

WHY THE ARIF?

A strong research and innovation system lays the foundation for remarkable discoveries, creates new jobs, and helps Alberta build a prosperous, growing society positioned for national and international success.

The Government of Alberta realizes that setting realistic, measureable targets is the first step to achievement. This Framework sets out a suite of aspirational **Innovation Targets**, intended to inspire collective action to develop transformational solutions that advance the lives of Albertans.

Aspirational, yet feasible innovation targets in areas of highest need or opportunity will:

- ✓ stimulate bold ideas and actions from innovators, industry, and entrepreneurs;
- ✓ guide research investments to support new knowledge where it's needed; and
- ✓ support a robust pipeline of innovations from early stage to scale-up, to market-ready.

WHAT IS NECESSARY FOR SUCCESS?

A successful research and innovation system requires the right elements and conditions to support and catalyze its findings and activities:



Infrastructure



People



Innovation
Environment



System
Linkages

HOW WILL WE GET THERE?

The Alberta Research and Innovation Framework (ARIF) Action Plan 2017 – 2020 outlines the Government of Alberta's tactical approach to advance the innovation targets and demonstrate results for Albertans.



For more information, contact Economic Development and Trade – 780-644-2253

2017



Alberta Research and Innovation Framework 2017

2030 INNOVATION TARGETS

Emerging Technologies

Grow Alberta's Green Economy

Support the cleantech sector to increase industry sales revenue by 25%, thereby increasing Alberta's global market share by 20%



Advanced Manufacturing & Materials

The value of Alberta's manufacturing sector will increase from \$18.8 billion to \$40 billion through the development of advanced materials, instrumentation, and repurposing jobs (2014 base)



Digital Economy

The information and communications technology (ICT) industry in Alberta generates more than \$20 billion in annual revenues, and the province is the best in Canada for digital literacy and connectivity



Food & Agriculture

Increase Sales

Sales from ingredient, food, and beverage product manufacturing increases from \$13.7 billion to \$25 billion (2014 base)



Increase Productivity

Increase crop and livestock quality and productivity by 30%, while responsibly managing natural resources (2013 base)



Strengthened Public Trust for Expanded Markets

Ensure agriculture, food and beverage production meets or exceeds public expectations and values by 10% by 2030 (2016 base)



Energy and GHG Mitigation



Reduce GHG Emissions

Support Alberta's climate change goals by accelerating solutions to reduce methane emissions by 45% by 2025 and ensure a dynamic portfolio of GHG emission reduction technologies (2014 base)



Increase Value & Market Access

Support the successful commercialization of new value-added products to increase the market value of Alberta's oil and gas exports by 25% and expanding access to market



Improve Oil Sands Efficiency

Oil sands production efficiency and economics improve by decreasing fresh water use by 50%, GHG emissions by 50% on a per barrel basis, and supply cost of bitumen to be globally competitive



Renewable Energy

Renewable energy sources like wind and solar will contribute 30% of Alberta's electricity generation

Environment & Climate Adaptation



Conserving Biodiversity

Biodiversity is maintained or enhanced at levels relative to reference conditions



Restoring Alberta's Landscapes

Reduce landscape disturbance intensity by 20% and accelerate reclamation of disturbed lands to promote native habitat and species recovery



Sustainable Water Management

Safe, secure, and reliable water resources, while enhancing the health of the aquatic ecosystems and improving overall water use efficiency by 30% (2010 base)

Health



Improve Robustness of Health Data

100% of human health data, social determinants of health data, and health-related data in the province are secure, linked, and readily accessible to improve health outcomes and enable decision making and research



Improve Quality of Care

Alberta has a high performing and equitable health care system with improved service quality and health outcomes and a per capita cost at or below the Canadian average



Reduce Burden of Disease

Innovations in chronic disease prevention and management decrease the disease burden of Albertans, including a 25% decrease in avoidable mortality and a 20% increase in patient-informed quality-adjusted life years for Albertans with chronic disease



Accelerate Health & Wellness Innovation

Alberta to become a top 10 location for research, development and commercialization of health and wellness innovations in North America, leading to social and health benefits for Albertans and beyond

Fibre & Bioindustrial

Increase Sales

Exports from Bioindustrial sectors increase by five times while maintaining environmental sustainability



Drive Investment

Industry operating in the value-added bioindustrial sector will attract an additional \$3 billion private sector investment in Alberta



Reduce Waste

50% reduction in organic waste to landfill through innovative technologies which produce value-added products

