan commits to delivering competitive funding calls that are accessible to a broad range of sectors and technology classes.

ERA Funding Program Outlook 2024-2026

By moving to a predictable, consistent schedule for funding call delivery, ERA is responding to stakeholder feedback and creating greater certainty for technology innovators and industry participants.

For the term of this Business Plan, ERA anticipates delivering two major competitive funding calls annually.

Annual Open Call

Estimated Launch: Spring 2024, Spring 2025, and Spring 2026

Example Focus Area:

Open Call – Advancing Decarbonization
Transitioning to a carbon-neutral economy requires the de-risking, demonstration, and deployment of a wide range of novel technologies and solutions. These technologies may include fuel switching to electricity or clean fuels, waste heat recovery; thermal energy storage; clean energy production from geothermal, nuclear, and other sources; energy efficiency and energy management; automation and novel digital solutions; novel feedstocks; integration of nature-based solutions and ecosystem sustainability; circular processes and practices for waste reduction; non-combustion hydrocarbon products and other advanced materials; and methane reduction, among others.

By investing annually in decarbonization opportunities across multiple sectors, ERA expects to achieve the following outcomes:

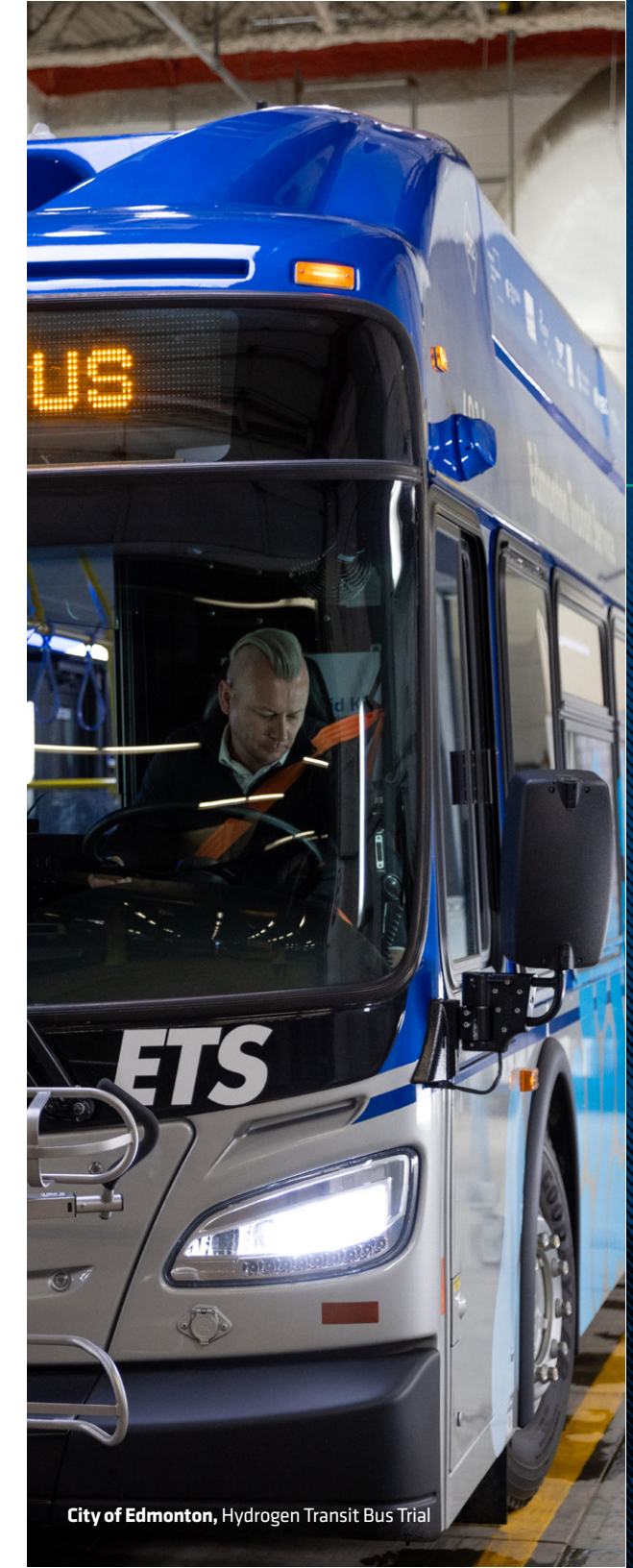
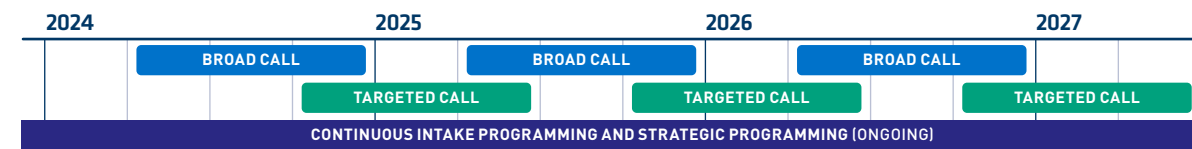
- ▶ Attract world-leading solutions that will reduce emissions while enhancing competitiveness and reducing costs.
- ▶ Develop a pipeline of commercial-ready emissions-reducing technologies that can be broadly adopted across Alberta's major natural resource and ecosystem-based sectors.
- ▶ Foster new low-emissions industries in Alberta to deliver economic diversification and open the province to new market opportunities.

Annual Targeted Calls

Estimated Launch: Fall 2024, Fall 2025, and Fall 2026

Example Focus Area:

Energy Efficiency & Affordability
Affordability and access to reliable energy is key for Alberta's manufacturing, agriculture, and buildings sectors. These sectors are also known to have significant untapped potential for energy efficiency improvements but have limited ability to absorb technology risk and face significant systems integration, technical, and business case challenges that prevent the early adoption of emissions reduction solutions. An additional challenge is long asset life; according to the Canadian Climate Institute, 70 per cent of all current buildings will still be in use in 2050, for example. This makes deep retrofits of infrastructure and equipment a critical need.



City of Edmonton, Hydrogen Transit Bus Trial

ERA investment in enhanced energy efficiency, energy management, and process enhancements for residential and commercial buildings, as well as light industry and agriculture, will deliver the following outcomes:

- ▶ Reduce costs and emissions while expanding new revenue opportunities for consumers including households, farmers, and small businesses.
- ▶ Increase accessibility, affordability, and reliability of Alberta's energy systems.
- ▶ Catalyze significant economic benefits including job creation and market growth associated with the development of a local deep retrofit industry and demand for new clean technologies.

Example Focus Area: Clean Energy

Energy demand remains the largest driver of GHG emissions globally and in Alberta. There is a critical need and substantial economic opportunity associated with the development and production of new clean energy carriers (such as hydrogen, renewable fuels, or sustainable aviation fuels) and improved approaches to generating and managing clean energy (such as nuclear, geothermal, novel renewables, energy storage, or advanced bioenergy). Opportunities exist for transformative innovation, step-change improvements, and critical technology enablers to reduce costs and meet future demands for next-generation clean fuels, heat, and electricity.

ERA investment in these areas can help achieve the following outcomes:

- ▶ Improved diversity and resilience of Alberta's energy systems and enabling access to affordable clean energy for fuel switching across multiple sectors to help support emissions reduction efforts.

- ▶ Alberta is a main producer of many forms of energy that can benefit from local consumers and export customers. Through this focus area, ERA will help maintain Alberta's leadership role.
- ▶ Deliver substantial economic benefits associated with attraction of new investment, deployment of capital projects, growth in export opportunities, and local job creation.

Example Focus Area: Advanced Materials

Material products are essential to the economy and present a significant opportunity for emissions reduction. For existing materials (such as concrete, plastics, and wood products) there is a critical need to reduce embodied carbon, enhance material properties with additives and/or new formulations, and improve circularity via better waste management, recovery, and recycling. Significant efforts are also underway to develop new materials such as non-combustion products from Alberta's hydrocarbon resources. These include high-value metals (such as vanadium, titanium, and lithium) which are found in trace amounts within Alberta's natural resources, novel bioproducts, and carbon-based materials from carbon dioxide utilization. These materials can facilitate technology such as advanced battery and fuel cell development and lighter and more durable products used in everyday life. However, these technologies are nascent in Alberta and are at a critical stage where funding support can significantly accelerate development and commercialization prospects.

ERA's investment in this area is expected to deliver the following outcomes:

- ▶ Increased competitiveness of Alberta's existing manufacturing and resource sectors.
- ▶ Attract and grow new industries in Alberta with substantial export potential.
- ▶ Reduce overall emissions impacts and embodied carbon footprint of the material supply chain.

Example Focus Area: Next-Generation Carbon Capture

Since 2009, ERA has provided more than \$160 million toward Carbon Capture Utilization and Storage (CCUS) projects. The most significant challenge to the long-term viability of CCUS is financial feasibility, which is driven by the high capital cost and operational challenges of existing capture technologies. If CCUS is to become a major component of a carbon-neutral future for Alberta, a new generation of higher-performing, lower-cost CCUS solutions that are applicable to a wider range of flue gas streams is needed. ERA will explore next-generation carbon capture technology options beyond traditional, commercially available amine processes to address these challenges with a focus on improving performance and reducing the cost of capturing CO₂, particularly from lower-concentration sources. In parallel, ERA will aim to expand its portfolio of carbon removal technologies such as bioenergy-with-CCS (BECCS) and nature-based solutions (NBS).

ERA's support for technologies in this area will achieve outcomes that include:

- ▶ Capitalize on Alberta's momentum in the CCUS space and develop local innovation/deployment capacity and talent.
- ▶ Establish a pipeline of next-generation carbon management solutions for hard-to-abate sectors and residual emissions to support mid-century emissions reduction goals.
- ▶ Reduce the costs of CCUS technology deployments to maintain Alberta's competitiveness.

Timing and scope of competitive funding calls are subject to change based on direction from the Government of Alberta, market dynamics and other factors. As ERA develops the updated TRM, direction may change to focus on strategic opportunities.

1.2.2 Continuous intake programming

While most of ERA's funding is distributed through its competitive funding calls, ERA also considers projects through its continuous intake programming. This allows ERA to remain nimble in addressing gaps to ensure high-potential and strategically important projects can be evaluated outside the call for proposals cycle.

Partnership Intake Program

Core to ERA's continuous intake programming, the Partnership Intake Program accelerates innovation by leveraging funds, coordinating investment priorities, and reducing administrative burden for project proponents. It also allows ERA to work with other funders to accelerate technology development. The program has been an effective tool for capturing opportunities that might otherwise be missed and for addressing strategic gaps in ERA's portfolio.

ERA's ongoing use of the Partnership Intake Program is expected to deliver the following outcomes:

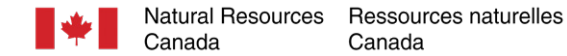
- ▶ Ensure ERA's funding is accessible to the widest possible range of applicants.
- ▶ Attract novel projects and technologies that may not align with calls for proposals but nonetheless have significant strategic value.
- ▶ Maximize the emissions reductions, economic benefits, and financial leverage associated with ERA's investments, for example, by supporting feasibility/FEED studies for strategically important technologies.

The program relies on co-funding projects with organizations that meet ERA's definition of a Trusted Partner, which are like-minded funding organizations with rigorous, fair, and transparent due diligence processes.

TRUSTED PARTNERS



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



2.0 DRIVE COMMERCIALIZATION

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

OBJECTIVES

1. Accelerate commercialization and market adoption of Alberta-based emissions-reducing technologies within Alberta, across Canada, and around the world.
2. Share technological learnings and project knowledge to accelerate commercial deployment of technologies.
3. Leverage investments to create larger pools of capital for innovation and technology.
4. Foster economic benefits (direct and indirect) in Alberta from projects funded by ERA.

KEY INDICATORS

- ▶ Completed projects continuing toward commercialization.
- ▶ Support for small and medium-sized enterprises.
- ▶ Collaborative partnerships.
- ▶ Measurable transformation toward a carbon-neutral economy.
- ▶ Lifetime emissions reductions.

STRATEGY:

2.1 Reduce barriers to commercialization through thought leadership and knowledge Strategy sharing

Public funding is critical for accelerating new technologies, yet it is not enough to carry innovation through to commercialization. Beyond funding, innovators face challenges that hinder technology advancement and adoption by industry. Addressing gaps requires an all-hands-on-deck approach, with government and industry sitting at the same table.

Throughout 2024-27, ERA will continue to work with government, innovators, ecosystem partners, and Alberta's industries to help address gaps and bring new technologies and solutions to market. ERA will also increase the frequency of engagement with accelerators, industry, innovation networks, industry alliances, and post-secondary institutions.

INITIATIVES:

2.1.1 Leverage federal programming and other technology funding opportunities

ERA will continue to strengthen partnerships with federal departments and other clean technology organizations to better leverage funding and maximize the impact and benefits to Alberta.

2.1.2 Increase and strengthen strategic partnerships

In 2024-27, ERA will build a broader suite of partnerships along the innovation continuum. This will enhance ERA's role as a convener in connecting innovators to the right resources based on their technology and business maturity. It will also allow ERA to gain deeper knowledge of high-potential technologies as they progress toward the scale-up and demonstration stages.

ERA will continue to work with business support service providers such as Plug & Play, Avatar Innovations, Platform Calgary, Edmonton Unlimited, and Alberta Innovates to help ensure entrepreneurs and innovators have the business capacity and skills to advance their technology toward commercialization.

2.1.3 Strengthen international partnerships

Achieving a carbon-neutral economy will demand global cooperation as reduction targets and nationally determined contributions become more stringent. ERA is committed to deepening its existing relationships with international partners to promote the export of local technologies worldwide and the import of global technologies to enhance local industries.

▶ Future critical minerals support with XPRIZE

In 2018, two ERA-funded Grand Challenge projects were finalists in the NRG COSIA XPRIZE: CarbonCure and Carbon Upcycling Technologies (CUT). In 2020, these two companies received ERA funding to advance their technologies closer to commercialization. Because of this success, ERA is once again partnering with XPRIZE.

▶ Clean Energy Transition Partnerships (CETP)

ERA is a member of the Clean Energy Transition Partnership (CETP), a transnational initiative for joint research, technological development, and innovation (RTDI) programming to boost and accelerate the energy transition. The initiative enables 50 national and regional funding partners from 30 countries to align on priorities and pool budgets for annual funding calls through 2027. ERA continues to participate in CETP, including through funding committed for projects to be announced in 2024 and other collaborative initiatives.

In addition to partnering on funding programs, ERA will elevate projects and lessons at international events such as the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP). ERA will host international experts at virtual events and continue to uncover new opportunities, establish partnerships to leverage funding, share knowledge and help support important industrial projects to final investment decisions.

2.1.4 Uncover and alleviate barriers to commercialization

In 2023, ERA completed a Barriers to Commercialization study to help uncover common gaps in commercialization and scale-up support. This report provides insight into notable trends in barriers and success criteria relevant to Alberta's current and future industries. The findings of this study will help ERA identify relevant partner organizations best suited to develop enhanced innovator support programs.



Gordon Gardiner, Plant Foreman, TAQA

2.1.5 Engage Ecosystem Supports

Alberta has a robust ecosystem of academia, industry and industry associations, government and accelerators that make GHG-reducing technology innovation more accessible. As a convener, ERA is able to enhance this ecosystem in various ways.

▶ **Continued partnership with the International CCS Knowledge Centre (Knowledge Centre)**

ERA and the Knowledge Centre have formed a community of practice with leading executives from across the province, the country, and the globe to help bring CCS projects closer to a final investment decision. The outcome will be the release of three whitepapers that will be shared at GHGT-17, an international CCS conference that will be co-hosted by ERA in Calgary in October 2024.

▶ **Support Decentralized Energy Canada's (DEC) Next Generation Energy Innovation Challenge**

In 2023, ERA supported the DEC's Next Generation Energy Innovation Challenge. DEC will work with the City of Medicine Hat to accelerate the adoption of near-commercial innovative energy technologies. Six SMEs will be supported to build small-scale technology demonstration projects to be owned and operated for ecosystem benefit by the co-recipient, the City of Medicine Hat.

▶ **Support other strategic investment areas**

ERA identifies and provides strategically important investments into areas where gaps in the innovation path may occur. ERA is able to provide various supports, including leading studies, technical expertise, funding for regional technical or knowledge

hubs, and provide resources to develop whitepapers, presentations, and conference speaker participation.

STRATEGY:

2.2 Deliver programming to support the market adoption of commercialized emissions-reducing technologies

ERA is helping Alberta businesses grow their operations and become more competitive, while creating skilled jobs and boosting the economy.

INITIATIVES:

2.2.1 Complete Energy Savings for Business (ESB) Program

All three streams of the ESB Program are fully subscribed and will be closing in 2024. The \$55 million funding opportunity supported cost-saving and emissions-reducing projects at small- and medium-scale industrial and commercial facilities. This Program helped Alberta businesses grow their operations and become more competitive while creating skilled jobs and boosting economic recovery.

The ESB Program supported SMEs, which, helped reduce 2.6 million tonnes of CO₂e, created approximately 1,400 jobs (direct and indirect), and drove an estimated \$300 million in economic activity.

2.2.2 Launch Green Industrial Facilities and Manufacturing (GIFM) Program

In Spring 2024, ERA will begin delivering the GIFM Program to support the implementation of energy efficiency and energy management solutions in industrial facilities. The \$50 million program [\$40 million from Natural Resources Canada [NRCan] and \$10 million from the Government of Alberta] will be fully implemented by March 31, 2027.

The GIFM Program will provide an opportunity to continue supporting small- and medium-sized industrial businesses in Alberta, allowing ERA to build on the relationships with contractors and manufacturers established through the ESB program.

ERA will deliver the GIFM Program through two streams:

Stream 1: Strategic Energy Management (SEM)

This stream will provide industrial facilities with the tools to identify energy efficiency opportunities through energy assessments and audits, and energy management systems that can be used to track, analyze, and manage energy consumption. The SEM component will engage Alberta's leading companies in a hands-on educational program that drives corporate culture toward identifying and implementing cost-effective energy savings practices.

SEM will build lasting institutional competencies that enable companies to plan and implement continuous operational efficiency improvements, large capital projects, and develop long-term emissions reduction strategies necessary to meet future goals. By focusing on corporate leadership, these benefits can expand across the corporate structure, contribute to capacity-building opportunities, and develop industry best practices.

Stream 2: Capital incentives

ERA will provide capital incentives for the implementation of energy efficiency retrofits identified via an energy management system. Upgrades may include retrofits to existing facilities only that are non-emitting (e.g., use energy sources such as electricity, renewable energy/biomass, hydrogen, etc., resulting in zero GHG emissions at end use) and have a combined payback period of greater than one year.

ERA expects to achieve the following outcomes:

- ▶ Over \$350 million in economic activity and 1,250 jobs (direct and indirect) created in Alberta.
- ▶ Up to \$100 million of energy expenditure reductions resulting in improved competitiveness for program participants.
- ▶ A cross-section of approximately 200 industrial facilities successfully implementing an energy management system and energy efficiency retrofits.
- ▶ Anticipated lifetime emissions reductions of 69M tonnes of CO₂e from SEM activities and 193M tonnes of CO₂e from capital project implementations.

2.2.3 Innovator Support Services Program

In 2024-27, ERA will relaunch the Innovator Support Services Program. In 2024, ERA will launch the Innovator Commercialization Assessment tool, an online tool that provides proponents an opportunity to identify missing skill sets or areas of improvement. This assessment will enable ERA to pair proponents with innovation system service providers that can help strengthen business success by offering strategic support to increase commercial readiness and increase pathways to commercialization.



3.0 MAXIMIZE IMPACT

Maximize ERA's impact beyond technology support by sharing knowledge, promoting lessons learned, and striving for operational excellence.

OBJECTIVES

1. Promote widespread dissemination of knowledge and lessons learned from ERA-supported technologies among innovation ecosystem stakeholders to gain support for greater adoption and scale-up.
2. Increase awareness of ERA's role within the innovation system.
3. Incorporate project learnings into future implementation and projects across the province.
4. Increase recognition of Alberta as an innovation and clean technology leader, strong environmental steward, and globally competitive clean investment destination.
5. Demonstrate the efficient and effective use of public funds.

KEY INDICATORS

- ▶ Stakeholder awareness and collaborative partnerships.
- ▶ Follow-on business from engagement with proponents.
- ▶ Operating costs as a percentage of approved project commitments.
- ▶ Length of ERA intake, decision-making, and contracting cycle.
- ▶ Leveraged investment.
- ▶ Return on investment.
- ▶ Projects supporting global sustainable development goals.
- ▶ Strengthened employee engagement.

STRATEGY:

- 3.1 Refresh the Technology Roadmap (TRM)**
In 2024, the Fifth Edition of the TRM will be published. ERA's TRM identifies the critical innovation pathways, timescales to technology deployment, challenges to adoption, and tactical opportunities to deliver on ERA's mandate and Alberta's job creation and diversification imperatives. Focus areas are designed to be complementary, supporting existing and emerging sectors across Alberta.

INITIATIVE:

- 3.1.1 Engage with government, industry, and innovators on investment priorities**
The TRM is informed and validated by relevant thought leaders across Canada. In early 2024, ERA will undergo extensive engagement with the Government of Alberta, various industry leaders, and innovators to identify the funding areas that will guide ERA's investment strategies. By engaging with a broad range of stakeholders, ERA can build a long-term strategy that accounts for uncertainty in the pace of technology development and the complexity of system transformations.

STRATEGY:

- 3.2 Elevate awareness of ERA's impact**
ERA's success stories demonstrate how Alberta is taking real action to deliver the environmental and economic outcomes the world needs. From 2024-27, ERA will leverage best-in-class internal and external communication approaches to continue to position ERA as critical to Alberta's economic growth and vital to driving toward carbon neutrality.

ERA's communication mix will help raise the profile of Alberta's emissions reduction successes, showcase Alberta as a place for clean technology investment, and amplify project outcomes to provincial, national,

and international audiences to drive future investment in technologies that benefit Alberta and beyond.

INITIATIVES:

- 3.2.1 Host and participate in strategic events, workshops, and conferences**
Leveraging industry connections and government influencers will continue to build ERA's credibility as a convener across the innovation system and as an accelerator of commercialization and adoption for GHG-reducing technologies. To create the greatest impact in 2024, ERA will host two key technology showcase events and participate in international events where there is the greatest opportunity to have a reputational impact.

- ▶ **17th Greenhouse Gas Control Technologies (GHGT-17) Conference**
ERA is co-hosting the IEAGHG-17 conference in Calgary in October 2024. The biennial event, created by the International Energy Agency's Greenhouse Gas R&D Programme in 1997, is the principal and largest international conference on CCUS technologies globally, historically attracting over 1,000 participants from more than 40 countries. It will include visits across the province to industrial sites and bring CCUS thought leaders from around the world to Alberta. ERA is targeting an attendance record for Calgary and will enhance the 2024 program by adding an additional content stream focused on business leaders seeking lessons learned on CCUS investments and conversations focused on overcoming challenges to commercialization of new technologies.

[Click here for more information.](#)

- ▶ **ERA's 15-Year Anniversary event**
ERA turns 15-years-old in 2024 and is expected to surpass \$1 billion in investments. To celebrate this milestone, showcase its return on investment, and share lessons learned from its projects, ERA will host a half-day, interactive summit in Calgary. Four hundred guests are expected, including: Government of Alberta representatives; CEOs and executives from ERA-funded projects; heads of industry and technical associations; post-secondary leaders; current and former Board members; and other informed and influential Albertans.

- ▶ **BECCS Leadership Summit**
ERA will serve as a convener of forestry, pulp and paper industry leaders, carbon dioxide removal (CDR) buyers, investors, First Nations, and BECCS project participants (forest products, energy, and subsurface storage companies) at an invitation-only Bioenergy with Carbon Capture and Storage (BECCS) summit in September 2024. The BECCS Leadership Summit will convene industry players to discuss challenges and opportunities to move this technology forward.

- ▶ **International event participation**
ERA is a supportive partner for the Government of Alberta and provides a delivery mechanism for the government to share Alberta's success. ERA will continue to support key international events, such as COP29, when the team's presence can lead to reputational gain or greater investment in Alberta.

- ▶ **Thought leadership opportunities through events, roundtables, and webinars**
ERA experts will speak at externally hosted innovation and sustainability events focused on raising awareness of emissions-reducing technology trends and projects. ERA will also attend and participate in events, roundtables, and webinars where cleantech researchers and innovators convene with representatives from the business community, government, and the innovation system. Key events include Inventures, the Canadian Hydrogen Convention, Carbon Capture Canada, the PTAC Methane Leadership Summit, and the Global Energy Show.

3.2.2 Develop ERA impact stories to engage new and existing audiences

ERA has over 200 stories to tell, each with unique challenges and learnings. Impact stories inspire innovation and reinforce that Alberta is a leader in technology development. Throughout 2024-27, ERA will deliver a fresh, story-based content strategy leveraging proponent success stories, ERA-supported white papers, and project learnings, as well as share across communication platforms (website, social media, newsletter, traditional media, YouTube, Spotify, Apple, Google, speeches, presentations, stakeholder updates, and internal communications). Content will focus on new and completed projects and feature industry and innovator thought leaders.

To engage the audience and increase awareness of ERA's impact in 2024 and beyond, ERA will:

1. Broaden the scope of its Carbon Copy podcasts.
2. Proactively distribute all content produced by the organization to its Trusted Partner network.

3. Develop case studies that include learnings and outcomes in a range of forms (including, updated project pages on the ERA website, fact sheets for the Government of Alberta on GHG reductions in a sector and project status updates, and project-focused videos).
4. Increase traffic to the ERA website and social media accounts, where users will be directed to apply for funding, attend events, and subscribe to ERA's newsletter.
5. Leverage sponsored content or boosted posts to share stories with a wider audience.
6. Increase the deployment of Technical Transfer Plans to appropriate partners and on the website.

3.2.3 Secure media coverage

ERA will continue to pursue earned media coverage by top-tier news organizations at the provincial, national, and international levels. This will include generating media coverage to share the Alberta clean technology story to reinforce the action Alberta has taken to address climate change.

3.2.4 Engage with project proponents

ERA will offer project proponents media training and storytelling workshops to enable organizations to tell their own stories and speak to the value of ERA's support. ERA will work closely with project proponents and partners on their media relations activities to amplify ERA's investments. ERA will also develop new communications toolkits to help proponents share and promote projects through earned media.

3.2.5 Build internal awareness and alignment

As ERA solidifies its strategic direction, it will be critically important for staff to understand what shifts are taking place. To further evolve the culture of ERA, decisions about strategy need to be shared widely, this includes:

- ▶ Continuing to orient staff on decisions made about strategy and communications.
- ▶ Enhancing the employee onboarding program and creating tools that streamline knowledge sharing with new staff.
- ▶ Reinforcing the consistent expression of the ERA brand and story.

STRATEGY:

3.3 Provide the Government of Alberta with opportunities to share ERA's success and lessons learned

ERA will continue to offer the Government of Alberta opportunities to leverage ERA's investments and successes for their reporting and decision-making. ERA communications assets will continue to be shared with government departments and relevant agencies.

INITIATIVES:

3.3.1 Government of Alberta participation in funding announcements, workshops, roundtable meetings, and key ERA-hosted events

As an enabler of the province's strategic communications outcomes, objectives, and activities, ERA will continue to ensure its funding launches and project announcements are made in partnership with the Government of Alberta. This includes in-person or digital media events with participation from the appropriate Minister(s) and, where possible, the Premier of Alberta. It also includes a corresponding news release from the Government of Alberta. ERA will work with the Government of Alberta to ensure industry and innovator stakeholders participate in these announcements and provide validator quotes for news releases.

3.3.2 Host regular, proactive briefings
ERA will continue to share regular briefings on project progress with the communications team at Government of Alberta's Environment and Protected Areas and other ministries when appropriate. The Government of Alberta and the Government of Canada's senior officials, departments, and agencies will be provided with relevant and timely information about ERA's unique value proposition, impact stories, and investment impacts related to GHG reductions and Alberta's economic growth.

STRATEGY:

3.4 Strengthen ERA's performance management framework

Performance management is critical to demonstrating that ERA is delivering on its mandate while staying true to its core values. Since 2009, ERA has been a well-established delivery agent of Alberta's climate change and economic policy, and its efforts are aligned with defined provincial, national, and international metrics. ERA is continually updating the metrics it uses and fine-tuning its collection methodology to align with best practices. ERA will continue strengthening its performance management approach to measure performance against key indicators and deliver maximum value to its stakeholders.

INITIATIVES:

3.4.1 Strategic dashboard refinement

The organization reports on portfolio-based performance outcomes and measures to demonstrate and communicate how ERA delivers results each quarter. ERA's strategic dashboard shows how its portfolio of projects is performing against original projections and why. In 2024-27, ERA will further analyze attrition metrics and identify barriers that can be addressed by the broader innovation ecosystem. ERA's strategic dashboard will continue to be augmented to provide more meaningful KPI reporting.

3.4.2 Quantify and report GHG reductions
ERA has a robust quantification methodology that aligns with industry standards and is applied by a team of experts. ERA funding applicants are evaluated on the GHG reduction potential of their proposed projects. This is central to ERA's mandate and is the most heavily weighted criteria during ERA's project selection process. ERA quantifies the estimated emission reductions that will be delivered through its portfolio of projects on a quarterly basis. ERA continues to quantify and refine internal policy on how ERA estimates GHG reduction potential for its investments in three broad categories, Direct/Indirect, Market and Enabled.

3.4.3 Launch open data portal

In 2024-27, ERA will enhance efforts to share the enabling impact of its investment portfolio and launch a publicly accessible database that will increase the transparency and accessibility of our data. In 2024, ERA will launch an open data initiative that will make its portfolio of funded projects available to the public. The initiative will share details of projects, the emissions reductions associated with these projects and enable users to obtain a copy of the dataset.

3.4.4 Quantify and report economic impact

Ensuring responsible and effective stewardship of public funds requires ERA to track and report metrics on past performance. ERA will continue refining its analysis to quantify the net economic impact of ERA's emissions reduction investments. This quantification includes an estimation of avoided climate damage associated with GHG reductions, and direct benefits from economic activities advanced through ERA-funded projects.

In addition to avoided climate damages, ERA uses Statistics Canada's Input-Output (I-O) model (2018) to determine the projected GDP impact to Alberta by 2025.

ERA's funded projects were expected to contribute \$5.4 billion to Alberta's GDP and \$7.25 billion to the national GDP by 2027.

As data analysis and reporting become more advanced, additional initiatives are being evaluated. In 2024-27, ERA will continue:

- ▶ To communicate and signal to investors the potential economic benefit these technologies offer in both Alberta and Canada.
- ▶ The valuation of its emissions reductions, determining and explaining trends.

ERA will further demonstrate to its stakeholders a clear line of sight between its funding, technology commercialization activities, and GHG emissions reductions, including:

- ▶ Identifying and investing in promising technologies that have a high potential in Alberta's short- and long-term future.
- ▶ Helping support Alberta energy producers' net-zero emissions commitments.
- ▶ Contributing to local, national, and international targets.
- ▶ Deploying additional communication tools for diverse audiences.

STRATEGY:

3.5 Continuous improvement of operations and governance

Delivering operational effectiveness and efficiency continues to be a guiding principle for ERA. The organization's approach to resourcing and capacity building is centred on being able to scale in response to the needs of ERA, the government, and the innovation ecosystem. To enable this, ERA relies upon a hybrid of internal staff and external service providers.

ERA will continue holding staff and service providers to a strong account and encouraging them to identify efficiencies and assist ERA in maintaining low operating costs and high value for dollar. Given the significant increase in the ERA portfolio of funded projects, the internal capacity of the team to manage and steward this portfolio has expanded to accommodate the volume of work with offices in both Edmonton and Calgary.

INITIATIVES:

3.5.1 Seek out and implement ongoing operational efficiencies

ERA has a culture of continuous improvement to enhance internal and external partner experiences and generate high-quality work and satisfaction. Upcoming operational improvement initiatives include:

- ▶ Internal process improvements:
 - ▶ Deploying ERA's biennial employee engagement survey and enhancing internal communications.
 - ▶ Leveraging technology solutions to optimize operational efficiencies, such as Borealis, a stakeholder management software, to better equip ERA to track and manage external relationships, and OnBoard, a board management system to streamline board document review.
 - ▶ Reviewing and updating internal policies, including developing request for proposal (RFP) guidelines.

3.5.2 Foster an Equity, Diversity, and Inclusion culture

ERA recognizes the importance of developing an inclusive culture. This is critical for developing programs and achieving outcomes relevant and accessible to Alberta's diverse populations. Over the next three years, ERA will advance its EDI strategy by continuing to offer training initiatives for staff, Board members, and service providers, and ensuring its engagement practices reach a broad spectrum of innovators, including underrepresented groups. ERA will continue collecting data from its proposal intake processes to understand the demographics of applicants, which will allow ERA to find potential gaps in its engagement process, so ERA can create equitable awareness of funding.

- ▶ Coordinating a Governance of Reporting Emission Reductions Information workshop for ERA's board and executive team members.
- ▶ Enhancing resource management to ensure ERA has reviewers and advisors for all projects ERA selects.
- ▶ Refreshing our technical review roster with Alberta Innovates to meet increasing demands.
- ▶ Proponent engagement and satisfaction:
 - ▶ Streamlining and modernizing the Contribution Agreement process.
 - ▶ Refining the stewardship of project execution from the project intake process through to the close-out process to ensure proponents have a streamlined experience.

BUDGET

ERA is a trusted delivery agent for the Government of Alberta and other public funders. The organization actively seeks opportunities to enhance cost-effectiveness and efficiency. The operating budget presented by ERA is a testament to its commitment to financial responsibility. A significant measure for ERA is the overall administrative costs in comparison to the total funds under administration. This metric is expected to remain below 3.0 per cent for the current fiscal year and is budgeted to be 3.2 per cent for the upcoming fiscal year.

REVENUE

ERA will have continued stability due to the core Government of Alberta grant. By successfully securing \$40M of federal funding from NRCan, ERA will augment TIER funds and deliver an estimated \$100M energy efficiency program in Alberta through to 2027. ERA will continue to exercise prudent cashflow management and ensure excess funds are invested to maximize return. Interest rates continue to be high for the current year and are forecasted into the first half of the 2024/25 fiscal year, resulting in increased returns on funds under management.

EXPENDITURES

ERA is committed to managing its operating expenses prudently and ensuring the responsible use of public funds. To this end, the organization is continuously reviewing its expenses. In 2024, ERA will host GHGT-17, which is expected to be cost-neutral, thanks to the support of sponsors and participants. ERA is also investing in commercialization supports and ecosystem investments, such as the Lithium XPRIZE, while improving its data access and narratives. As the organization matures, ERA is rationalizing its services, which has led to greater team capacity using the same financial resources.

ERA continues to operate with robust financial controls for projects and pays at the completion of milestones with associated deliverables. ERA is looking at adapting contribution payments slightly for our Emerging Innovators Challenge in recognition of cashflow challenges this group often experiences. However, appropriate risk mitigation and controls will remain in place. ERA also withholds a standard per cent of each payment until the project is completed and a final outcomes report is shared publicly.

Due to continued economic conditions and supply chain disruptions, existing projects in ERA's portfolio are experiencing longer-than-expected project timelines, resulting in a higher balance in funds under management. ERA anticipates payments to accelerate as projects return to expected execution timelines. As a result, the operating cost metric is expected to increase over the three-year period as project expenses are paid out at a faster rate than new commitments are made. Future operating costs will be influenced by the size of the project portfolio and will be updated as project commitments unfold. ERA will work 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, attrition data is being analyzed and considered when funding recommendations are brought forward, to acknowledge that not all projects will proceed to execution and completion.

EMISSIONS REDUCTION ALBERTA (ERA)



	2023/24	2023/24 Annual Forecast	2024/25	2025/26	2026/27
	Budget (Approved Mar 2023)	(Provided to Board March 2024)	Budget (Provided to Board March 2024)		
	\$	\$	\$	\$	\$
Revenue					
Government of Alberta	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000 (a)
Government of Canada	9,438,890	2,338,322	13,333,333	13,333,333	13,333,333 (a)
Interest income	18,506,564	30,195,593	21,807,428	14,085,986	12,259,061 (b)
Total Revenue	77,945,454	82,533,915	85,140,762	77,419,319	75,592,394
Project Expenditures	183,481,992	158,469,386	176,918,951	99,963,724	102,606,695 (c)
GIFMP Project Expenditures	-	-	14,666,632	14,666,632	14,666,632
Revenue less Project Expenditures	(105,536,538)	(75,935,471)	(106,444,821)	(37,211,038)	(41,680,933)
Operating Expenses					
General & Administrative Expenses					
Corporate costs	509,550	541,273	518,953	686,905	698,512
Insurance	30,000	35,000	36,050	37,132	38,245
GST expense	149,363	171,867	186,302	189,089	167,670
Total General & Admin Expenses	688,913	748,140	741,305	913,126	904,427 (d)
Management Expenses					
Project Adjudication and Portfolio Management	2,228,619	2,726,804	2,595,121	2,626,003	2,683,910
Contracts	280,304	288,741	311,144	319,440	289,758
Communication and Engagement	1,671,176	1,910,052	1,776,743	1,898,830	1,910,924
Strategic	763,303	521,096	518,943	552,624	569,128
Corporate Administration	1,102,562	1,017,465	1,073,038	1,102,987	1,122,811
Governance	229,323	285,320	249,337	256,812	273,470
Total Management Expenses	6,275,287	6,749,478	6,524,326	6,756,696	6,850,001 (e)
Other Contracted Services and Special Initiatives					(f)
Fee-for-Service Projects	-	679,558	285,000	340,000	380,000
Performance, Measurement and Evaluation	-	35,136	156,700	26,700	26,700
Innovator Support Services	-	52,000	398,500	403,500	378,500
Other Strategic	825,150	143,069	200,000	50,000	35,000
GHGT Conference	-	166,269	136,879	-	- (g)
Total Other Contracted Services and Special Initiatives	825,150	1,076,033	1,177,079	820,200	820,200

EMISSIONS REDUCTION ALBERTA (ERA)



EMISSIONS REDUCTION ALBERTA (ERA)



	2023/24	2023/24 Annual Forecast	2024/25	2025/26	2026/27
	Budget (Approved Mar 2023)	(Provided to Board March 2024)	Budget (Provided to Board March 2024)		
	\$	\$	\$	\$	\$
Energy Efficiency Programming					
ESB	1,383,147	835,219	276,608	-	-
GIFMP	-	-	1,993,775	2,443,590	1,560,307
Total Energy Efficiency Programming	1,383,147	835,219	2,270,383	2,443,590	1,560,307
Board and Oversight					
Board remuneration and expense	128,000	128,000	131,840	135,795	139,869 (h)
Professional fees	80,000	80,000	82,400	84,872	87,418
Total Board and Oversight	208,000	208,000	214,240	220,667	227,287
Total Operating Expense	9,380,497	9,616,869	10,927,333	11,154,279	10,362,222
Surplus / (Deficiency) of Funds for the year	(114,917,035)	(85,552,341)	(117,372,154)	(48,365,317)	(52,043,155)
Total Funds Under Management - beginning of year	447,074,855	429,567,975	459,990,374	378,273,567	359,241,515 (i)
Total Funds Under Management - end of year	349,491,752	459,990,374	378,273,567	359,241,515	336,531,624
Committed Funds for Approved Projects	1,118,169,353	1,088,039,344	1,276,039,238	1,405,539,238	1,534,039,238 (j)
Total Project Funds paid to date	(769,811,774)	(658,489,732)	(909,048,297)	(1,056,999,894)	(1,208,475,452)
Remaining Funds required to fulfill approved	348,357,580	429,549,612	366,990,941	348,539,344	325,563,786
Uncommitted Funds	1,134,172	30,440,762	11,282,626	10,702,170	10,967,838
Operating costs as a % of Funds Required to Fulfill Approved Project Commitments (With Energy Efficiency Programming)	2.7%	2.2%	3.0%	3.2%	3.2% (k)
Operating costs as a % of Funds Required to Fulfill Approved Project Commitments (Without Energy Efficiency Programming)	2.3%	2.4%	2.7%	2.7%	2.8%
Operating costs as a % of new commitments in the year			6%	9%	8%

Notes and assumptions

- (a) The GOA approved a base allocation of \$50M per year for three years commencing in FY23. In the first year, ERA received an additional \$25M to support investments in hydrogen development and value chain. FY24 will be the second year of this agreement. Total funding under the federal Low Carbon Economy Leadership Fund (LCELFL) has been adjusted to \$87.2M, as of FY24 ERA has fully accrued the expected grant amount. ERA has received \$66M out of the approved LCELFL funding, and is anticipating \$21.2M in FY24.
- The Energy Savings for Business (ESB) program will wind down in FY25 and the new federally funded Greening Industrial Facilities and Manufacturing Processes (GIFMP) program is expected to launch. ERA has been awarded \$40 million of funding from Natural Resources Canada (NRCAN) for the three-year GIFMP, a Strategic Energy Management Program. The GOA has approved the use of \$10 million of TIER funding to expand the program's funding envelope for capital incentives. This will be drawn from ERA's existing unallocated funds already received from the GOA.
- (b) Interest income has been based on cash flow projections for the Corporation and current interest rate assumptions forecasted by ERA. Current effective rate earned on notice hold accounts are 5.8% (Reference rate +0.55%) and 5.9% (Reference Rate +0.65%) for Scotiabank 31 and 95 day notice periods respectively, the ATB Notice Demand Account, 5.71% effective rate (Prime less 1.49%) and the CWB Flex Notice Account, 5.75% effective rate (Prime less 1.45%).
- (c) Program expenditures have been budgeted based on signed contribution agreements or on a set of assumptions regarding approved and anticipated funding for projects. Future funding initiatives are based on anticipated calls laid out in the Business Plan and funding received from the GOA and GOC. Attrition has been estimated based on ERA's average attrition rate and applied to the monthly forecasted project expenditures for FY25 to FY27.
- (d) General and Administrative Expenses budget for FY25 reflect an increase due to the maturing of the organization. The lease costs for a new Edmonton office have been deferred until FY26 for the free rent period, saving \$165K in budgeted costs; this will normalize in future years and increases in the out years reflect this.
- (e) Total Management expense costs, excluding ESB, have been forecasted to decrease from the current year forecast. This is due to efficiencies achieved through transitioning tasks internally that have previously been completed by external service providers, partially offset by the increase in operations due to new full time staff members. In addition, call volume is expected to return to two calls per year.
- (f) The increase in Contractor Services and Special Initiatives relates to the resurgence of the innovator support program offset by the completion of certain fee-for-service projects.
- (g) ERA will be co-hosting the GHGT-17 conference in October 2024. The budget reflects the effort and resources dedicated to this conference delivery over FY25, however the conference is anticipated to be cost neutral.
- (h) Board remuneration and expense budgets for FY25 and beyond are expected to remain consistent with FY24 activity. This reflects Board meetings for 2 days per quarter and the associated committee meetings: Governance, Accountability and Human Resource, Audit, Finance and Investment, and Engagement and Outreach.
- (i) Based on Cash flow projections for the period ended December 31, 2023 and representing the actual funds under management. The change each year may differ from the Surplus/deficiency noted above due to timing of revenue accrual and receipt of grant amounts.
- (j) Based on actual funding for remaining active and board approved projects, and estimated future calls.
- (k) This metric represents total ERA Operating costs for the year as a percentage of the funds required to fulfill all remaining project commitments approved by the ERA Board of Directors. The relative percentage increases over the three year budget. The funds required to fulfill remaining commitments will be reduced as project payments continue to be made in accordance with the project plans, at a greater pace than new commitments are made. Given we have placeholders for future year grant allocations, the actual percentage will differ from the estimate above. When Energy Efficiency Programming is removed, the operating metric improves given the programs experience a higher administrative cost burden than ERA's typical portfolio of projects.



Supported by: *Alberta* 