



ALBERTA  
CHAMBER OF  
RESOURCES



# Resource Industry of the Future: Pathways Framework Executive Summary

Alberta Chamber of Resources  
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## Executive Summary

Our purpose is to build on the Alberta Chamber of Resources' (ACR) ongoing mission of providing cross-sector leadership for strategic and responsible development of Alberta's natural resources, with specific focus on envisioning sustainable advancement for the Resource Industries of the Future (RIF).

The intent of our RIF initiative is to outline opportunities to leverage enabling conditions and overcome limiting conditions for the purpose of identifying conceptual practical pathways, over the next 30 years, in support of a low carbon sustainable resource economy in Alberta.

Our white paper, herein, outlines conditions for promoting success in a low carbon economy including economic, technical, policy, and collaboration aspects. We have composed a vision of practical conceptual pathways for Alberta future focused economic diversification for consideration.

Alberta is home to an abundance of natural resource industries. We have a mature ecosystem for energy innovation and collaboration to build on and leverage for further successes.

We, as a global community, have a significant challenge ahead of us as we accelerate and implement our energy transition solutions. Alberta and Canada have a critical role to play to meeting transition pathway demand. There is an incredible economic opportunity associated with meeting transition pathway demand with competitive, low emission production. An orderly transition will require practical approaches and significant investment on the part of government and industry.

A conceptual pathway shows promise for significant reductions in GHG across Alberta's industry sectors. Ongoing energy efficiency and operational improvements, together with available and developing technologies, require accelerated implementation by industry. These improvements and innovations will need continuously more staunch support and enabling by government policy.

High level actions to support reaching successful outcomes across industry sectors should include:

- Accelerate the deployment of energy efficiency and process improvement technologies
- Identify electrification and fuel substitution opportunities and start to implement
- Build CO2 trunk line and storage hubs as enabling infrastructure
- Develop, demonstrate, and deploy CCUS technologies
- Accelerate development, demonstration, and deployment of new net zero technologies
- Fund and support hydrogen enriched natural gas (or hythane)
- Continue to allocate funding towards continued irrigation infrastructure modernization.
- Broaden access to funding for research and development on advanced irrigation technologies
- Appropriate upgrades to the electric distribution system to support solar installations
- Focus on waste mitigation and diversion solutions that consider the full waste hierarchy
- Focus on solutions to improve energy efficiency, reduce carbon footprint, and reduce impacts on water supply and water quality associated with circular economy processes
- Data-based and digital solutions to measure ESG benefits and outcomes.
- Attention as well to potential new wastes from emerging advanced and composite materials.
- Benchmarking programs to quantify the performance of industry relative to global standards and highlight the untapped potential to reduce energy demand and GHG emissions levels.
- Incentivize energy management, fuel switching and bioenergy with CCUS programs.

Continued and expanded collaborations will be a vital component to enabling pathways for industry GHG reductions. We, as members of the ACR; represent industry, academia, and professional service leaders in Alberta. As vested stakeholders, we are keenly interested in the future of our industries. Next steps in follow-up to our RIF initiative could include focused, solution-oriented dialogues between government and ACR members to high-grade the opportunities for government to action.