

**Written Responses to Public Accounts Committee
Energy and Minerals – 26 March 2024, 08:00 – 10:00**

Regarding the Site Rehabilitation Program – Energy and Minerals (PA-29):

1. **Question - Mr. Schmidt:** What was the actual liability reduction that was achieved, then, by the program?

2. **Response:**

The Site Rehabilitation Program (SRP) was an economic relief program that protected and created jobs and supported Alberta's energy sector services during an economic downturn while ensuring the capacity remained in Alberta when the sector rebounded. It launched on May 1, 2020, and provided grant funding to oil field service companies to perform well, pipeline, and oil and gas site closure and reclamation work.

The program goals were to:

- immediately get Alberta's specialized oil and gas labour force back to work,
- accelerate site abandonment and reclamation efforts, and
- quickly complete a high volume of environmentally significant work.

The SRP overall was a resounding success that supported economic activity and employment of oil field service companies while accelerating the abandonment and reclamation of inactive oil and gas wells in Alberta.

The SRP generated significant closure work and was a complementary program to Alberta's improved liability management framework implemented by the Alberta Energy Regulator (AER). This framework includes new annual closure spending targets that must be met by industry. Grant funding received through the SRP was not eligible to be used by industry to meet its closure spending targets under the new framework, meaning that industry was required to spend corporate funds to meet this liability reduction requirement.

The SRP also used benchmarks to provide limits to grant amounts approved for various closure activity. The final costs associated with closure activity could have exceeded the grant amount paid because of top up funding from the licensees or other activities not funded through the program. In addition, closure spending does not correlate dollar for dollar with liability reduction, so it would be difficult to determine an accurate assessment of liability reduction based only on SRP grant funding.

The SRP spent about \$863 million in grant funding for closure work on 46,705 sites to 562 Alberta based companies, creating approximately 4,135 jobs. A total of 34,963 applications were approved and completed their grant agreements.

Of the total program spend, \$486 million was for abandonment work on 27,787 sites, and \$377 million was paid towards reclamation and remediation work for 14,927 Phase 1 environmental site assessments, 5,373 Phase 2 environmental site assessments, 1,183 remediation sites and 12,088 reclamation sites.

This spending includes \$107.5 million to clean up sites within Indigenous communities and \$65.4 million to clean up site and restore habitat for three species at risk – caribou, sage grouse and native trout.

As a result of the SRP and implementation of the new liability management framework, annual industry spending on closure activity has significantly increased, with \$549.9 million spent in 2021 and over \$1 billion in 2022. Of the \$1 billion spent by industry on closure activity in 2022, \$696 million was funded by industry with the remaining spending coming through SRP grants. While the SRP grant funding contributed to increased closure spending, the government-funded portion did not count towards a licensee's mandatory closure spend quota.

For more information on closure spend targets and details on the liability management program, please see the AER's website:

Closure Spend:

www.aer.ca/providing-information/data-and-reports/data-hub/closure-spend

Liability Management:

www.aer.ca/providing-information/by-topic/liability-management

Bulletin 2022-23:

www.aer.ca/regulating-development/rules-and-directives/bulletins/bulletin-2022-23

2022 Closure Quotas Highlight Report:

static.aer.ca/prd/documents/reports/2022-closure-quotas-highlight-report.pdf

Regarding the Liability Management Framework Report (Jan 2024) – AER (PA-30):

Mr. Schmidt: There's no target, then, for achieving an elimination of the liability by any particular year.

1. **Question:** How is each licence holder's spending quota determined? The overall spend, as you said, in 2023 was \$700 million, but how do you determine each licence holder's spend?

Response:

The AER's methodology for setting annual industry-wide closure quotas is outlined within section 4.2 of AER Manual 023: Licensee Lifecycle Management.

A licensee's mandatory closure spend quota is determined by multiplying their total inactive liability by a spend rate. The AER has a higher and a lower spend rate, which are reviewed and set annually. The spend rate licensees receive from the AER is determined based on their level of financial distress, with the intent that all licensees conduct closure work each year regardless of their level of financial distress. Additional information about the AER's spend rate is available on aer.ca under our Closure Spend Quotas webpage.

Manual 023: Licensee Lifecycle Management:

static.aer.ca/prd/documents/manuals/Manual023.pdf

Closure Spend Quotas:

www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/inventory-reduction-program/closure-spend-quotas

Regarding the Liability Management Framework Report (Jan 2024) – AER (PA-33):

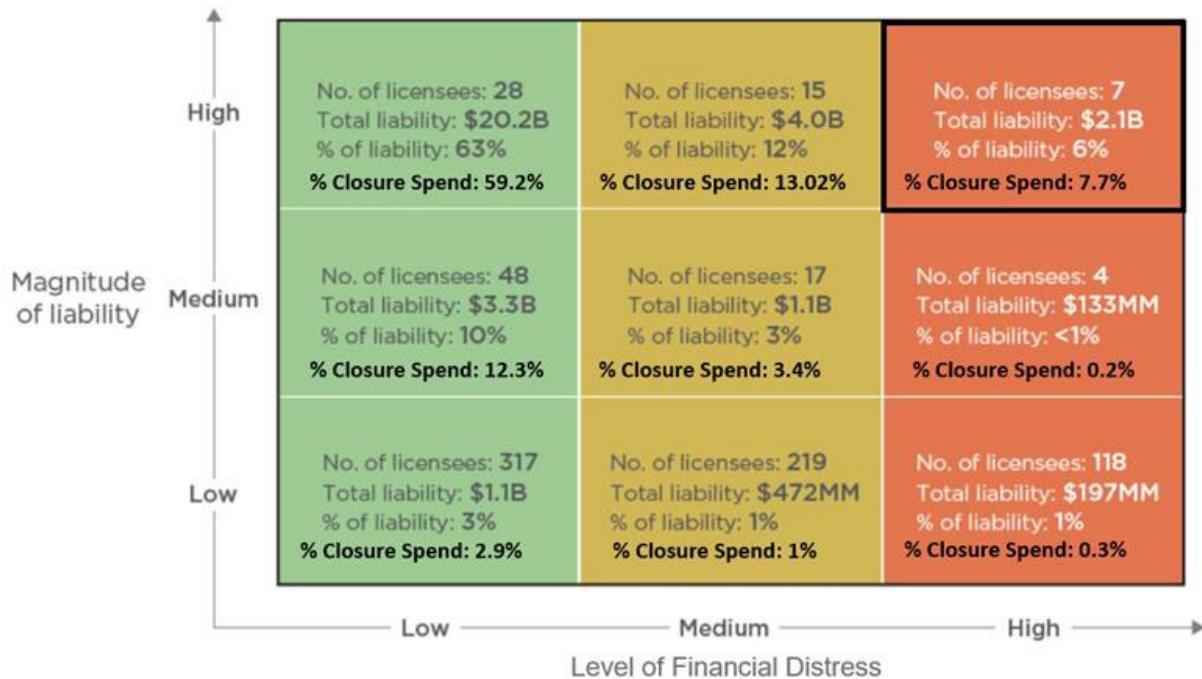
Mr. Schmidt: Thank you, Mr. Chair. I want to return to the liability management framework report. The question that I asked at the end of the last block was dealing with the \$2 billion that that report highlighted in liabilities held by operators in high financial distress. We'll get into the Orphan Well Association in a minute.

- Question:** But of the \$696 million that was spent in 2022, how much of that was spent on high-risk sites?

Response:

The figure below from the AER's 2022 Liability Management Performance Report has been updated to include the percentage of closure spend for licensee groups of the \$696 million industry-wide closure quota in 2022. Please refer to the far-right column for the specific percentage of closure spend for licensees that have a high level of financial distress and high level of magnitude of liability under the AER's Licensee Capability Assessment. Licensees with the highest magnitude of liability and level of financial distress spent approximately 7.7 per cent of the \$696 million quota in 2022, which is \$53.6 million (top right box).

Figure 6. Licensee liability by magnitude of liability and level of financial distress



NOTES:

- A licensee's magnitude of liability is categorized as high (\$150+ million), medium (\$25-150 million) and low (under \$25 million). Financial distress is calculated using financial information required under Directive 067 (see definitions in *Manual 023*)
- The AER is providing financial and liability information while maintaining confidentiality requirements, but we are committed to sharing what information we can.
- Percentages may not add to 100 due to rounding.
- Data as of October 2023

The AER's inventory reduction program uses the licensee capability assessment to group licensees based on their level of financial distress and their magnitude of the liability. These groups are categorized as low, medium and high. Please refer to section 2 in Manual 023 for more information.

2022 Liability Management Performance Report:

www.aer.ca/protecting-what-matters/holding-industry-accountable/industry-performance/liability-management-industry-performance

Licensee Capability Assessment:

www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/holistic-assessment-and-licensee-capability-assessment

Inventory Reduction Program:

www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/inventory-reduction-program

Manual 023:

static.aer.ca/prd/documents/manuals/Manual023.pdf

Regarding the Minister's feedback to the Chair of the AER – Energy and Minerals (PA-37):

Mr. Schmidt: The Mandate and Roles Document states that ministers are responsible for providing feedback on the performance of the chair.

1. **Question:** When in 2022-23 was feedback to the chair provided by the minister, and will the written evaluation of the chair's performance be tabled for the committee?

Response:

According to the Alberta Energy Regulator – Mandate and Roles Document, the Minister of Energy and Minerals and Minister of Environment and Protected Areas are responsible for providing feedback on the performance of the Chair of the AER.

In 2022-23, feedback to the Chair was provided orally by the previous Minister of Energy and Minerals, which was in accordance with the Mandate and Roles Document. The current Minister and Deputy Minister were not present for the conversation. Therefore, the Ministry of Energy and Minerals is unable to table any information for the Public Accounts Committee.

The Alberta Energy Regulator – Mandate and Roles Document is publicly available on the AER's website.

AER – Governance:

www.aer.ca/providing-information/about-the-aer/governance

Alberta Energy Regulator – Mandate and Roles Document:

static.aer.ca/prd/documents/about-us/Secretariat_MandateRoles.pdf

Regarding Hydrogen Projects– Energy and Minerals (PA-38):

Ms. De Jonge: I don't have much time here, but, you know, maybe I can just sneak in a question about hydrogen. That's something that you've referenced in terms of growing Asian markets.

1. **Question:** Can you give us an overview of some of the major hydrogen projects in Alberta and any updates on statuses during the 2022-23 fiscal year?

Response:

Over \$8 billion worth of clean hydrogen-related projects, investments, and technology deployments are currently underway, announced, or undergoing feasibility studies toward Final Investment Decisions. Some examples include:

- Heartland Generation, which is planning Canada's first large-scale 100 per cent hydrogen power generation facility, will produce up to 400 megawatts of baseload electricity with zero emissions.
- Air Products, which is constructing a multi-billion-dollar net-zero hydrogen energy complex in Edmonton. The \$1.6-billion facility will convert natural gas into clean hydrogen by using carbon capture, utilization, and storage to safely store the resulting carbon emissions. The project is approved for a \$161.5-million grant under the Alberta Petrochemical Incentive Program and is expected to create over 2,500 jobs during its construction.
- ATCO and Kansai have announced a partnership to explore a clean fuels export facility.
- Pembina Pipeline Corp. has partnered with Japan's Marubeni to advance an industrial-scale clean ammonia for export facility, which is made using hydrogen.

Edmonton's economic development agency, Global Edmonton, aims to have 5,000 hydrogen and hydrogen dual-fuel vehicles on the road in Alberta by 2028 as part of its "5,000 Vehicle Challenge." The Toyota and Edmonton International Airport hydrogen-fuel-cell electric-vehicles (FCEVs) project highlights a notable use of hydrogen in passenger vehicles. The project will bring 100 FCEVs to the airport's ecosystem, along with other hydrogen deployment initiatives.

Several pilot projects across the province are exploring new deployment applications and methods of cost-effective clean hydrogen production:

- Ekona Power is developing a novel low-cost clean hydrogen production system for industrial processes.
- Canadian Pacific Kansas City Southern (CPKC) Railway is testing hydrogen fuel cell use in three locomotives for rail freight. These are three former diesel-electric locomotives that have been converted by an Alberta based company to hydrogen-electric.
- ATCO is blending hydrogen with natural gas for residential heating systems on a pilot basis.
- The Invest Alberta Corporation, Alberta Transportation, and the Canadian Infrastructure Bank are assessing a Calgary to Banff hydrogen-powered rail passenger project.
- The Alberta Zero Emissions Truck Electrification Collaboration is testing hydrogen's ability to fuel the province's heavy freight transportation sector.

Regarding OWA and Liability Management – AER (PA-41):

Ms. Renaud: The AER refers to an unprecedented number of wells being transferred to the Orphan Well Association (OWA) during the COVID pandemic.

1. **Question:** Can the AER provide the exact number of wells that were transferred to the OWA in that time period?

Response:

Between 2020 and 2022*, 4,475 wells were designated as orphaned by the AER and transferred to the industry-funded OWA for closure (i.e. suspension, abandonment, remediation, and reclamation).

More information on the Orphan Well Association:

www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/orphan-well-association

*Note: To answer this question, the AER assumed that the COVID-19 pandemic took place from 2020 to 2022.

2. **Question:** Does the AER have a method to calculate the numbers of wells that may be transferred to the OWA in the near future, and if so, what plans are in place to manage them?

Response:

The AER works with companies to ensure their regulatory and liability obligations (including closure) are met at the end of a project's life. In 2022, the AER conducted a review of potential future liability that could be realized by the OWA. The review considered operating licensees with high levels of financial distress and their inventory with considerations for the working interest participants. This review is now completed annually by the AER and details are shared with the OWA to assist with its operational planning for the year.

The AER also monitors licensees who may be at risk of becoming insolvent or have entered insolvency proceedings.

Through our Licensee Management Program (LMP), the AER identifies those licensees that are or are likely to be at risk of not meeting their regulatory and liability obligations throughout the energy development life cycle. Through this program, the AER uses a range of regulatory tools and conducts compliance assurance activities with the licensee to address the risk.

Licences may be designated as orphan where a company is unable to meet its regulatory obligations to abandon and reclaim its licences. When a company fails to meet their obligations, a receiver or trustee can be appointed by the courts to sell the assets of the insolvent company. However, the AER does not control or prevent insolvencies.

As of April 2024, there are approximately 7,400 wells in active insolvency proceedings. It's important to note that the AER does not expect all assets involved in insolvency

proceedings to be orphaned to the OWA. When assets are not sold in an insolvency process, the AER looks to other responsible parties, for example, a working interest participant (WIP), to execute the remaining closure obligations. Where there are no remaining viable responsible parties to conduct abandonment or reclamation work, the AER may orphan these sites and direct the OWA to conduct this work.

Licensee Management Program:

www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/licensee-management-program

Ms. Renaud: The AER states there are 29 legacy sites.

1. **Question:** Can the AER explain what criteria or methodology was used to determine the number of legacy sites?

Response:

As of April 1, 2024, the AER is currently aware of 31 legacy sites in the province. The AER defines a legacy site as a site where energy development previously occurred for where there is no remaining person, company, or licensee to complete the work, nor any funding to pay for it.

2. **Question:** Can the AER please provide an updated estimate of the unfunded liabilities of legacy sites?

Response:

The AER continues to work with Environment and Protected Areas to determine an approach to manage legacy sites.

An updated estimate is dependent on direction from the Government of Alberta on the appropriate management, the extent of public responsibility, and the closure standards for these sites. Furthermore, this direction needs to be considered in conjunction with an up-to-date site assessment to determine a cost estimate at each site, which Environment and Protected Areas will be undertaking.

Ms. Renaud: Next question...

1. **Question:** Does the AER have an estimated time frame for when responsibility regarding legacy sites may be clarified?

Response:

The AER continues to work with Environment and Protected Areas on addressing the recommendations from the Office of the Auditor General's (OAG) 2021 report on Processes to Provide Information About Government's Environmental Liabilities. As of March 2023, Environment and Protected Areas and the AER are sharing information, and are actively reviewing the 31 legacy sites that the AER has identified to determine next steps.

The Office of the Auditor General's 2021 report on Processes to Provide Information about Government's Environmental Liabilities:

www.oag.ab.ca/wp-content/uploads/2023/06/2021-processes-to-provide-info-about-governments-environmental-liabilities.pdf

2. **Question:** If not, does the AER have any processes to examine the cost of lack of timely action on legacy sites?

Response:

Costs would be based on the condition of these sites following assessment by Environment and Protected Areas.

Ms. Renaud: Finally...

1. **Question:** How many licences have been exchanged outside of the AER's licence transfer application process? Does the AER keep track of those? How many of the new licence holders would have been able to go through the AER process?

Response:

The AER believes this question is about corporate amalgamations, which are different than a transfer of licences.

AER licenses cannot be transferred outside of the AER's requirements or AER's the transfer process per Directive 088: Licensee Life-Cycle Management. When an amalgamation takes place, two or more Alberta corporations join and form a new corporation. Amalgamations take place under Section 181 of the *Business Corporations Act*. Once the amalgamation has been registered in the corporate registry, the property of each corporation taking part in an amalgamation becomes property of the newly formed successor or amalgamated corporation. The successor corporation takes on all liabilities and obligations of each of its predecessors.

The AER's Directive 067: Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals considers amalgamations to be a material change to the ability of the company. When a company undergoes a material change, an updated Directive 067 Schedule 1 must be submitted within 30 days of the change. Schedule 1 contains information on changes to corporate structure, directors/officers and controlling interests and is reviewed by the AER. Before effecting a material change, a licensee or approval holder can request an advance determination on whether the AER would consider the proposed change to pose an unreasonable risk under section 4.5 in Directive 067.

The AER tracks corporate amalgamations through internal systems as part of its regulatory requirements set out in Directive 067. Once the AER receives notification of an amalgamation, a review of the amalgamation is conducted. This review can occur either prior to after the licenses have been reassigned to the surviving entity on the level of risk. Where the AER determines risk in the amalgamation it can compel security inside or outside its review.

The transfer of licenses can only occur through the two directives and avenues mentioned above, both of which require either new or existing licensees to valid holders of eligibility per Directive 067. The AER has strong requirements to ensure that licensees of record are reviewed for risk and accurate records are maintained on the composition and persons responsible for the company.

Directive 067: Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals:

www.aer.ca/regulating-development/rules-and-directives/directives/directive-067

Directive 088: Licensee Life-Cycle Management:

www.aer.ca/regulating-development/rules-and-directives/directives/directive-088

Regarding Geothermal – Energy and Minerals (PA-41):

Mr. McDougall: Thank you. Yes, just going on to another area that probably has not received as much attention in the past as hopefully in the future, and that's the geothermal development. On page 35 of the annual report, we talk about Energy and Mineral's work on the geothermal file. With the new regulatory regime now in place can your ministry . . .

1. **Question:** Will the ministry provide an overview of how many leases the government has granted and whether this is an established timeline for the development of these projects?

Response:

From January 1, 2022, to February 2, 2024, Energy and Minerals has received a total of 102 applications to date and has issued 59 leases based on these applications. The number of geothermal approved leases is regularly updated on the Government of Alberta webpage under "Geothermal Resource Development."

However, the number of total tenure applications and how many of those agreements may turn into actual projects depends on industry's business decisions. With the release of the AER's rules and directive in June 2022, the geothermal regulatory regime is complete and in place.

Unfortunately, Energy and Minerals cannot provide details regarding timelines at this moment; however, companies are encouraged to work with the AER to advance their projects to the next stage of development.

Geothermal Resource Development:

www.alberta.ca/geothermal-resource-development

2. **Question:** You have \$50 million in funding from various sources coming from Alberta Innovates, and some information as to how this funding has supported the companies and its efforts to advance this technology while creating the jobs and presumably being a leader in that. Some details on what you actually are funding, or what Alberta Innovates has been funding for these, an update on new and current projects in Alberta, and considering that they received 74 applications for tenure and issued 32 leases, some context as to how big we actually think that geothermal opportunity is in Alberta.

Response:

Developing geothermal energy could promote economic development in municipalities and has the potential to help enhance energy and community resiliency for Indigenous and remote communities. There is also potential for co-production with oil and gas as well as repurposing inactive oil and gas well infrastructure to generate geothermal energy, which could facilitate investment while limiting the land impacts.

Companies have expressed interest in exploring Alberta's geothermal potential, and having established legislation and a robust regulatory system will help further our economic recovery by attracting investment and creating jobs.

Alberta Innovates has supported Alberta-based geothermal companies, such as Eavor Technologies Inc., which has proprietary technology called the Eavor-Loop. Emissions Reduction Alberta and Invest Alberta each committed \$1 million to its demonstration project near Eckville.

There are currently four geothermal projects in Alberta.

Terrapin Geothermal Power Project (also known as Greenview Geothermal Power Plant - Alberta No. 1):

- Alberta No. 1 in Grande Prairie will be the first conventional geothermal energy facility in the province. It will consist of a wellfield, electrical generation plant, and district-heat-use infrastructure.
- The \$90-million project has received \$25.45 million in funding through Natural Resources Canada (NRCan).
- Nearly 300 direct and indirect jobs will be created through this project.
- It is estimated that Alberta No. 1 will generate 10 megawatts (MW) of clean electricity and 985 terajoules a year of clean heat, offsetting over 97,000 tonnes of carbon dioxide annually.

Eavor-Lite Demonstration Project:

- As previously mentioned, Eavor Technologies Inc. has proprietary technology called the Eavor-Loop.
- Its demonstration project, located near Eckville, began construction in August 2019 and is now complete.
- Emissions Reduction Alberta and Invest Alberta each committed \$1 million to the project.
- Building from the portfolio of technologies and methods demonstrated at the Eavor-Lite facility near Rocky Mountain House, Eavor commenced its demonstration project in August 2022 to drill the deepest and hottest directional geothermal well in history, called Eavor-Deep, in Nevada, U.S.A.
- The project concluded in 2022, and its success has unlocked a portfolio of Eavor-Loop projects in key U.S., Canadian, European, and Asia-Pacific markets.
- The first commercially operated Eavor-Loop system commenced in Germany (the Eavor-Europe project) in October 2022 and is supported by the German government.
- In October 2023, the Government of Canada announced its \$90 million investment in Eavor through the Canada Growth Fund, to help build geothermal in Canada.

Novus Earth Latitude 53 Geothermal Project:

- Novus Earth is proposing to build a geothermal project near Hinton.
- In 2018, NRCan funded \$5 million to execute a front-end engineering design (FEED) study for the project.
- The first stage of the project will commercialize Novus Earth's well technology for direct heating for residential, commercial, and industrial applications; the second stage focuses on electrical production.
- The project would provide up to 120 full-time jobs.
- Proposed commencement date is unknown.

In December 2023, E2E Energy Solutions announced a proposed project in the town of Rainbow Lake in northwestern Alberta, targeting to become the first municipality in Canada to be fully powered by geothermal energy by as early as 2028.

- More details are expected soon.

According to the Canadian Geothermal Energy Association, there is an estimated potential of 388,500 MW of thermal energy in Alberta that can be recovered under existing technical, structural, and ecologic restrictions.

Regarding Critical Minerals – Energy and Minerals (PA-41):

Mr. McDougall: Finally, going back to the critical minerals question, what I started a little while ago:

1. **Question:** Can you provide an update on the progress made on implementing the mineral strategy and action plan and what your next steps are for that?

Response:

As the first step towards implementation of the Strategy, Energy and Minerals reviewed the province's mineral regulatory and tenure frameworks to ensure both regimes are modernized and adapted to facilitate existing and emerging mineral opportunities in the province.

The Government of Alberta passed Bill 82: the *Mineral Resource Development Act* in December 2021 to improve the regulatory environment, a key area identified in the strategy to support and achieve Alberta's vision. The *Mineral Resource Development Act* establishes the AER as the full lifecycle regulator for Alberta's mineral resources. The act will help advance Alberta's strategy and action plan to create jobs and make our province a preferred international producer and supplier of minerals and mineral products.

Government has taken a two-phased regulatory approach to implementing the *Mineral Resource Development Act* to enable a smooth transition. The first phase of implementation was complete when the *Mineral Resource Development Act* came into effect for brine-hosted minerals on March 1, 2023. In addition, modernized tenure requirements came into effect on January 1, 2023. The second and final phase to implement rock-hosted mineral development is now complete with the full proclamation of the *Mineral Resource Development Act*, and coming into force on February 28, 2024. This includes transferring regulatory functions for rock-hosted minerals from Environment and Protected Areas and Forestry and Parks to the AER.

Our next steps will be guided by the Minerals Strategy and Action Plan, which outlines short, intermediate, and long-term actions needed to realise our vision of Alberta as a preferred producer and supplier of metallic and industrial minerals and mineral products. The strategy details six key areas to support and achieve Alberta's vision:

- Increase public knowledge and access to geoscience data.
- Enhance the fiscal and regulatory environment.
- Promote responsible development.
- Advance opportunities for Indigenous Peoples.
- Develop public awareness and a skilled workforce.
- Promote innovation and industrial development.

Within those key areas, the strategy outlines 43 actions in total over the short, intermediate, and long term to enhance the conditions for responsible mineral resource development along the mineral value chains and realise our vision. To date, over 90 per cent of the short terms actions are either complete or well on way to completion.

These actions are led by various ministries and agencies, including Energy and Minerals; Advanced Education; Environment and Protected Areas; Indigenous Relations; Jobs, Economy, and Trade; Technology and Innovation; the AER; the Alberta Geological Survey; Alberta Innovates; and the Invest Alberta Corporation. Guided by the strategy, government will continue to evaluate policy and regulations to respond to emerging issues and new development opportunities as the sector evolves.

For example, under “enhance fiscal and regulatory environment,” the short-term actions include:

- Modernizing the metallic and industrial mineral tenure.
- Providing clear regulatory guidance to industry, such as through a regulatory roadmap.
- Enabling a lifecycle metallic and industrial mineral regulatory regime.

Intermediate actions under “enhance fiscal and regulatory environment,” include:

- Continue the implementation of an updated lifecycle metallic and industrial mineral regulatory regime.
- Exploring policy and other tools available to the government to further encourage mineral exploration and development throughout the mineral value chains.
- Reviewing and updating the metallic and industrial mineral royalty framework.

Long-term actions under “promote innovation and industrial development” include:

- Leveraging the province's industrial and scientific capacity to establish Alberta's leadership role in the North American critical mineral supply and value chains.
- Promoting innovation and Alberta-made technologies.
- Pursuing opportunities to expand industrial development throughout the mineral value chains within the province.
- Working with Canada and other jurisdictions to foster a Canadian critical minerals, battery, and energy-storage supply and value chain, fueled by Alberta-produced minerals and mineral products.

In addition, Alberta is taking several steps to advance the use of innovative technologies in mineral mining and extraction, led by other ministries, that may be leveraged to enhance the overall investment and business climate for minerals. Some of these steps include:

- Speeding up research, innovation, and entrepreneurship using Alberta Innovates as a launch point for innovative technologies and ideas.
- Creating the Innovation Employment Grant program to support companies to invest in research and development activities.
- Developing the Alberta 2030: Building Skills for Jobs to leverage work-integrated learning and development of related micro credentials, expanding the apprenticeship model, and further developing the link between industry and post-secondary educational institutions.