



GOING GLOBAL

A GUIDE TO COMPETING IN A GLOBALIZED ECONOMY

GOING GLOBAL

THE GLOBAL ECONOMY IS GOING THROUGH MAJOR TRANSFORMATION. FORCES SUCH AS THE RISE OF EMERGING MARKETS, AN AGING POPULATION, THE POWER OF DISRUPTIVE TECHNOLOGIES, AND GREATER GLOBAL CONNECTIVITY ARE DRIVING DEMAND FOR NEW PRODUCTS AND SERVICES AND CREATING NEW ECONOMIC OPPORTUNITIES.

WE ARE WELL-POSITIONED TO MEET THOSE DEMANDS AND CAPITALIZE ON NEW OPPORTUNITIES BY ALIGNING OUR TRADITIONAL ECONOMIC STRENGTHS WITH TECHNOLOGY-DRIVEN GLOBAL OPPORTUNITIES.

TO COMPETE TO WIN, WE MUST REASSESS OUR DEFINITION OF COMPETITIVENESS. IN ORDER TO DELIVER CLEAR RESULTS THAT ENHANCE OUR GLOBAL COMPETITIVENESS, GOVERNMENTS MUST:

- ADOPT A GLOBAL MINDSET
- CREATE AN ENABLING ENVIRONMENT
- INVEST IN A GLOBALLY COMPETITIVE TALENT POOL
- FOSTER WORLD CLASS INNOVATION

	WHERE WE ARE TODAY	2025 GOALS
FOREIGN DIRECT INVESTMENT (FDI)	ALBERTA IS 7 TH AMONG CANADIAN PROVINCES FOR INBOUND FDI	PROPEL ALBERTA INTO THE TOP THIRD OF CANADIAN PROVINCES FOR INBOUND FDI
	STOCK OF FOREIGN INVESTMENT GROWTH IN CANADA 2% ANNUALLY SINCE 2005	ACHIEVE FOREIGN INVESTMENT GROWTH FOR CANADA ABOVE OECD AVERAGE (7%)
SMALL & MEDIUM-SIZED ENTERPRISES (SMES) EXPORTING	ONLY 12% OF CANADIAN SMEs ARE EXPORTING	DOUBLE PERCENTAGE OF SMEs EXPORTING

GLOBAL OPPORTUNITY | PAGES 2-9

- + A globalized economy | pages 2-3
- + The Edmonton Metropolitan Region's global value proposition | pages 4-5
- + The internationalization imperative | pages 6-7
- + Government's role | page 8

RECOMMENDATIONS

ADOPT A GLOBAL MINDSET | PAGE 10

An all-of-government approach to internationalizing our economy and businesses focuses on reforming institutions and the data that drives decision-making.

- + Whole-of-government systemic and cultural shift | page 10
- + Data-driven decision making | page 10
- + A coordinated approach to investment and innovation attraction | page 10

CREATE AN ENABLING ENVIRONMENT | PAGE 11

The enabling environment of global competitiveness includes using levers like infrastructure, taxation and regulation to enable economic growth and internationalization.

- + Economy-enabling physical and digital infrastructure | page 11
- + Modernized taxation tools | page 11
- + Growth-focused regulatory system | page 11

INVEST IN A GLOBALLY COMPETITIVE TALENT POOL | PAGE 12

Attract, develop and retain a more globally competitive, diverse and digitally-skilled workforce.

- + Fast-track foreign talent | page 12
- + Retain international students | page 12
- + Empower Indigenous Peoples | page 12
- + Skills for the modern economy | page 12

FOSTER WORLD CLASS INNOVATION | PAGE 13

Foster public-private partnerships, accelerate commercialization and adoption of advanced technologies, integrate innovators with the global supply chain and showcase local innovations globally.

- + Scale for global growth | page 13
- + Speed to market | page 13
- + Facilitate digitization and technology adoption | page 13

A GLOBALIZED ECONOMY

CHANGING DYNAMICS ACROSS THE GLOBE – DRIVEN LARGELY BY TECHNOLOGY AND DEMOGRAPHICS – ARE TRANSFORMING DEMAND FOR PRODUCTS AND SERVICES AND GLOBAL VALUE CHAINS AT AN UNPRECEDENTED PACE AND SCALE.

1

THE RISE OF EMERGING MARKETS



RISING DEMAND FOR AGRI-FOOD & ENERGY

Middle class growth in emerging markets will drive an increase in protein consumption and demand for food produced in a safe and environmentally sustainable way.

Emerging markets will consume almost two-thirds of the world's manufactured goods by 2025. By 2030, developing countries are projected to account for more than half of all global consumptions.

MIDDLE CLASS GROWTH IN EMERGING MARKETS 2010-2030: 3 BILLION PEOPLE

BY 2050, GLOBAL DEMAND FOR AGRI-FOOD IS EXPECTED TO RISE BY 70%.

THE WORLD WILL NEED TO PRODUCE AS MUCH FOOD IN THE NEXT 45 YEARS AS IN THE PREVIOUS 10,000.

DEMAND FOR PLASTICS (USED FOR FOOD PRESERVATION, ELECTRONICS, HOUSEHOLD PRODUCTS): NEARLY DOUBLED SINCE 2000.

PETROCHEMICALS SET TO ACCOUNT FOR MORE THAN A THIRD OF THE GROWTH IN OIL DEMAND TO 2030, AND NEARLY HALF TO 2050.

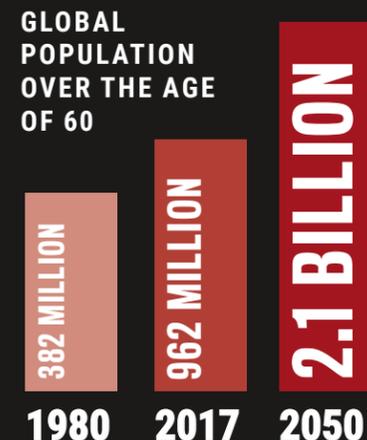
2

AN AGING POPULATION



INCREASED NEED FOR HEALTH INNOVATION

The global population is aging (even more so in developing countries), health care costs are rising, and chronic diseases are increasing in prevalence driving a demand for a more efficient delivery system for patients and practitioners.



GLOBAL DIGITAL HEALTH MARKET EXPECTED TO GROW FROM \$118 BILLION TO \$223.7 BILLION BY 2020, A COMPOUND ANNUAL GROWTH RATE OF 45%.

3

THE POWER OF DISRUPTIVE TECHNOLOGIES



PRODUCTIVITY AND ECONOMIC GROWTH OPPORTUNITIES

AGRI-TECH - MARKET VALUE OF SMART FARMING APPLICATIONS IS EXPECTED TO REACH \$23.14 BILLION BY 2022 GLOBALLY, RISING AT A COMPOUND ANNUAL GROWTH RATE OF 19.3% FROM 2017.

LIFE SCIENCES - ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING APPLICATIONS IN HEALTH TECHNOLOGY VALUED AT \$1.4 BILLION IN 2016, WITH EXPECTED ANNUAL 40% GROWTH RATE TO REACH \$6.6 BILLION BY 2021.

CLEAN TECH - GLOBAL ACTIVITY IS ESTIMATED AT OVER \$1 TRILLION AND EXPECTED TO EXCEED \$2.5 TRILLION BY 2022.

ADVANCED MANUFACTURING - INTERNET OF THINGS (IOT) APPLICATIONS IN MANUFACTURING WILL GENERATE \$1.2-\$3.7 TRILLION OF GLOBAL ECONOMIC VALUE ANNUALLY BY 2025.

INDUSTRY 4.0 TECHNOLOGIES HAVE THE ABILITY TO BOOST THE PRODUCTIVITY OF THE WORLD'S FACTORIES BY 10-25%, ADDING 1-1.5% TO A NATION'S ANNUAL PRODUCTIVITY GROWTH.

THE EDMONTON METROPOLITAN REGION'S GLOBAL VALUE PROPOSITION

NATIONALLY DISTINCTIVE - INNOVATIVE - GLOBALLY RELEVANT

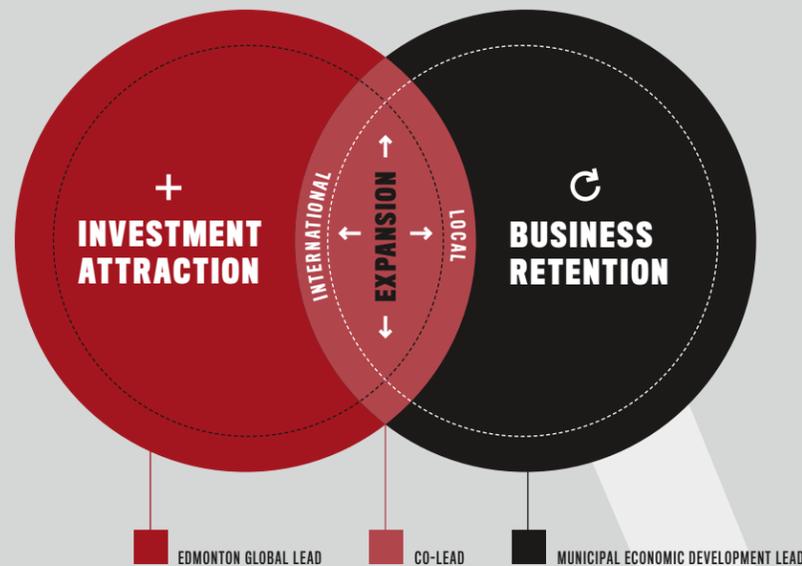
THE EDMONTON METROPOLITAN REGION POSSESSES UNDENIABLE POTENTIAL BOTH IN TERMS OF FORECAST POPULATION GROWTH AND BUSINESS INVESTMENT ACTIVITY.

The Edmonton Metropolitan Region is well-positioned to meet the increased demand from an emerging global middle class and aging population. Our global value proposition is at the intersection of traditional sector strengths and their technology-driven transformations.

MANUFACTURING / ADVANCED MANUFACTURING	HEALTH & LIFE SCIENCES	ENERGY & CLEAN TECH	FOOD & AGRICULTURE
METAL & MACHINE FABRICATION	DIGITAL HEALTH	PETROCHEMICAL PROCESSING	HEMP PROCESSING
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING	APPLIED PHARMACEUTICAL INNOVATION	ENERGY SERVICING	FOOD & BEVERAGE PROCESSING
INDUSTRY 4.0 TECHNOLOGIES	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING APPLICATIONS	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING APPLICATIONS	AGRI-TECH & AI / MACHINE LEARNING APPLICATIONS FOR FOOD SAFETY
INTERNET OF THINGS APPLICATIONS IN MANUFACTURING	HEALTH DATA ANALYTICS	RENEWABLES & GEOTHERMAL	AGRI-FOOD PRODUCT INNOVATION

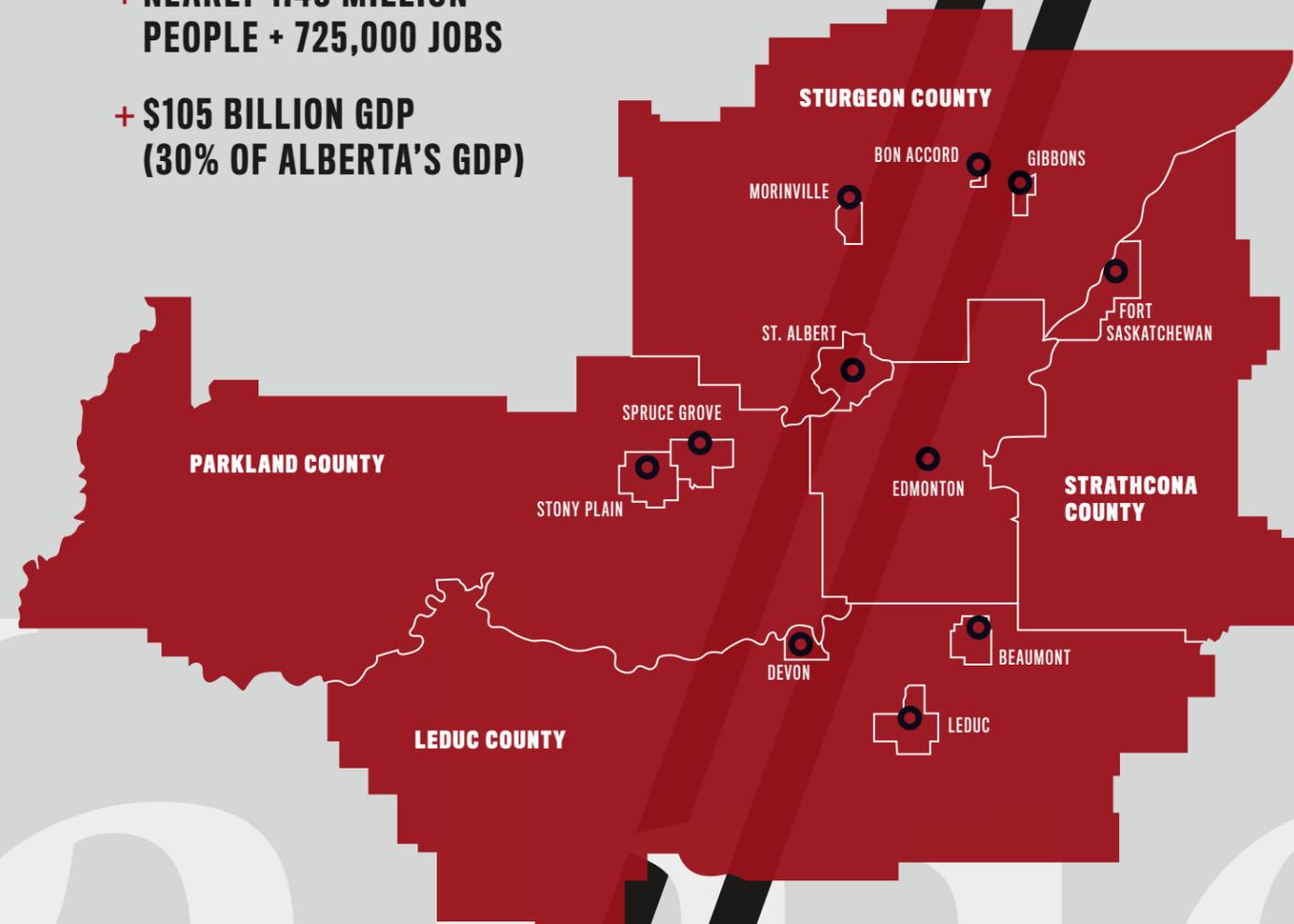
Coopetition: Collaborating locally to compete globally

Edmonton Global was created by 15 municipalities to take the Edmonton Metropolitan Region's global value proposition to the world. We use a collaborative approach to investment attraction and export promotion that incorporates data analysis, insights from key private and public stakeholders, and broader market intelligence into a process that aligns local strengths with international market trends and opportunities.



THE EDMONTON METROPOLITAN REGION:

- + FIFTH MOST PROSPEROUS REGION IN CANADA
- + NEARLY 1.43 MILLION PEOPLE + 725,000 JOBS
- + \$105 BILLION GDP (30% OF ALBERTA'S GDP)



THE INTERNATIONALIZATION IMPERATIVE

“THE EVIDENCE IS CLEAR THAT GREATER EXPORTS AND FOREIGN INVESTMENT ARE BENEFICIAL TO FIRMS, WORKERS AND METRO ECONOMIES. EVERY REGION CAN – AND MUST – BE GLOBAL IN ITS ORIENTATION TO TAKE ADVANTAGE OF THESE TRENDS, RATHER THAN BE TAKEN ADVANTAGE OF.”

~ THE BROOKINGS INSTITUTE

IN ORDER TO CAPITALIZE ON EMERGING GLOBAL OPPORTUNITIES, WE NEED TO INTERNATIONALIZE OUR ECONOMY AND BUSINESSES.

What is internationalization?

For the economy, it's increasing linkages to, and involvement in, international markets through FDI attraction, trade, and export promotion.

For a business, it's taking steps to increase their footprint, or capture greater market share, by branching out into international markets.

Why is it important for Canada and Alberta?

Canada's and Alberta's economies are heavily dependent on internationalization and the global economy because our market size is too small to sustain all domestic production. Essentially, we can grow our economy by going global.

“THOSE COMPANIES THAT DON'T WORK IN INTERNATIONAL MARKETS BECOME LESS COMPETITIVE AND MORE VULNERABLE.”

~ IESE BUSINESS SCHOOL, FORBES MAGAZINE

Benefits

Benefits of Internationalization

To put the benefits in terms of simple numbers: when countries increase their level of globalization by 1%, their GDP growth rises by 10-15 basis points. That's a linkage we can't afford to ignore with our inbound FDI and our GDP growth steadily on the decline.

COUNTRIES WITH A LARGER NUMBER OF CONNECTIONS IN THE GLOBAL NETWORK OF FLOWS INCREASE THEIR GDP GROWTH BY UP TO 40% MORE THAN LESS-CONNECTED COUNTRIES DO. UP TO \$450 BILLION IS ADDED TO GLOBAL GDP GROWTH EACH YEAR BY GLOBAL NETWORK OF FLOWS.

FOREIGN INVESTMENT HAS PLAYED A SIGNIFICANT ROLE IN CANADA'S ECONOMY

2017 CANADA'S INWARD FDI STOCK WAS \$1.1 TRILLION USD OR 62.5% OF GDP. APPROXIMATELY 1.9 MILLION CANADIANS WERE EMPLOYED BY FOREIGN MAJORITY-OWNED COMPANIES: NEARLY 12% OF ALL CANADIANS.



INCREASE IN INBOUND FDI FROM 2% TO 6% = ~\$43 BILLION ADDED TO CANADA'S GDP

GOVERNMENT'S ROLE

CHALLENGE ORTHODOXIES ▪ RE-EVALUATE COMPETITIVENESS
▪ SET AMBITIOUS GOALS

CONCERNS AND HOPES ABOUT INTERNATIONAL INVESTMENT REVOLVE IN MANY WAYS AROUND WHAT GOVERNMENTS MAY DO.

The reality of the globalized economy is that competitors are not all offering identical products under the same conditions. Governments play an integral role in setting the conditions, ensuring stability and predictability, leveling the playing field and capitalizing on competitive advantages.

This forces us to question our core assumptions around competitiveness and productivity, take close note of the shifting landscape and move quickly to adapt. Many of our institutions, policies and regulations are based on a 20th century economic model, which means in many respects we are barely keeping up with our global competitors, let alone leading them.

We cannot compete in a 21st century data-driven globalized economy with a 20th century mindset.

Global Competitiveness Principles for Governments:

- + *Strive to regulate and operate at the speed of commerce, responding quickly to new and emerging global competitiveness trends*
- + *Strive to continuously reform and strengthen traditional policy levers*
- + *Have a strategy for promoting and enabling internationalization*
- + *Create a culture of innovation and entrepreneurship both within government and in the broader public sector*
- + *Know government's role and operate within it to avoid being in the business of business*

"THE WINNERS IN THE NEW ERA OF GLOBALIZATION WILL BE THOSE WHO CAN REALLOCATE RESOURCES WHILE QUICKLY ADOPTING STRATEGIES AND POLICIES TO TAKE ADVANTAGE OF THE TRENDS."

~ PUBLIC POLICY FORUM

Ambition

ADOPT A GLOBAL MINDSET

Whole-of-government systemic and cultural shift

1. That the Government of Canada and Government of Alberta ensure all of government is more focused on working with businesses and enabling new investment, economic growth, and creating an environment where risk, creativity and experimentation are applauded and rewarded. Attribute specific mandates and metrics for ministries and departments focused on collaboration, innovation and enabling economic growth.

Data-driven decision making

2. That the Government of Canada and Government of Alberta commission independent, sector-based, global competitiveness reviews of the province and country regularly, including an economic impact analysis of government programs and initiatives and an environmental scan of policy and regulatory changes in competing jurisdictions. Publish the details and use the data to inform policy changes to increase global competitiveness for investment attraction and economic growth.

A coordinated approach to investment attraction

3. That the Government of Alberta reform FDI attraction and export promotion efforts across all ministries to provide coordinated end-to-end investor care based on global best practices: government-funded, operationally independent, support from the highest political levels, employment of sectoral experts and strategies based on competitive strengths, use of private sector ambassadors and involvement of all relevant public and private sector agencies.

CREATE AN ENABLING ENVIRONMENT

Economy-enabling physical and digital infrastructure

4. That the Government of Canada and Government of Alberta take a strategic approach to infrastructure planning and funding with a coordinated 20-year economy-enabling infrastructure plan that includes a rolling list of high-priority, short-, medium- and long-term infrastructure needs (including ongoing maintenance) put through a competitiveness filter to prioritize projects that will enhance our global competitiveness, productivity, and market access.
5. That the Government of Canada and Government of Alberta leverage public-private funding mechanisms to invest in the required infrastructure to achieve 100% internet coverage across the Edmonton Metropolitan Region by 2025 – with unlimited data and a minimum of 100 Mbps download speeds and 50 Mbps upload speeds.
6. That the Government of Canada and Government of Alberta promote public-private collaboration to pool data assets through open big data libraries. For sensitive data, create data trusts that use an independent institution with trustees to make decisions about how data is collected, used and shared and ensure competitors have common levels of access.

Modernized taxation tools

7. That the Government of Canada and Government of Alberta implement a mandated and regularized review process that evaluates and reforms different components of the tax system annually based on the findings of economic impact analysis and global competitiveness reviews (see Recommendation 2).
8. That the Government of Alberta and Government of Canada each implement a broad-based tax credit, that can be leveraged together to focus on attracting anchor tenants in target sectors. The tax credit structure should align with global best practices: transparent criteria and process, ongoing intake, at least six years of certainty to align with corporate planning timelines, processing at the speed of commerce, and determined by open and clearly weighted criteria.

Growth-focused regulatory system

9. That the Government of Canada and Government of Alberta incorporate the objective of regulatory harmonization with key competitor jurisdictions into the government's regulatory budgeting model so that departments are credited and penalized for regulatory changes that converge or diverge with other global standards. And include a mechanism for real-time public tracking on those key performance indicators.
10. That the Government of Canada and Government of Alberta include "innovation, economic growth and global competitiveness" as core considerations in the mandate of all regulators.
11. That the Government of Canada and Government of Alberta establish a mechanism for industry experts to advise regulators on an ongoing basis of unintended impacts of regulations and ways to mitigate or eliminate them and identify opportunities to achieve health and safety outcomes at the lowest cost to the economy.

INVEST IN A GLOBALLY COMPETITIVE TALENT POOL

Fast-track foreign talent

12. **A)** That the Government of Canada and Government of Alberta eliminate the requirement for a Labour Market Impact Assessment through the Alberta Opportunity Stream.
- B)** That the Government of Canada invest in expanding the Global Skills Stream and improving processing times by 50% for applications by 2025.

Retain international students

13. That the Government of Canada and Government of Alberta work together to create an international student retention program across all Alberta-based universities to fast-track work permits and immigration for international students in STEM fields who obtain full time employment or pursue entrepreneurship in Alberta.

Empower Indigenous Peoples

14. That the Government of Canada fund Indigenous-led education at a rate comparable to average provincial per pupil K-12 funding and continue to direct funding to Indigenous-led programs that offer a tailored and culturally appropriate approach to Indigenous post-secondary education and employment training.

Skills for the modern economy

15. That the Government of Canada and Government of Alberta partner to collect and analyze data on labour market supply and demand on an ongoing basis and make this information electronically available in real-time to the post-secondary and K-12 education institutions to facilitate informed and market-driven decisions about programming, research, and curriculum.
16. That the Government of Canada and Government of Alberta expand co-op and work integrated learning programs (such as the Student Work Placement Program and Alberta's Registered Apprenticeship Program) and open them up to international students.
17. That the Government of Canada and the Government of Alberta work with post-secondary institutions and industry to develop lifelong learning programming relevant to the new economy and develop a tax credit or rebate for employers who invest in reskilling or ongoing learning for their employees.

FOSTER WORLD CLASS INNOVATION

Scale for global growth

18. That the Government of Canada and Government of Alberta modernize innovation grants and tax credits so that the criteria are more in line with the kind of research that characterizes today's digital era, the process is more in line with business timelines and practices, and the focus is on helping companies with high-growth and export potential scale up.

Speed to market

19. **A)** That the Government of Canada work with the Government of Alberta and relevant public and private sector stakeholders to implement a regulatory sandbox for new health technology commercialization and adoption within the Edmonton Metropolitan Region to enable early testing, validation and idea-sharing related to regulatory options for emerging technologies that would increase efficiency, reduce costs, and have high export potential.
- B)** That the Government of Alberta work with industry to develop a clean technology regulatory sandbox in the Edmonton Metropolitan Region for testing, commercializing and adoption of new technologies for the oil and gas sector that would increase efficiency, reduce costs, reduce carbon intensity and emissions, and have high export potential.

Facilitate digitization and adoption

20. That the Government of Canada and Government of Alberta support the establishment of a digitization and technology adoption program for Alberta businesses that identifies companies with high potential for growth and export, and assigns a case manager to help them assess opportunities for digitization and technology adoption and navigate implementation through the support of their local innovation ecosystem.



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