Alberta Competitiveness Council

MOVING ALBERTA FORWARD



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MESSAGE FROM THE CO-CHAIRS

A competitive Alberta promotes and enables future growth and prosperity in the province for current and future generations. Improving Alberta's competitiveness is a shared responsibility between government and private business and industry.

In 2010, the Alberta government created the Alberta Competitiveness Council to look at ways to improve Alberta's ability to compete in a global economy. A more competitive economy benefits all Albertans by creating more sustainable and stable economic growth that improves living standards and quality of life.

The Alberta Competitiveness Council consists of government and industry leaders. Together, we identified actions needed to increase Alberta's competitiveness in general, as well as in four specific sectors:

- → Agriculture Grains and Oil Seeds;
- → Manufacturing;
- → Financial Services; and
- → Petrochemicals/Chemicals.

The Council's work included developing a framework for measuring competitiveness to compare Alberta's performance with that of other jurisdictions. This benchmarking study found that Alberta has a sound foundation for competitiveness - specifically, living standards, economic well-being, and taxes and fiscal policy. In some areas, however, Alberta has room for improvement, primarily in relation to investments in research and development, productivity growth and innovation.

Focusing on the findings from the benchmarking study and based on consultations with industry, the Council determined the priority actions to improve Alberta's competitiveness. The recommendations are practical and through collaborative partnerships, they will be implemented with meaningful results.

The work of the Council has never been about implementing a single major initiative nor has the Council's work been about major spending commitments. It is about moving in the right direction and taking concrete steps to improve competitiveness and doing so without delay. Most importantly, it is about collectively responding to challenges and keeping our province on track for a prosperous future.

We would like to thank the many individuals who shared their knowledge and provided their support as we prepared this action plan. We commend the collaborative approach used to arrive at this plan. By working together as equal partners, recognizing that actions must occur in both the public and private spheres, we will make a difference.



Honourable **Ed Stelmach** Premier



Bob Brawn Chair. Alberta Economic **Development Authority**

Executive Summary

Alberta's competitiveness matters.

Competitiveness is essential for maintaining Alberta's high quality of life. A competitive economy attracts industries and investment to the province, which create jobs and opportunities for Albertans. A competitive Alberta also leads to healthy and strong communities. Businesses that call Alberta home make important contributions to their communities, and they help finance public services like education, health, infrastructure, and environmental protection.

Our province's competitive position, anchored by our abundant natural resources, has fuelled our growth and prosperity over the past decade.

However, our continued prosperity is not assured. Alberta faces a growing number of competitors, and shifting economic forces stand to impact our future success. We cannot rest on our past success and passively expect opportunities to keep coming to our province.

Competitiveness is the condition created when government, industry and Albertans work together to pursue sustained prosperity.

Alberta Competitiveness Council Report on Competitiveness: Alberta 2010

Simply put, there are other places in the world that are competing for the same investment, jobs and opportunities.

Alberta will not be complacent.

We must all work to enhance our province's competitiveness - government and industry, academics and investors, and employers and employees.

In that spirit, and as part of the Alberta Competitiveness Act, the Government of Alberta established the Alberta Competitiveness Council.

The purpose of the Alberta Competitiveness Council is to analyze Alberta's competitive position relative to national and international competitor jurisdictions, and to identify actions that will sustain and improve Alberta's competitive position.

Consisting of Members of the Legislative Assembly and business leaders, the Council represents a strong collaboration between government and industry. This reflects the fact that both government and industry have complementary roles to play in achieving the shared objective of sustained prosperity.

Benchmarking Alberta's Competitiveness

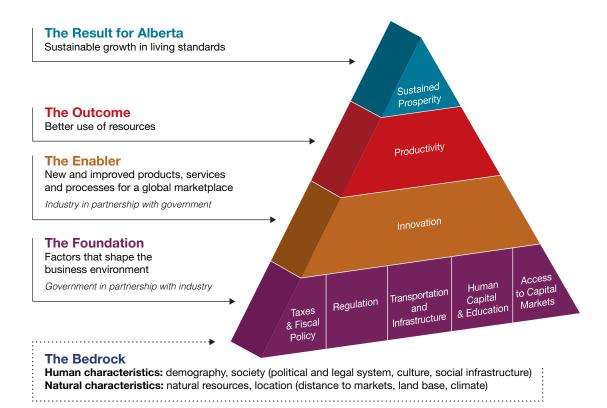
In December, 2010, the Council released its Report on Competitiveness: Alberta 2010, which benchmarked Alberta's performance relative to 14 other national and international jurisdictions.1

The report measured Alberta's position on 60 indicators across the entire provincial economy, using the framework of the Competitiveness Pyramid.

In the Competitiveness Pyramid, the bottom layer is the bedrock: a series of human and natural characteristics within every jurisdiction. Generally these change only incrementally over time, if at all. The bedrock comprises characteristics such as the location, climate, natural resources, political and legal systems, and social or cultural aspects of society.

The foundation layer is composed of the key structural areas upon which a competitive environment is built. These are factors that government is primarily responsible for shaping. They include taxes and fiscal policy, regulation, transportation and infrastructure, human capital and education, and access to capital markets.

The report is available at http://www.finance.alberta.ca/ competitiveness.



As depicted in the Pyramid, these factors enable innovation, which is continually required for any competitive environment. Innovation is developing new and better ways of doing things - like investing in new machinery and equipment, or adopting more effective processes. While government can create conditions that enable innovation, industry has the primary role in pursuing and deploying innovation.

Innovation promotes productivity. Productivity gains are essential to sustained prosperity - a balance of social, economic and environmental outcomes the result that matters for Albertans.

Alberta ranks well in terms of sustained prosperity. The province's Gross Domestic Product per capita an internationally accepted measure of a jurisdiction's overall standard of living - is the highest among all comparator jurisdictions. Our province also scores well on the Index of Economic Well-being², which considers environmental and social measures of well-being such as equality of income distribution and risks of poverty and illness.

In addition, Alberta ranks highly on several foundation factors, such as competitive taxes and infrastructure.

However, there are a number of areas where Alberta has opportunities for improvement.

To sustain our province's economic growth, Alberta must improve its productivity growth. This will require greater innovation from industry.

To support industry's ability to innovate, our province must have a strong foundation for competitiveness. Industry and government must work together to shape the factors that will provide a competitive business environment.

² From the Centre for the Study of Living Standards.

Overall Factors of Competitiveness

Based on the results of the benchmarking report, and through conversations with industry leaders and representatives, the Alberta Competitiveness Council has identified a number of priority areas that require urgent attention by government and industry throughout the entire economy:

→ Labour market development

Alberta's single greatest challenge to competitiveness is labour supply. The recent global downturn relieved some pressure in the province's labour market, but a new period of labour shortages is fast upon us. Companies are already reporting difficulty sourcing the workers they need.

This time around, the labour shortage will be structural and sustained, driven by demographic forces such as an aging population. Alberta will not be alone. Other developed economies are facing the same challenges and will be competing aggressively for the same workers. Alberta will face an ongoing battle for talent, both skilled and unskilled. Industry will need to adapt their business models, and deal with labour shortages as the "new normal."

Alberta's experiences with labour shortages during the last economic boom have taught us lessons. Our province must do all it can to develop, attract, and retain workers here at home, from across Canada and from around the world. There is no single solution to this challenge. It will require a variety of strategies and continued collaboration between industry and government in areas such as engaging populations under-represented in the workforce (such as Aboriginals, mature workers, and people with disabilities), workforce training, immigration policy, and education.

ACTIONS: INCREASE PARTICIPATION AND EMPLOYMENT OF GROUPS UNDER-REPRESENTED IN THE ALBERTA ECONOMY.

MAKE IT EASIER TO EMPLOY TALENT FROM OTHER PARTS OF CANADA AND ABROAD.

→ Productivity and innovation

Alberta has a productivity problem. Our province's productivity growth is weak compared to that of other jurisdictions.

Productivity growth is critical for Alberta's competitiveness, given the tough labour market challenges the province will face. With labour supply unable to meet future demand, we will need to produce greater value from each hour of work. We must improve productivity throughout the entire economy, to keep pace with and exceed that of other jurisdictions.

To do this, Alberta needs to be innovative – we must pursue new and better ways of doing business. The Government of Alberta has created an environment that encourages innovation through its tax and fiscal policies, and through investments in education and research. Industry must make use of that environment and examine ways of enhancing their innovation and productivity.

Innovation can come in many forms, but it requires nothing short of a culture change. Truly innovative and productive companies will be those that have strong leadership and management, foster creativity and risktaking, have a qualified workforce, and demonstrate entrepreneurial spirit.

ACTION: LEVERAGE PRODUCTIVITY AND INNOVATION NETWORKS.

→ Transportation, infrastructure, and access to markets

Alberta companies depend on access to high-quality and reliable transportation systems to enable the flow of people, goods and services. Maintaining and enhancing Alberta's transportation and infrastructure will be critical for supporting Alberta's long-term competitiveness. Industry and government must work together to enhance the efficiency and effectiveness of transportation modes commonly used by Alberta businesses - trucking, rail, and air. In addition to much-needed regulatory improvements, our transportation systems must benefit from strategic, long-term planning.

Enhancing transportation is also essential for expanding Alberta's access to international markets. Currently, Alberta is highly dependent on U.S. markets, which poses economic risk to the province. Alberta must expand the number of sizeable customers for its goods and services. With some of the world's largest and most diverse markets, Asia presents a significant growth opportunity for Alberta businesses.

As Alberta works with industry to expand its linkages with Asian markets, the ports of Vancouver and Prince Rupert will have increased importance. Alberta must continue to work with British Columbia and Saskatchewan through the New West Partnership³ to enhance the ability of Western Canadian firms to get their products to Asian markets using the Asia-Pacific Gateway infrastructure.

ACTION: MOVE HIGHER-DENSITY MODULES TO ALBERTA OIL SANDS PROJECTS.

→ Regulatory competitiveness

Regulation is essential to a well-functioning economy, assuring environmental sustainability, and creating a safe and just society. But outdated, duplicative, and uncoordinated rules can also impose unnecessary compliance costs. For business and industry, this can lower efficiency and productivity, resulting in competitive disadvantages.

Alberta must have effective regulatory systems that achieve public interest goals in an efficient and affordable manner. To this end, the Government of Alberta has a long-standing commitment to a government-wide regulatory reform program to improve the efficiency and effectiveness of Alberta's regulatory systems. The program advances a quality-based approach for improving regulation, which focuses on the impacts on stakeholders, including burden reduction.

The participation of stakeholders and businesses in the regulatory process is an important part of building an effective system. Businesses need to be able to fully understand the regulatory environment in which they operate. Their feedback can help identify specific

areas where regulatory complexity is hampering competitiveness and help work towards solutions that continue to protect the public interest. Increased coordination among regulators and other governments (municipal, provincial, federal) is also required to enhance opportunities for growth, investment and trade.

ACTION: ESTABLISH MEASURES TO REGULARLY ASSESS ALBERTA'S REGULATORY PERFORMANCE.

Enhancing Sector Competitiveness

The benchmarking report marked the beginning of an ongoing, annual process to enhance Alberta's competitiveness and generate sustained prosperity.

This year, the Alberta Competitiveness Council was mandated to examine factors impacting the province's overall competitiveness and four sectors of Alberta's economy: Agriculture - Grains and Oil Seeds, Financial Services, Manufacturing, and Petrochemicals / Chemicals.

The Council established a task team for each of these sectors, as well as a task team dedicated to examining the overall factors of competitiveness.

Building from the analysis of the benchmarking report, each task team consulted with industry representatives and stakeholders in these four sectors. The task teams also consulted with other government advisory bodies such as Alberta Economic Development Authority and Alberta Innovates. Informed by this input, each task team identified issues impacting Alberta's competitiveness in each sector, and developed a series of key actions aimed at addressing those issues and enhancing the sector's competitiveness.

The key actions are designed to be timely and practical solutions that can be readily implemented. They are intended to address specific competitiveness pressures facing each sector, and to realize demonstrable improvements in the near-to-medium-term (i.e., within five years). They are deliberately limited in number, ensuring they can be implemented with the resources available, and will complement ongoing efforts by industry and government to better position our province for sustained prosperity.

Information about the New West Partnership is available at http://www.international.alberta.ca/645.cfm

→ Agriculture - Grains and Oil Seeds

There are significant economic opportunities ahead for Alberta's grains and oil seeds sector. Estimates suggest the world's population will increase to about 9.3 billion people by 2050, up from about 6.9 billion in 2010, led by growth in developing countries.4 Over the next few decades increasing prosperity among consumers will lead to rising demand for imports of food and agricultural commodities.

These developments offer opportunities for Alberta's grains and oil seeds sector. However, the sector faces some hurdles. Certain areas of agriculture policy remain challenging, including the lack of marketing choice for wheat and barley. As in other agriculture sectors, fewer members of newer generations choose to enter grains and oil seeds farming. The cereal grains sector is also falling behind in productivity improvement compared to crops such as corn, soybeans and canola.

To capitalize on future opportunities, Alberta's grains and oil seeds sector must continually enhance its competitiveness through research and innovation, market access and market development, rural renewal, and improved policy, regulatory and institutional systems.

ACTIONS: CONTINUE TO SUPPORT MARKETING CHOICE FOR WHEAT AND BARLEY.

ADOPT AND ADVANCE POLICIES THAT ENABLE A MORE COMPETITIVE AND INNOVATIVE INDUSTRY.

ATTRACT FARMERS FROM OVERSEAS.

DEVELOP AND SUPPORT PILOT INCUBATOR FARMS.

ADDRESS THE FUNDING AND GOVERNANCE MODEL FOR GRAINS AND OIL SEEDS RESEARCH AND INNOVATION FOR ALBERTA AND WESTERN CANADA.

→ Financial Services

The financial services industry is one of Alberta's key growth sectors, contributing over \$8 billion to the province's economy.5 Strong energy prices and significant investments in oil sands development have resulted in a remarkable expansion of the financial services industry during the past decade. Alberta's financial services industry has strong growth prospects, and numerous strengths it can leverage and build upon. Now is an opportune time for Alberta to capitalize on these strengths.

The world-class niche strengths of Alberta's financial services industry are not as internationally well-known as they could be. Alberta needs to be "top of mind" for financial services firms, skilled workers in the sector, or those managing large pools of capital. Alberta also needs to enhance the development, attraction and retain retention of skilled financial services talent.

To ensure the sector's continued growth and competitiveness, government and members of the financial services industry will need to work in partnership to address these issues.

ACTIONS: ESTABLISH AN INDUSTRY-GOVERNMENT FINANCIAL SERVICES SECTOR GROUP.

DEVELOP AND IMPLEMENT A BRANDING AND MARKETING STRATEGY FOR ALBERTA'S FINANCIAL SERVICES INDUSTRY.

DEVELOP, ATTRACT, AND RETAIN FINANCIAL SERVICES TALENT.

→ Manufacturing

Alberta offers many advantages to manufacturing companies. However, geographic and demographic realities present challenges to manufacturers in the province.

⁴ United Nations Population Division.

⁵ Statistics Canada, November 2010 estimates for 2009, in chained (2002) dollars.

Alberta manufacturers in some cases face higher costs and longer lead times than manufacturers in competing jurisdictions due to Alberta's northern and landlocked location. This industry also faces difficulty recruiting and retaining workers - a challenge compounded by the dominance of Alberta's oil and gas industry, which competes for many of the same workers. Manufacturers also face pressures from ever-evolving market dynamics, including: the emergence of new global supply chains, increasing competition from lower-cost international markets, and the rising value in the Canadian dollar.

Enhancing the competitiveness of Alberta's manufacturing industry requires urgent attention to two major drivers: people and productivity. These drivers are highly interrelated; without qualified people, manufacturers cannot keep pace with developments that will make them more productive in the future. Action on both fronts is required to enhance the manufacturing sector's competitiveness.

ACTIONS: STRENGTHEN PRODUCTIVITY ALBERTA THROUGH AN INCREASED ROLE AND OWNERSHIP BY INDUSTRY.

UNDERTAKE A DEMONSTRATION PROJECT TO FACILITATE MORE EMPLOYER-SUPPORTED TRAINING.

→ Petrochemicals/Chemicals

Alberta is Canada's leading producer of petrochemicals, and the petrochemicals/chemicals industry represents significant value-adding activity in Alberta's economy. Today, Alberta's industry includes four ethane-cracking plants, including two of the world's largest. Alberta's industry also has key advantages over its main competitor, the U.S. Gulf Coast, including newer and more efficient facilities and historically lower prices for ethane feedstock.

Despite these advantages, the industry's long-term competitiveness and viability is now at risk due to dwindling feedstock supplies, due to changes in the natural gas marketplace and the maturity of Alberta's conventional gas fields. Although current and future natural gas production outside the province offer potential sources of ethane, regulatory uncertainty threatens Alberta's ability to capitalize on these opportunities.

To remain competitive and viable, industry and government must work together to obtain more ethane at competitive prices by enhancing regulatory certainty, improving policies, and leveraging Alberta's infrastructure advantages.

ACTIONS: ENHANCE THE INCREMENTAL ETHANE EXTRACTION PROGRAM.

LEVERAGE AND ENHANCE THE ALBERTA NATURAL GAS HUB.

CHAMPION REGULATORY CERTAINTY TO IMPROVE THE EXTRACTION AND PROCESSING OF NATURAL GAS LIQUIDS IN THE PROVINCE.

Going forward, the Alberta Competitiveness Council will monitor Alberta's progress in implementing the key actions - at the sector level and across the economy. The Council will also consider research and other information to identify a new series of economic sectors for task team examination.

Working together - industry, government and all Albertans we will build on our current competitiveness, and position Alberta for even greater success in the new global economy.

Alberta Competitiveness Council

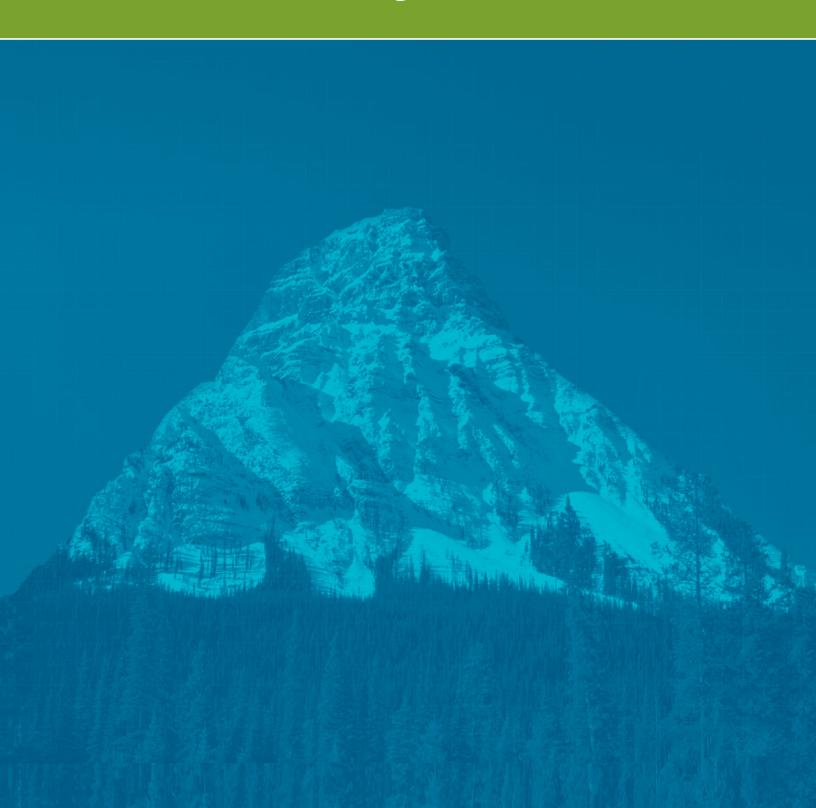
Actions to Enhance Competitiveness - Summary Table

IMPLEMENTATION STAGE
Initiated Government departments, training institutions and employers are working together to update and develop new strategies.
Initiated
Alberta government and businesses are providing input on federal reviews on immigration. Alberta government is taking action on
foreign qualification recognition, including performance measure targets for 2015.
Initiated
Expanded Productivity Alberta programs and services in the past year. Alberta Innovates organizational structure implemented in 2010.
Initiated
Feasibility assessment of a heavy load corridor between industry and Alberta Government under way.
Initiated Assessment of potential measures under way with Alberta's Regulatory Review Secretariat.

ACTION	IMPLEMENTATION STAGE		
AGRICULTURE – GRAINS AND OIL SEEDS			
6. Continue to support marketing choice for wheat and barley.	Initiated		
→ Utilize every avenue and opportunity to consult and coordinate with other western provinces and the federal government to advance the marketing choice file so Alberta farmers are able to sell their grains to whomever they choose.	Alberta government motion made in support of federal action on marketing choice. Alberta Grains Council serving as an advocacy body for producers.		
 7. Adopt and advance policies that enable a more competitive and innovative industry. During federal/provincial/territorial negotiations, champion a position for Growing Forward 2 that calls for policies, programs and services important for long-term competitiveness. 	Initiated Federal/provincial/ territorial discussions ongoing. New agreement in place in 2013.		
8. Attract farmers from overseas.	Initiated		
→ Develop and implement a strategic plan for attracting immigrant farmers to Alberta.	Cross-ministerial effort in development. Information for use by international farm media being developed.		
Develop and support pilot incubator farms.	Initiated		
→ Leverage opportunities for new crop development.	Business case for incubator farms, including potential locations, in development by Alberta Agriculture and Rural Development.		
10.Address the funding and governance model for grains and oil seeds research and innovation for Alberta	Planning Preliminary review and information gathering		
and western Canada.	underway.		
→ Explore ways to address gaps in Research and Development funding for cereal grains.	,		
→ Work within the New West Partnership to establish shared approaches with B.C. and Saskatchewan.			
FINANCIAL SERVICES			
11.Establish an industry-government financial services	Initiated		
 sector group. → This group would support the growth of the financial services industry by monitoring issues and informing regulatory/policy decisions. 	Discussions on governance and funding between industry and government under way.		
12.Develop and implement a branding and marketing strategy for Alberta's financial services industry.	Planning To be completed by industry-government		
→ Take advantage of global recognition of the stability and integrity of the Canadian financial system and Alberta's competitive tax policies.	financial services sector working group.		
13. Develop, attract, and retain financial services talent.	Initiated		
→ Fostering the expansion of the Alberta Finance Institute.	Discussions on the expansion of the Alberta		
→ Increase the talent pool available to the financial services industry in the province.	Finance Institute underway with stakeholders.		

ACTION	IMPLEMENTATION STAGE	
MANUFACTURING		
 14.Strengthen <i>Productivity Alberta</i> through an increased role and ownership by industry. → Move <i>Productivity Alberta</i> from a government entity to a not- 	Initiated Governance and financial structures under development. First stage of transfer targeted	
for-profit business model to enable a greater role for industry and better use of/access to <i>Productivity Alberta</i> resources and services.	for completion by June, 2011.	
15. Undertake a demonstration project on employer-supported	Initiated	
 training. → Implement a program that assesses employer / employee training needs and targeted support through employer-supported training programs. 	Funding arrangements established. Pilot proje parameters in development.	
PETROCHEMICALS / CHEMICALS		
16.Enhance the Incremental Ethane Extraction Program.	Complete	
→ Alleviate the growing shortage of ethane supplies by making program changes to increase adoption and uptake by industry.	Program changes announced March, 2011.	
→ Encourage more ethane extraction from off-gases that result from bitumen refining or upgrading	Industry commitments made March, 2011.	
17.Leverage and enhance the Alberta Natural Gas Hub.	Planning	
→ Develop the concept and relationships needed to capitalize on the extensive infrastructure and state-of-the-art complexes in Alberta with western Canadian and other jurisdictions.	Consultation with sector stakeholders set to begin.	
18. Champion regulatory certainty to improve the extraction and processing of natural gas liquids in the province.	Initiated Policy development and required approvals	
→ Develop policy statement affirming the government's commitment to facilitating value-added development in the province, to guide regulation and developments in upcoming National Energy Board (NEB) hearings.	to pursue intervener status for NEB hearings in process.	

Background



Background

Enhancing Alberta's Competitiveness

Alberta's competitive tax system, investments in essential programs, services and infrastructure. and abundant natural resources all contribute to our substantial economic growth and current prosperity.

However, this does not mean that Albertans' future prosperity is assured. A growing, rapidly changing and increasingly interconnected world is giving rise to economic forces that will impact our province.

Alberta faces increased competition – from within Canada, North America, and from around the world. Each day people and companies make decisions about their future - where to work, where to live and raise their families, where to invest or expand, and where to seek new opportunities. Whether they choose Alberta is directly influenced by how competitive our province is and continues to be.

To ensure Albertans can enjoy long-term prosperity, the province must work to maintain and enhance its competitiveness. We must ensure Alberta provides a climate where entrepreneurship, innovation, productivity, and investment thrive.

We must ensure Alberta provides a climate where entrepreneurship, innovation, productivity, and investment thrive.

Competitiveness is not just the concern of economists or investors. It is in everyone's interest for Alberta to be as competitive as possible - government and industry, academic institutions and leaders, and individual Albertans who work every day to advance the prosperity of the province.

By focusing on competitiveness we will maintain and improve our quality of life and uphold the values important to Albertans.

There are several initiatives with the goal of ensuring Alberta's prosperity for future generations. These include:

- → Premier's Council for Economic Strategy -Established in 2009 and comprised of globally recognized business leaders and experts, the Council has provided a long-term vision and started a conversation on how Albertans can shape a future that builds on the province's strengths and values, while taking it in exciting new directions.
- → Energizing Investment In early 2010, as a response to changes in the energy marketplace, Alberta Energy outlined and led a series of initiatives to position Alberta as one of the most competitive jurisdictions in North America for upstream oil- and gas-development.
- → Alberta Competitiveness Initiative Introduced in the summer of 2010, the Alberta Competitiveness Act brings together government, industry, and Albertans to develop a shared strategy to measure and improve the province's overall competitiveness.
- → Asia Advisory Council Established by the Asia Advisory Council Act, the Council will examine ways of expanding business, education, and cultural linkages between Alberta and Asia, to develop new markets and opportunities for our province.

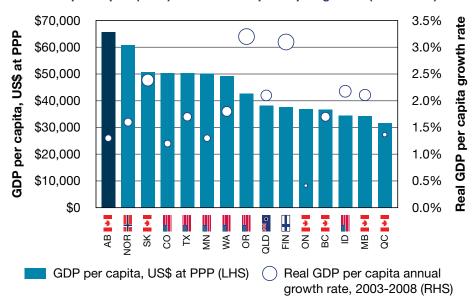
Why Competitiveness Matters

Sustained prosperity is created when government, industry, and Albertans work together to pursue a common objective - a competitive economy.

Sustained prosperity is about improving the standard of living and quality of life for all Albertans. While good jobs and income are important elements for a high quality of life, sustained prosperity is not measured only in terms of economics. It is also about the things we value as a society - including positive health outcomes, a first-rate education system, and a clean and healthy environment.

Prosperity is typically represented in terms of the Gross Domestic Product. While this is one important quantitative measure of prosperity, to be truly prosperous Alberta needs to achieve a balance of social, economic, and environmental outcomes. Our province's ability to improve and invest in those areas depends on maintaining and enhancing our long-term competitiveness.

GDP per capita (2008) and real GDP per capita growth (2003-2008)



We can expand the Gross Domestic Product by working "harder" or working "smarter."

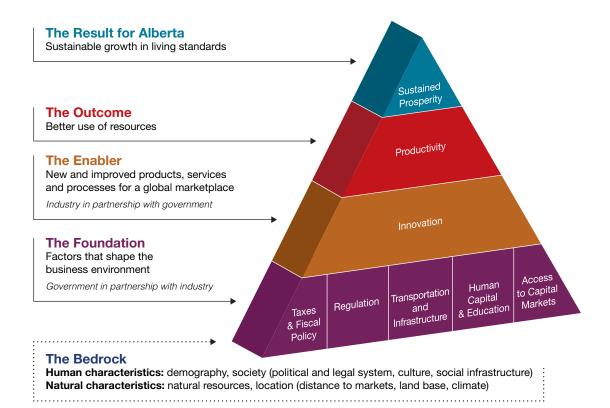
Working harder means increasing the total labour effort in the economy. This is accomplished by expanding the workforce or by working longer hours. Realistically, neither approach provides the right answer, particularly in light of Alberta's current labour force participation and changing demographics. Alberta has one of the highest levels of labour efforts in Canada - there is limited room to increase participation in the Alberta workforce. An aging population and continuing pressures in the labour market will mean that Alberta's standard of living cannot be sustained solely by increasing total labour effort.

The alternative is for Albertans to work smarter by generating more economic activity per hour worked. This means increasing Alberta's productivity. By increasing productivity we can maintain and enhance Alberta's global competitiveness, which can further improve our standard of living and sustain our future prosperity. Through innovation, there are virtually no limits on how productive we can be.

Innovation is the key to developing new and improved products, services, and processes for a global marketplace. No single factor causes innovation to occur, but a variety of factors help to foster innovation and attract investment to the province. Our capacity to innovate depends on having the right combination of skilled people, finance, infrastructure, strong management and leadership, and many other factors.

The role of government is to ensure that policies and programs reflect the values of Albertans and establish a competitive business climate. Industry must lead by creating jobs, seizing economic opportunities, and investing in innovation and productivity. Creating the right mix of policies and actions requires a partnership between government and industry to reach our shared objective of sustained prosperity.

The interrelated nature of these concepts is depicted in Alberta's Competitiveness Pyramid. The pyramid provides a framework for examining Alberta's competitive position and developing initiatives to enhance Alberta's long-term competitiveness.



The Competitiveness Pyramid

In the pyramid, the bottom layer is the bedrock: a series of human and natural characteristics within every jurisdiction. Generally, these change only incrementally over time, if at all. The bedrock comprises characteristics such as the location, climate, natural resources, political and legal systems, and social and cultural aspects of society.

The foundation layer is composed of the key structural areas upon which a competitive environment is built. These are factors for which government is primarily responsible, including: taxes and fiscal policy, regulation, transportation and infrastructure, human capital and education, and access to capital markets.

As depicted in the pyramid, these factors enable innovation, which is required continually for any competitive environment. Innovation is developing new and better ways of doing things - such as investing in new machinery and equipment, adopting more effective processes, training skilled labour, or undertaking research and development activities. While government can create conditions that enable innovation, industry has the primary role in pursuing and deploying innovation.

Innovation promotes productivity. Productivity gains are essential to sustained prosperity - a balance of social, economic, and environmental outcomes - the result that matters for Albertans.

The Alberta Competitiveness Council

	Government Co-Chair	Industry Co-Chair	
Council Co-Chair	Premier Stelmach Minister Snelgrove (alternate)	Bob Brawn Alberta Economic Development Authority	
Agriculture (Grains and Oil Seeds)	Mr. George Groeneveld MLA, Highwood	Dr. Christoph Weder SpiritView Ranch	
Financial Services	Ms. Janis Tarchuk MLA, Banff-Cochrane	Mr. Greg Turnbull Partner, McCarthy Tétrault	
Manufacturing	Mr. George Rogers MLA, Leduc-Beaumont-Devon	Mr. Larry Kaumeyer President, Almita Manufacturing Ltd.	
Petrochemicals / Chemicals	Mr. Ray Prins MLA, Lacombe-Ponoka	Mr. Val Mirosh President, Mircan Resources Ltd.	
Overall Factors of Competitiveness	Mr. Cal Dallas MLA, Red Deer-South	Mr. Les LaRocque President, Botting & Associates Alberta Ltd.	

The Alberta Competitiveness Council was established in May, 2010, through the Alberta Competitiveness Act. The Alberta Competitiveness Council was charged with implementing the directions outlined in the Act.

The purpose of the Alberta Competitiveness Council is to analyze Alberta's competitive position relative to national and international competitor jurisdictions, and to identify actions that will sustain and improve Alberta's competitive position.

The Council represents a strong collaboration between government and industry.

For this first year, the Council included task teams mandated to examine four sectors of Alberta's economy and the overall factors of Alberta's competitiveness.

Each task team is co-chaired by a Member of the Legislative Assembly and a senior representative from industry, working together to analyze issues and develop actions for enhancing Alberta's competitiveness.

This approach recognizes that industry, government and all Albertans must engage in ongoing dialogue and work together to create the right mix of policies and actions to generate prosperity.

While the Government of Alberta can take certain actions to improve the "foundation" (i.e., the province's business climate), Alberta's long-term prosperity also depends on industry taking corresponding actions to maximize the opportunities afforded by that climate and improve competitiveness.

On an ongoing basis, government and industry must build consensus on what is required to generate sustained prosperity and then get on with the job of supporting innovation, improving productivity, and empowering our workforce.

Comparator Jurisdictions

Canada: British Columbia, Saskatchewan, Manitoba, Ontario, and Quebec.

United States: Colorado, Idaho, Minnesota, Oregon, Texas, and Washington.

International: Finland, Norway, and the State of Queensland, Australia.

In December, 2010, the Council released its Report on Competitiveness: Alberta 2010, which examined Alberta's competitive position and benchmarked its performance relative to 14 other national and international jurisdictions. Using the framework of the Competitiveness Pyramid, the report measured Alberta's position on 60 indicators across the entire provincial economy.

The report provides a baseline set of measures that will enable evaluation of the province's competitive position now and in future years, while also considering the four economic sectors that were identified as priority areas of work for the first year of the Alberta Competitiveness Council:

- → Agriculture Grains and Oil Seeds;
- → Financial Services;
- → Manufacturing; and
- → Petrochemicals/Chemicals.

These sectors were selected based on their roles in the province's economy and the opportunities to improve Alberta's competitive position in each of them. They were also selected to complement Alberta government-led initiatives focusing on other sectors (e.g., oil sands, oil and natural gas) to ensure a broad scope of Alberta's economy benefits from examination. Additional sectors are expected to be reviewed in future years.

The Task Team Process

Building from the analysis of the benchmarking report, each Council task team examined one of the four economic sectors and the overall factors of competitiveness.

As part of this examination, each task team consulted with industry representatives and stakeholders in the sector, and with other government advisory bodies such as Alberta Economic Development Authority and Alberta Innovates.

Informed by this input and analysis, each task team identified issues and factors impacting Alberta's competitive position in the sector. They then developed a series of key actions aimed at addressing these issues and enhancing the sector's competitiveness.

The key actions developed by the task teams are designed to be timely and practical solutions that can be readily implemented. They are intended to address specific competitiveness pressures facing each sector, and to realize demonstrable improvements in the near-to-medium-term (i.e., within five years). They are deliberately limited in number, ensuring they can be implemented with the resources available, and will complement broader initiatives already underway by government and industry.

The key actions reflect the importance of a shared responsibility by both government and industry in enhancing the province's competitiveness for the betterment of all Albertans.

While industry must act on its own accord, there are powerful incentives to take action on increasing innovation, improving productivity, and enhancing competitiveness. Companies in Alberta will continue to face growing competition from other domestic and international players. Those taking action today will better position themselves to confront the realities of tomorrow's economy and marketplace.

About This Report

This report summarizes the findings of the Council's task teams:

- → Overall Factors of Competitiveness;
- → Agriculture Grains and Oil Seeds;
- → Financial Services;
- → Manufacturing; and
- → Petrochemicals/Chemicals.

Each chapter describes Alberta's competitive position in a sector, and identifies actions for government and industry that aim to address the competitiveness pressures of that sector. For each area, sector-level benchmarks are also outlined to enable ongoing evaluation of Alberta's competitiveness in each sector. These will complement the indicators in the Council's benchmarking report, offering a more complete picture of Alberta's competitiveness at the sector level.

Overall Factors of Competitiveness



Overall Factors of Competitiveness

The results of the December, 2010, benchmarking report indicate that Alberta is performing well against comparator jurisdictions both nationally and internationally. Alberta rates either above average or average in the majority of the measures.

Alberta ranks well in terms of sustained prosperity. The province's Gross Domestic Product per capita an internationally accepted measure of a jurisdiction's overall standard of living - is the highest among all comparator jurisdictions. Among Canadian comparator jurisdictions, Albertans benefit from the highest personal income after tax.

Our province also scores well on the Index of Economic Well-being, developed by the Centre for the Study of Living Standards. This index considers measures of wellbeing beyond economics, including environmental and social measures such as equality of income distribution, and risks of poverty and illness.

Alberta's strongest rankings are in the areas of taxes and fiscal policy. Residents and businesses in the province benefit from the lowest overall tax burden of any jurisdiction in Canada. This is one of several important foundational factors needed to attract investment and support economic growth.

Moreover, Alberta's net financial assets are strong, thanks to our significant natural resources and provincial policies relating to debt financing. The province's public finances are not burdened with high debt servicing costs.

To sustain our province's economic growth, Alberta must improve its productivity.

While demonstrating Alberta's competitive strengths, the benchmarking report also revealed a number of areas where Alberta has opportunities for improvement.

Alberta's GDP growth has been primarily driven by increased labour effort brought about by high levels of labour effort from individual Albertans and high population growth from interprovincial and international migration. However, Alberta will not be able to sustain its economic growth solely by increasing total labour effort. Aging demographics and slower workforce growth place practical limitations on this approach.

To sustain our province's economic growth, Alberta must improve its productivity. This will require greater innovation from industry.

To support industry's ability to innovate, our province must have a strong foundation for competitiveness. Industry and government must work together to shape the factors that will provide a competitive business environment.

It is important that Alberta takes a strategic approach to enhancing its competitiveness. Alberta need not be a leader in every measure of competitiveness, but rather, focus its resources and actions for the greatest effect.

Based on the results of the benchmarking report, and through conversations with industry leaders and representatives, the Alberta Competitiveness Council has identified a number of priority areas that require urgent attention by government and industry. Strategic actions in these areas will benefit all sectors of the economy, and will effectively enhance Alberta's overall competitiveness.

LABOUR MARKET DEVELOPMENT

Having the right workers with the right skills at the right time is essential for our province's long-term competitiveness. Limited access to labour can result in uncompetitive labour rates and missed economic opportunities for the province.

Alberta's single greatest challenge to competitiveness is labour supply.

Alberta experienced a period of labour shortages during the last economic boom. The recent global downturn relieved some pressure in the province's labour market, but with a return to economic growth Alberta is already entering another period of labour shortages. Several companies are reporting difficulty in sourcing labour, especially companies in the energy sector.

This is going to be a continuing challenge for our province. Although Alberta has one of the youngest workforces among comparator jurisdictions, the province's population is aging. Thousands of baby boomers will leave the workforce over the next two decades.

Alberta will not be alone in facing this challenge. Developed economies around the world face similar situations, driven by similar demographic realities, and they will be competing aggressively for the same skilled labourers.

Alberta's single greatest challenge to competitiveness is labour supply.

In the years ahead, Alberta will face an ongoing battle for labour.

Industry will need to regard labour shortages not as a temporary anomaly, but as the "new normal." Companies will need to examine their business models and determine how they will adapt to an economy with a persistent labour shortage.

At the same time, to mitigate labour shortages our province must do all that it can to develop, attract, and retain the skilled workers our economy requires. Industry and government will need to work together to expand our province's labour market.

Companies will need to examine their business models and determine how they will adapt to an economy with a persistent labour shortage.

At home, we must ensure the province's education system equips Albertans with the skills and ideals required to build a creative and competitive economy of the future including skills such as financial literacy, community engagement and entrepreneurial spirit. This will require all levels of our system to work together to develop programs that train individuals who are well equipped to meet the needs and expectations of the workplace.

Alberta has taken important steps in transforming the province's education system to help ensure "all students are inspired to achieve success and fulfillment as engaged thinkers and ethical citizens with an entrepreneurial spirit."7 The Competitiveness Council is encouraged by this and stresses that it must continue as a top priority for action.

Albertans must be fully engaged in the workforce. While employers often struggle to find workers, there remain Albertans who are without employment. Aboriginal Albertans – a population that is young and growing – could make up a significant portion of Alberta's labour force. Similarly, mature workers are a growing cohort with valuable experience. Albertans with disabilities and youth often struggle to find a meaningful place in the Alberta economy.

Feedback from the Alberta Employment and Immigration's 2010 Minister's Workforce Forum⁸ confirmed that successful employment for these Albertans depend on several factors – appropriate education and training, connection to the right job opportunity, and the willingness of employers to consider them as potential employees. Given the prosperity of Alberta, and the resulting workforce shortages, these Albertans must be fully engaged and share in the province's economic prosperity.

ACTION: INCREASE PARTICIPATION AND EMPLOYMENT OF GROUPS UNDER-REPRESENTED IN THE ALBERTA ECONOMY.

Alberta Employment and Immigration is working with other government departments, training institutions and employers to implement targeted workforce strategies and initiatives to increase the participation of these Albertans.

Inspiring Action on Education: https://ideas.education.alberta.ca/ engage/previous-initiatives/inspiring-action.aspx

⁸ Information on the Minister's Workforce Forum: http://www.employment. alberta.ca/BI/12568.html

The Alberta Competitiveness Council supports the efforts of government to update the province's Building and Educating Tomorrow's Workforce strategy, and the implement the recommendations in Alberta Economic Development Authority's Balancing Alberta's Workforce^{9,10} report. Other strategies such as the First Nations, Métis and Inuit Workforce Planning Initiative will also feed into this process.

Realistically, these efforts will only take Alberta so far. To help meet our labour force needs, our province will increasingly need to attract and retain workers from outside the province. Industry and government must build on initiatives such as the Alberta Immigrant Nominee Program and the Temporary Foreign Worker program. Since immigration falls outside provincial authority, it is essential that industry and the Government of Alberta provide clear information and direction to the federal government to ensure these programs meet provincial needs.

One opportunity warranting attention is the ability to attract workers from the United States. Faced with relatively higher unemployment, workers in the United States are looking for economic opportunities. Many have the skills required by Alberta's economy. Seizing this opportunity will require the federal government to reduce the regulatory burden and to work with U.S. counterparts to facilitate the movement of workers across the border.

As we look beyond our borders for workers, Alberta communities have an important role in welcoming and integrating newcomers to help smooth the challenges that many immigrants face when moving to Alberta. By fostering robust settlement services and welcoming communities, Alberta can establish itself as a favourable place to re-settle, making the province more attractive to workers, innovators, investors, and entrepreneurs from around the world.

Alberta will continue to face stiff competition from other jurisdictions for the same skilled workers. If there are too many barriers to coming to Alberta, skilled workers will go elsewhere. Given the critical importance of labour supply to our competitiveness, our province must do what it can to make it easier for workers to choose Alberta over other destinations. Alberta's recent experiences with labour shortages provide lessons on how industry and government can effectively act to help mitigate future shortages.

ACTION: MAKE IT EASIER TO EMPLOY TALENT FROM ALBERTA, OTHER PARTS OF CANADA AND ABROAD.

Industry and the Government of Alberta must accelerate advocacy efforts with the federal government, with the goal of ensuring federal immigration policies and programs meet provincial needs. In particular, there must be a focus on ways to reduce delays in processing time and broadening access to immigrants who have the skills and abilities our economy needs. Adaptations to the Temporary Foreign Worker and Alberta Immigrant Nominee programs can help improve the ability of Alberta firms to strategically engage the labour resources needed to grow their businesses. Attention must also be given to foreign qualification recognition, so that qualified skilled workers, in a wider range of occupations needed, who come to the province can participate fully in the economy.

Action on labour mobility agreements to improve access and movement of workers from other parts of Canada also remains important. Cooperation between industry, federal and provincial jurisdictions is critical for standardizing credentials across Canada and for determining equivalencies to Alberta occupational standards.

PRODUCTIVITY AND INNOVATION

Alberta has a productivity growth problem.

Productivity is about the better use of all our available resources - including our land, natural resources, labour, and capital resources. Labour productivity is the single most important determinant in maintaining and enhancing sustained prosperity.

Productivity is especially critical, given the tough labour market challenges our province will face. With labour supply unable to meet future demand, we will need to produce greater value from each hour of work.

⁹ The AEDA report can be found at: http://aeda.alberta.ca

¹⁰ The report, Connecting the Dots: Aboriginal Workforce and Economic Development, can be found at: http://employment.alberta.ca/BI/3282.html

Alberta has a high productivity level compared to most other jurisdictions. However, the province's productivity growth over the past decade has been slower compared to the United States and other international jurisdictions, which negatively impacts on Alberta's global competitiveness.

To remain competitive, Alberta's productivity growth must improve across the entire economy. It must keep pace with and exceed the productivity of other jurisdictions.

Productivity growth should concern all Albertans government and industry, academics and investors, and employers and employees. We need to grow our productivity if we wish to maintain our standard of living.

Productivity gains can be achieved in many ways, including: improving the business environment; fostering innovation; increasing capital intensity (machinery and equipment, and information and communications technology); enhancing infrastructure; and strengthening human capital.

A key to improving Alberta's productivity is the use of innovation - employing new approaches, products, technology, and tools to generate more value for the same amount of effort. There are many ways to innovate.

While people often think of innovation in terms of major technological leaps, innovation can come in the form of incremental changes that aim for continuous improvement. For example, the simple idea of stacking two containers on top of each other on railway cars served to double productivity of that mode of transport.

To compete, Alberta companies will need to reignite the entrepreneurial spirit for which they have long been known.

The Alberta government has created an environment that encourages innovation through its tax and fiscal policies, and investments in advanced education and research, including initiatives through Alberta Innovates.

It is up to industry to make use of that environment and examine ways of enhancing productivity and innovation. Companies are best suited to understand their business models and to adopt new ways of thinking, managing, and operating.

There are many approaches companies can take, depending on their economic sector and the nature of their individual businesses. These include investing in machinery, equipment, and technology, and in investing in their workers to enhance skill sets.

What is required, however, is nothing short of a culture change. Truly innovative and productive companies will be those that have strong leadership and management, foster creativity and risk-taking, and demonstrate entrepreneurial spirit.

To compete, Alberta companies will need to reignite the entrepreneurial spirit for which they have long been known. Industry must take stock of the reality that they are no longer competing within Alberta or North America, but competing with the world.

ACTION: LEVERAGE PRODUCTIVITY AND INNOVATION NETWORKS.

Initiatives that help Alberta businesses access knowledge and resources are essential in developing the leadership capabilities, process improvements, and investments in machinery and equipment that will enhance innovation and productivity.

This includes the work of *Productivity Alberta*¹¹, which offers a variety of resources, including an online diagnostic tool that owners and managers can use to assess productivity.

Alberta Advanced Education and Technology has also made improving innovation performance a priority, through its Action Plan: Bringing Technology to Market, and the creation of the Alberta Innovates corporations.

The Competitiveness Council welcomed efforts to develop Alberta's innovation and productivity connections. Alberta needs to maximize use of the resources and networks these organizations are providing.

¹¹ Information about Productivity Alberta can be found at: http://www.productivityalberta.ca/

TRANSPORTATION, INFRASTRUCTURE, AND ACCESS TO MARKETS

Alberta companies depend on access to high-quality and reliable transportation systems to enable the flow of people, goods, and services. The age and extensiveness of Alberta's transportation and infrastructure is a competitive advantage.

The Government of Alberta has built on this advantage in recent years by placing strong emphasis on infrastructure. Significant investments have been made to provincial highways and major corridors to increase efficiency, including the development of ring roads around Calgary and Edmonton and twinning of Highway 63 to Fort McMurray. Important public infrastructure investments are also being made in the schools and hospitals our province needs. Alberta continues to lead all Canadian provinces in government infrastructure investment per capita.

Maintaining and enhancing Alberta's transportation and infrastructure will be critical for supporting Alberta's long-term competitiveness.

Electricity transmission and supply is another infrastructure issue of great concern to Alberta industries. To be competitive, Alberta companies require stable, reliable and cost-competitive electricity supplies. Critical electrical transmission upgrades are needed if Alberta is to continue to grow and prosper. Albertans have many strong views on these issues, and they all have a stake in the outcome. Alberta needs a transmission plan that includes staging of infrastructure investments, strong oversight, and best practices in tendering contracts to minimize future increases in electricity costs.

An unchangeable reality facing Alberta businesses is the province's geographical distance from major markets. Consequently, total transportation costs faced by Alberta companies are generally higher than those faced by companies in comparator jurisdictions, particularly the United States.

However, when considered on cost-per-mile basis, it has been found that the primary modes of transportation - trucking, rail, and a combination of surface transport and ocean containerization - offer generally competitive rates. As a proportion of the total value of delivered cost, transportation costs do not differ widely between Alberta and other jurisdictions, and are not a significant source of competitive disadvantage.

Maintaining and enhancing Alberta's transportation and infrastructure will be critical for supporting Alberta's long-term competitiveness.

Trucking is the key mode by which Alberta manufacturers obtain access to North American markets. Rail is an important mode for the movement of bulk goods, while air service is used mainly for high value or time sensitive products. Industry and government will need to work together to enhance the efficiency and accessibility of these major modes of transport.

One key opportunity is to harmonize trucking regulations across Canadian provinces and along Alberta's major trade corridors in the United States. Differences in these regulations force shippers to conform to the most restrictive regulatory regime, undermining the ability of Alberta shippers to reach key markets. Greater standardization of weights and configurations that are similar to Alberta's current system, including the use of long-combination vehicles, will improve the competitiveness of Alberta's exporters.

There are also opportunities to enhance rail service. While rail services available to Alberta shippers are generally satisfactory and have transit speeds competitive with U.S. railways, there is room to improve weekly consistency and service reliability. Federal legislation proposed in March, 2011, into which the Alberta government provided input, would offer shippers new measures aimed at improving the performance of the entire rail supply chain. Industry and government will need to continue advocating for rail service improvements.

Improvements to air service are also a priority. Industry and government must continue to urge the federal government to move forward with negotiating "Open Skies" agreements. These agreements would improve access to air transportation options for Albertans and Alberta businesses.

Long-term planning will also help ensure Alberta businesses benefit from efficient and reliable transportation services and infrastructure. Alberta Transportation is developing a 40-year strategic transit transportation plan. This plan will guide investments for the province's economic and social growth in an environmentally sustainable way.

Enhancing transportation will improve Alberta's access to international markets, which must be a priority for both industry and government.

Currently, Alberta's economy is highly dependent on U.S. markets. Recent U.S. economic weakness demonstrates how this situation poses economic risk to our province.

Market diversification is just as important as product diversification. From a competitive standpoint, it makes sense for Alberta to have several sizeable customers for its goods and services. With some of the world's largest and most diverse markets, Asia presents a significant growth opportunity for Alberta businesses.

With the enactment of the Asia Advisory Council Act, the Alberta government has signalled its commitment to establish Alberta's linkages with Asia, including priority markets such as India and China. Industry will have an important role in helping build and leverage those linkages to bring about new and greater economic opportunities for Albertans.

As Alberta seeks to expand its linkages with Asian markets, the ports of Vancouver and Prince Rupert will have increased importance. It is in the national interest that western Canada has improved port capacity whether by pipeline or rail - which will open the door to Asia's rapidly growing markets. Alberta must continue to work with British Columbia and Saskatchewan through the New West Partnership to enhance the ability of western Canadian firms to get their products to Asian markets using the Asia-Pacific Gateway infrastructure.

ACTION: MOVE HIGHER DENSITY MODULES TO ALBERTA OIL SANDS PROJECTS.

As Alberta's energy production has shifted increasingly to capital-intensive oil sands projects, heavy construction has become routine in the Athabasca oil sands area.

Most of the modules used in the construction of oil sands projects are fabricated in the Edmonton region and shipped over the provincial highway network. However, there are concerns that resource developers will be financially enticed to fabricate modules offshore and ship them to the oil sands via the United States. This creates additional challenges for Alberta's industry.

Currently, weight limits for the transportation of modules in Alberta are set at 345,000 pounds. However, much of the existing infrastructure along Alberta's main high-load corridor north of Red Deer may be able to accommodate weights of up to 500,000 pounds. In fact, loads that are heavier than current limits are often shipped along this corridor when they are deemed indivisible. Alberta Transportation permits these shipments on a case-by-case basis.

A heavy module has the same dimensions as a standard module, but can accommodate up to 155,000 additional pounds of weight. The use of heavy modules allows for design optimization and reduces the total number of modules required. These improvements also will minimize the labour required in the field, improving worker safety by shifting construction processes from the field to the fabrication yard. This can reduce overall project costs by up to 5 percent. In the context of multi-billion dollar oil sands projects, these savings are significant.

This presents an opportunity for Alberta to establish a competitive advantage in transportation and infrastructure. An assessment of the heavy module corridor from the Edmonton region to oil sands projects will be undertaken to determine the feasibility of increasing module weight limits from both an infrastructure and safety perspective.

REGULATORY COMPETITIVENESS

Regulation is essential to a well functioning economy, promoting environmental sustainability, and creating a safe and just society. But outdated, duplicative, and uncoordinated rules can impose unnecessary compliance costs. For business and industry, this can lower efficiency and productivity, resulting in competitive disadvantages.

Effective regulatory systems are those that achieve public interest goals in an efficient and affordable manner. There are many ways to achieve this, including: minimizing compliance costs for business, developing evidence-based policy, and enhancing public understanding of the law. Improving the way regulations are developed and managed are among the best ways that governments can promote economic development, investment, and trade.

The Government of Alberta has a long-standing commitment to a government-wide regulatory reform program focused on producing the desired outcomes in an efficient manner. This approach places a strong emphasis on the ongoing review of regulation to assess the impacts of regulation on stakeholders, including work towards burden reduction.

The reform program includes the use of sector-specific reviews. The Regulatory Enhancement Project¹², for example, is pursuing enhancements to Alberta's regulatory framework for oil and gas. The goal is to develop a regulatory system that will protect the environment and public safety and support the conservation of Alberta's resources, while ensuring our province is one of the most attractive places in North America in which to invest in energy development. 13

In instances where there are multiple regulators in a single sector, opportunities exist to improve the coordination and consistency of regulations. With respect to trade and investment, Alberta is pursuing better regulatory co-operation through several initiatives, including the New West Partnership Agreement between Alberta, British Columbia, and Saskatchewan.

There are also opportunities to work with municipalities in a similar fashion to support competitiveness. While each municipality must have the ability to pursue local approaches that reflect local needs, priorities, and issues, there is considerable benefit in strengthening the consistency of approaches. This would provide greater predictability for business and further support Alberta's long-term competitiveness.

- 12 Information about the Regulatory Enhancement Project is available at http://www.energy.alberta.ca/Initiatives/RegulatoryEnhancement.asp
- 13 The Regulatory Enhancement Project did not include an examination of First Nations consultation processes. The Government of Alberta is currently engaged with First Nations in a review of Alberta's First Nation Consultation Policy on Land Management and Resource Development and associated guidelines and is committed to consulting with First Nations in accordance with this policy. The government is committed to fulfilling its legal obligations to First Nations.

Improving the efficiency and effectiveness of regulatory frameworks is an ongoing process, and work is aimed at pursing regulatory improvements that encourage long-term competitiveness and quality-of-life results by focusing on the outcomes of regulation.

Industry also plays an important role here. Companies and industry groups can participate in the process to help bring about greater efficiency and effectiveness by identifying specific areas where regulatory complexity or confusion is hampering competitiveness.

ACTION: ESTABLISH MEASURES TO REGULARLY ASSESS ALBERTA'S REGULATORY PERFORMANCE.

The Government of Alberta is improving the effectiveness and efficiency of Alberta's regulatory environment through a quality-based approach.

Comprehensive measures are needed to assess and validate regulations as effective and efficient and to understand how these efforts support Alberta's competitiveness.

For several reasons, regulations vary significantly from one jurisdiction to another. Consequently, it is challenging to compare a given set of regulations against those of another jurisdiction.

More useful and meaningful measures are those that can be used to assess improvements in Alberta's regulatory framework over time, as a result of specific reform initiatives. Examples of measures include:

- → A quality-based assessment of regulatory impact analysis;
- → Estimations of direct compliance costs to businesses from regulation; and
- → Indicators such as the World Bank Doing Business Indicators, which consider the requirements applying to small and medium businesses through their life cycles.

Performance measures for evaluating regulatory quality will guide work to enhance Alberta's regulatory competitiveness, and will be examined as part of the Alberta Competitiveness Council's benchmarking efforts.

Agriculture – Grains and Oil Seeds



AGRICULTURE – GRAINS AND OIL SEEDS

Alberta's farmers are stewards for 52.1 million of Alberta's 157.7 million acres of land. They produce massive exportable volumes of wheat, malting barley, canola seed, field peas, and oats. Some have also diversified into differentiated products such as small grains and organic grains. Under this initiative, the task team has focused on the grains and oil seeds sector.

There are significant economic opportunities ahead for Alberta's grains and oil seeds sector. Estimates suggest the world's population will increase to about 9.3 billion people by 2050, up from about 6.9 billion in 2010, led by growth in developing countries.¹⁴ Over the next few decades increasing prosperity among consumers, particularly in developing and emerging economies such as China and India, will lead to rising demand for imports of food and agricultural commodities.

These developments will mean new customers and rising demand for grains and oil seeds products. To capitalize on those opportunities, however, Alberta's grains and oil seeds sector must continually enhance its competitiveness through research and innovation; market access and market development; rural renewal; and improved policy, regulatory, and institutional systems.

Some of the factors that affect the grains and oil seeds sector, such as transportation and regulatory competitiveness, are not restricted to the sector and can be addressed in a broader solution. There are also a number of sector-specific issues (discussed below) that require attention. The Council has identified a number of actions to address these issues enhance Alberta's competitiveness in grains and oil seeds.

AGRICULTURAL POLICY

As an area of shared jurisdiction, agriculture policy is set by both the federal and provincial governments. National policy frameworks in the area of agriculture are established through negotiation between the federal, provincial, and territorial governments and implemented through a series of agreements between the governments. The federal government partially funds the costs of these agreements and demands a certain degree of comparability in agriculture programs and services between jurisdictions. Alberta and some other provinces have negotiated some regional flexibility in the design and delivery of their programs.

Despite this collaborative approach and policy evolution since the mid-1990s, certain areas of agriculture policy remain challenging. For instance, the bulk of government funds remain devoted to income stabilization programs which are not particularly effective. By comparison, insufficient attention is being paid to areas such as research, infrastructure, skill enhancement, and business adaptation, which are needed to enhance the sector's long-term competitiveness.

Summary statistics – grains and oil seeds

	2005	2006	2007	2008	2009	Average
Farm Cash Receipts (\$ billions)	2.8	3.1	4.2	6.2	5.3	4.7
# of Employees (thousands)*	7.7	8.3	7.9	9.0	10.0	8.6
% of Alberta GDP	2.6	2.2	2.2	2.6	2.1	2.3
Value of Exports (\$ billions)	2.1	2.7	3.4	5.3	4.7	3.7
* Excludes milling						

¹⁴ United Nations Population Division.

Federal legislation and policy concerning the marketing of wheat and barley continues to present a major barrier to industry competitiveness. Alberta producers and shippers of wheat and barley products should be free to sell their grain and products to whomever they wish, including the Canadian Wheat Board if they so choose.

Individual farmers know what is best for them to maximize returns, and must have the freedom to engage and trade with customers in domestic and international markets on their own terms. The success of Alberta producers in growing and marketing canola, pulses, and oats all "non-board" crops - demonstrates that marketing choice would enhance Alberta's competitiveness in wheat and barley.

ACTION: CONTINUE TO SUPPORT MARKETING CHOICE FOR WHEAT AND BARLEY.

While there are no easy solutions to the challenge of federal marketing restrictions in wheat and barley, the issue remains a priority for Alberta.

- → The Government of Alberta will continue to work with the Alberta Grains Council to advocate for marketing choice for Alberta's wheat and barley producers.
- → The government will utilize every avenue and opportunity available to it to consult and coordinate efforts with other western provincial governments and the federal government to advance the Marketing Choice file so Alberta farmers are able to sell their grains to whomever they choose.

ACTION: ADOPT AND ADVANCE POLICIES THAT ENABLE A MORE COMPETITIVE AND INNOVATIVE INDUSTRY.

In terms of general agricultural policy, the Government of Alberta will advocate for policies and programs that will enhance the sector's long-term competitiveness through federal-provincial negotiations. The current federal-provincial agriculture agreement, called Growing Forward, expires in 2013. Negotiations are under way for its replacement, Growing Forward 2.

The Competitiveness Council supports Alberta championing a negotiating position calling for policies, programs, and services important for the industry's long-term competitiveness. This includes:

- → Strategic emphasis on programs aimed at research and innovation, market access, business development, food safety, crop and animal health, and environmental stewardship, which will help the sector adapt and compete in the long term;
- → Within the current Business Risk Management suite, optimize funds and improve program effectiveness by directing funding towards programs that use insurance-based approaches where possible;
- → Engagement in a policy process that defines riskmanagement roles and responsibilities between producers, associations, and government; and
- → Acquiring further regional flexibility for Alberta in the design and delivery of agriculture programs.

Alberta Agriculture and Rural Development, the Alberta Grains Council, and the Alberta Financial Services Corporation will jointly investigate appropriate risk-management skills and training for grains and oil seeds farmers in Alberta.

Influencing agriculture policies and programs in this way will help create a policy environment that more effectively encourages innovation and productivity improvement. This will better position the grains and oil seeds sector to compete and capitalize on future opportunities.

RURAL RENEWAL

Like other agricultural sectors, the grains and oil seeds sector faces demographic challenges. Fewer members of newer generations choose to enter the farming business. As Alberta's population ages, the number of highly productive middle-aged farmers will continue to decline. Farming remains an important contributor the vibrancy and quality of life of Alberta's rural communities. As current farmers retire, many will be looking to sell their assets to new operators.

Given the economic opportunities on the horizon for Alberta's grains and oil seed sector, it is important that a new generation of farmers be attracted to and engaged in the industry. New farmers can bring new ideas, energy, and approaches to the sector which, in turn, can improve the sector's innovation and productivity.

ACTION: ATTRACT FARMERS FROM OVERSEAS.

Farmers from overseas represent an opportunity to engage a new generation of farmers in Alberta's grains and oil seeds sector.

The typical farmer migrating to western Canada is from Europe, and is looking to resettle where land is more reasonable and the regulatory environment is less burdensome. Many immigrant farmers opt for supplymanaged sectors or irrigated crops. However, each year a few opt to undertake dry land grain and oil seed farming.

Anecdotal evidence suggests these farmers succeed. They also bring new and different approaches with them, are open to new ideas, and contribute to their communities. Attracting more immigrant farmers from overseas to Alberta's grains and oil seeds sector would help boost the sector's competitiveness and contribute to broader rural renewal.

- → Alberta Agriculture and Rural Development, working with Alberta Employment and Immigration and Alberta International and Intergovernmental Relations, will develop a strategic plan to attract more farmers from overseas.
- → As an interim step, a campaign will be developed aimed at encouraging overseas farmers to consider immigration to Alberta.

ACTION: DEVELOP AND SUPPORT PILOT INCUBATOR FARMS.

The use of incubator farms presents an innovative option to facilitate new entrants, including immigrants, to the grains and oil seeds sector. This approach provides aspiring producers with access to land, equipment, and infrastructure at reasonable rates, along with business planning support, technical training, mentorship, and experience with ecological and emerging farming methods. The concept is similar to the Leduc incubator, which Alberta has successfully developed on the value-added processing side. Incubator farms are utilized in the United States and Ontario

An incubator farm for grains and oil seeds can assist in engaging immigrants who have the experience and interest in farming but who find it challenging to enter the sector due to market dynamics. It can also create opportunity for entrepreneurs to test the agronomy and market acceptance of new crops. This would help leverage opportunities for import replacement and new crop introduction, including grain crops such as buckwheat, quinoa, teff, kamut, and spelt, as well as many non-grain crops.

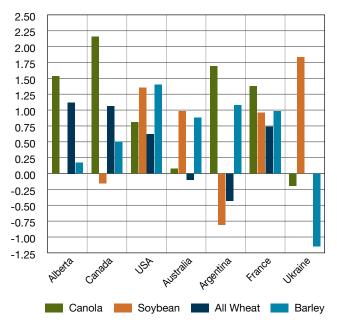
→ Alberta Agriculture and Rural Development will undertake a pilot project to set up incubator farms in the coming months.

RESEARCH AND INNOVATION

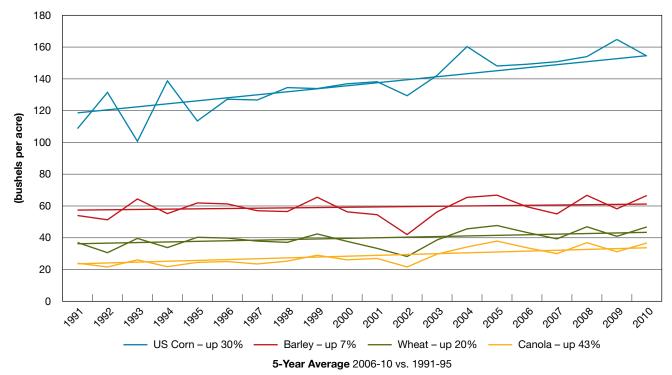
It is a key concern that the cereal grains sector is falling behind in productivity improvement compared to crops such as corn, soybeans, and canola. An examination of yield data illustrates this challenge.

Yield growth is the conventional measure of progress in agriculture, both in agronomic practice and in plant breeding. In terms of average annual growth rate in yield, Alberta is performing relatively well in canola compared to other jurisdictions. Alberta is also performing well in wheat relative to other jurisdictions. However, neither wheat nor barley has done well relative to canola or soybeans.

Average annual growth rate in yield (%, 1990-2009)



Alberta Major Crops and US Corn - Yield, 1991-2010



Alberta's productivity challenge in barley is particularly stark when compared to the productivity improvements realized by corn producers in the United States. While average crop yields of U.S. corn over the past 20 years have risen by 30 percent, crop yields of Alberta barley have increased by only seven percent.

Global growth will increase demand for cereal grains, creating opportunities for Alberta producers. However, issues such as climate change, water scarcity, and growing pressure on resources will pose challenges. Alberta producers also face higher freight-to-market costs than United States and Australian competitors, since the province is geographically farther from major markets.

Competing jurisdictions are investing heavily in research and innovation. If Alberta is to remain competitive in cereal grains, Alberta producers will need to be among the most productive producers in the world. Research and innovation in the cereals sector is crucially important in bringing about these productivity improvements, not only in barley but also in wheat, canola, pulses, and other cereal grains.

ACTION: ADDRESS THE FUNDING AND GOVERNANCE MODEL FOR GRAINS AND OIL SEEDS RESEARCH AND INNOVATION FOR ALBERTA AND WESTERN CANADA.

Studies consistently demonstrate that a farmer's ability to learn and adapt has a greater impact on the agronomic and financial performance of a farm than the endowment of land and other assets.

The competitiveness of Alberta's grains and oil seeds sector will depend on the ability of Alberta producers to access and utilize the best available technology to minimize costs and maximize product value. There is substantial value to be realized in Alberta's cereal grains sector by improving agronomic performance and productivity.

There have been numerous efforts to address the research and development gap between the cereal grains sector and other sectors, including initiatives by the Western Grains Research Foundation and the Alberta Crop Industry Development Fund. However, these efforts represent only a partial solution.

There is a need to build on these efforts with targeted and sustained strategies. A solution to address the research and innovation gap in the sector will need to address two issues: stable funding and governance.

The canola research and development experience provides one example of a funding model that has shown success. However, many stakeholders have pointed to the hurdles of replicating the canola experience in grains. True enough, this model would have already been adopted were it workable in grains.

The task team has considered various models that are used in different jurisdictions to encourage research and innovation in the grains sector. One novel approach that could be adapted for the western Canadian context is that of the Australian Grains Research and Development Corporation. In this model, which has been in place for two decades, producers are part of the solution in meeting the funding needs for research and innovation. In return, producers have significant control over the funds and prioritization of the activities including research and development and market development.

The Australian Grains Research and Development Corporation experience offers a conceptual model that could effectively address Canada's research and innovation gap in cereal grains. While more detailed analysis would need to be undertaken on how to adapt aspects of the model, including financial mechanisms, the task team believes this conceptual model offers great promise not only for Alberta, but other western provinces as well.

- → In order to anchor research and innovation for the grains and oil seeds sector in Alberta on a sustained and long-term commitment, the Government of Alberta through the Ministry of Agriculture and Rural Development will engage industry stakeholders and other western provinces to champion and develop a western Canadian research and innovation framework for the sector. The framework would provide a governance structure and stable funding approach, and focus on basic research, agronomics and extension, and market development.
- → Importantly, the framework would engage producers in contributing to and directing research and innovation priorities. It would also recognize the important role that government and academic and research institutions play in basic scientific research that underpins plant development and commercialization.

Beyond basic and agronomic research, there is also a need to enhance plant breeding, or varietal development. Breeding technologies hold great potential for the cereal grains sector.

The stagnation of public funding for basic agronomic research and germplasm development is one of the factors that have made it less attractive for breeders to engage in cereals variety development.

The other factor that influences varietal development is the assurance of returns on investment dollars through the protection of intellectual property rights. The yield growth performance of canola and U.S. corn reflects the higher degree of private involvement in research and innovation from which those crops have benefited.

Historically, universities and government research operations dominated plant breeding. This model is no longer as effective or responsive as newer models, where private companies invest in developing new varieties in return for premium prices they charge producers for their seeds. This new model of crop variety development has out-performed the old model. Western Canadian farmers have voted with their seeders by maximizing the acres planted with canola and reducing acres planted with cereals such as wheat and barley.

→ As part of championing the western Canadian research and innovation framework, the Government of Alberta will promote new mechanisms that will improve the attractiveness of investment in plant breeding in the cereals sector.

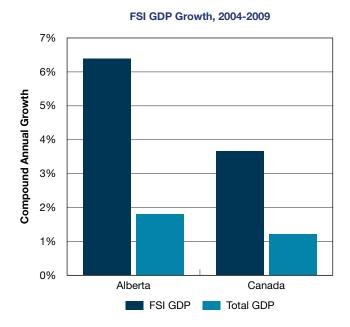
Here again, Australia offers a model that could be adapted for the Alberta and western Canadian context. This model assures returns on private investment in varietal development through end-point royalty, rather than charging upfront premium prices. The Australian model also enables farmers to save seeds. While aspects of this model would need to be examined in detail, including financial mechanisms, it provides a conceptual framework for further consideration.

Improving the attractiveness of research will help drive innovation and productivity improvement, helping to enhance the long-term competitiveness of Alberta producers.

Financial Services



Financial Services

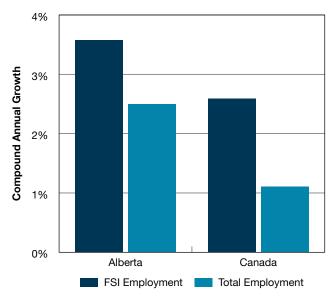


The financial services industry is one of Alberta's key growth sectors, contributing over \$8 billion to the province's economy. The industry has largely grown around servicing the transaction and financing needs of the energy sector. Strong energy prices and significant investments in oil sands development have resulted in a remarkable expansion of the financial services industry during the past decade. With almost \$74 billion of capital investment expected in Alberta this year alone, the sector appears poised for additional growth.

Under the competitiveness initiative, the financial services industry is composed of four subsectors: banking and credit, investment banking, fund management, and insurance.

As part of its analysis, the task team benchmarked Alberta's competitiveness in financial services against a number of jurisdictions, including leading global financial centres.¹⁵ From 2004 to 2009, Alberta ranked first among

FSI Employment Growth, 2004-2009



12 jurisdictions for employment growth in financial services, 16 and second of 14 jurisdictions for sector GDP growth. However, in 2009, Alberta ranked 13th of 14 jurisdictions on the sector's share of GDP, and 12th of 14 on the sector's share of total employment. This suggests Alberta's financial services sector has room to expand.

A robust and competitive financial services industry is important to Alberta's future economic success. The industry has strong growth prospects. Alberta is competing with jurisdictions across Canada and around the world to attract and retain global financial services firms, talent, and capital. Given the importance of financial services and capital to overall economic growth, this competition is fierce.

Alberta's financial services industry has a number of strengths it can leverage and build upon. The province is home to the headquarters of a number of financial institutions, including Canadian Western Bank, Servus Credit Union, ATB Financial, and the Alberta Investment Management Corporation (AIMCo), one of Canada's largest and most diversified institutional investment fund managers. In addition, fully 75 percent of the top 20 global investment banks have offices in the province.

¹⁵ Alberta was compared against British Columbia, Ontario, Quebec, Colorado, Texas, Norway, and New Zealand. International jurisdictions that are home to global and transnational financial centers (Illinois. Massachusetts, New South Wales (Australia), New York, Singapore, and Switzerland) were also included to provide a reference of how Alberta compares.

¹⁶ Data on employment growth was unavailable for Norway and Singapore.

Throughout the past decade, Calgary and Edmonton have developed expertise in complementary areas. Calgary has increasingly attracted banking and asset management activity focused primarily on the oil and gas sector, while Edmonton has developed a competitive wealth management and pension management industry. The province also provides an attractive environment for capital investment.

The task team found that this is an opportune time for Alberta to capitalize on these and other strengths. Current and future investments in the province's energy resources base and supporting industries offer a great opportunity to foster the development of Alberta's financial services industry. In addition, Alberta can benefit from global recognition of the stability and integrity of Canada's financial system. This can further diversify the province's economy and create highly skilled jobs for Albertans.

To support these objectives, however, there are some key challenges that Alberta must overcome. The Financial Services task team has developed key actions to help address these challenges. The actions have been structured to complement each other, with the first providing a foundational structure to support the other two. Implementing these actions will require effort, commitment and resources from all stakeholders. including government, industry and the academic sector.

INDUSTRY PROFILE

Alberta offers many advantages that make the province an excellent location for financial services firms, talent, and capital:

- → Compared to many other jurisdictions, Alberta is an attractive and politically stable place to invest. The province has a high quality of life, competitive tax and fiscal policies, and a welcoming business climate;
- → As a major energy supplier, the province offers significant economic opportunities and economic growth prospects;
- → The province has developed world-class expertise in niche sectors, such as asset management and energy finance;

- → The province has maintained a stable policy environment, while there is a high degree of uncertainty in competitor jurisdictions (particularly in the United States and Europe) following their regulatory responses to the recent global financial crisis; and
- → Emerging and new pools of capital, such as sovereign wealth funds in Asia and the Middle East, are seeking opportunities for strategic, long-term investments in areas where Alberta offers a strong value proposition.

Unfortunately, these advantages are not as internationally well-known as they could be. Alberta is not "top of mind" for financial services firms, skilled workers in the sector, or those managing large pools of capital.

ACTION: ESTABLISH AN INDUSTRY-GOVERNMENT FINANCIAL SERVICES SECTOR GROUP.

Financial centres are aggressively working to attract capital and top talent. A review of successful financial centres shows that the establishment of formal mechanisms for public-private collaboration plays a central role in enhancing the financial services industry competitiveness.

Many leading financial centres have established organizations that serve as catalysts for strengthening and expanding the financial services industry in their jurisdictions. One Canadian example is the Toronto Financial Services Alliance (TFSA), which has been operating since 2001 and is currently being expanded. Other examples include: International Financial Services London (IFSL), the Holland Financial Centre (HFC), and the Swiss Financial Centre Dialogue Steering Committee (STAFI).

In Alberta, a number of initiatives are under way, including annual roundtables between the Minister of Finance and Enterprise and senior industry leaders, as well as industry-led financial services advisory committees of Calgary Economic Development and the Edmonton Economic Development Corporation.

Despite these important initiatives, stakeholders have noted the need to enhance and formalize coordination efforts across the Alberta financial services industry. Currently, no ongoing mechanism exists at the provincial level to streamline the work and dialogue between financial services firms, academia, and government.

To better capitalize on opportunities to grow the financial services industry, a formalized, public-private, provinciallevel financial services working group will be created. As a partnership between industry and government, this group will:

- → Strengthen relationships between government, industry and the academic sector;
- → Identify and pursue opportunities to promote Alberta's financial services sector;
- → Monitor issues and barriers to growth of the sector;
- → Foster additional international investment in the province;
- → Work with Alberta's universities and business schools to develop human capital; and
- → Inform regulatory and policy decisions that impact Alberta's financial services industry.

ACTION: DEVELOP AND IMPLEMENT A BRANDING AND MARKETING STRATEGY FOR ALBERTA'S FINANCIAL SERVICES INDUSTRY.

Now is an opportune time for Alberta to clearly brand and promote the province as a prime destination for financial services firms, global talent, and capital. The province can take advantage of global recognition of the stability and integrity of the Canadian financial system. Alberta can also promote its competitive tax policies - including zero taxes on capital, no provincial sales tax, and no harmonized sales tax - to aggressively encourage the relocation of funds under management to the province.

As an initiative of the new industry-government financial services group, a branding and marketing strategy will be developed to:

- → Establish a common vision and brand for Alberta's financial services sector;
- → Promote Alberta's value proposition for global investment and financial services operations;
- → Build on Alberta's world-class niche strengths. high quality of life, and competitive tax and regulatory environment;
- → Increase both domestic and international awareness of opportunities for work and the establishment of a financial services business presence in Alberta; and
- → Heighten awareness of the financial services industry's contribution to the economic vitality of Alberta and Canada.

In developing the strategy, industry and government will build on and collaborate with existing organizations that are focused on promoting Alberta and Canada abroad, including Alberta's international offices. In addition, these efforts will complement current endeavours by the cities of Calgary and Edmonton.

Members of Alberta's financial services industry have a uniquely valuable role to play in acting as ambassadors of the province. The people-based nature of the sector means that decisions are often made on the basis of strong business relationships and experiential anecdotes. Financial services firms and talent are more likely to consider Alberta as a favourable location to do business if the "sales pitch" comes from companies and credible industry leaders that already call Alberta home.

COMPETITION FOR TALENT

Financial services are a people-oriented business. Financial services professionals are the conduits to the management of the wealth and assets of Albertans, accessing pools of capital and putting together deals. As such, the industry depends on having access to a highly-skilled labour force. A range of workers with post-secondary training are required, including financial professionals, legal professionals, managers, administrators, and many others.

To ensure continued growth and competitiveness of the financial services industry, Alberta will need to develop, attract, and retain skilled talent. Industry representatives cite this as a key challenge facing the sector.

ACTION: DEVELOP, ATTRACT, AND RETAIN FINANCIAL SERVICES TALENT.

The financial services industry requires a strong pool of talent from which to draw in order to remain competitive. Strong technical, interpersonal, communication, and leadership skills are needed to establish business relationships, connect with pools of capital, arrange and service financial deals, manage capital assets, and support various operational functions to enable the delivery of financial services. Likewise, individuals with strong quantitative skills (e.g., financial mathematics, actuarial science, and econometrics) play an important role in developing and managing financial products.

In order to broaden and deepen the talent pool available, the Alberta government and industry will work together with the academic sector to attract and develop the talent required for the growth of Alberta's financial services industry - particularly for decision-making functions. Elements of the talent attraction and development strategy will include:

- → Information sharing on training gaps and opportunities;
- → Coordination of joint training opportunities;
- → Supporting efforts to bring global financial leaders to teach, lecture, and conduct training seminars and workshops in Alberta;
- → Ensuring courses and programs meet industry needs;
- → Supporting the creation of chairs and professorships in areas of strategic relevance for Alberta, as required; and
- → Increasing domestic and international awareness of opportunities for work in Alberta's financial services industry.

Initial work will focus on fostering the development and expansion of the Alberta Finance Institute. The Institute is a virtual entity established jointly by the Alberta Investment Management Corporation (AIMCo), the University of Alberta, and the University of Calgary in 2008, to coordinate the organization of joint seminars, scholarships, and internships for AIMCo executives, PhD candidates, and MBA students.

Manufacturing



Manufacturing

Alberta's manufacturing industry comprises a large number of small businesses in diverse subsectors. More than 80 percent of firms in the industry employ fewer than 50 people. Much of the industry does business mainly within Alberta. However, there are a number of large firms that undertake export businesses, mainly selling to customers in resource-based industries.

The task team was mandated to examine the following sectors:

- → primary and fabricated metal manufacturing;
- → machinery manufacturing;
- → transportation equipment manufacturing;
- → computer and electronics manufacturing; and
- → electrical equipment appliance manufacturing.

In terms of overall factors, Alberta offers advantages to manufacturing companies. Most importantly, Alberta's manufacturers benefit from proximity to the province's oil resources and expertise and relationships developed over many years of sector activity.

Manufacturers also benefit from the province's low tax rates. Alberta's tax framework does not provide targeted investment tax credits for manufacturers and processors, contributing to a simpler and more efficient business tax structure than most other jurisdictions.

However, geographic and demographic realities present challenges to manufacturers in the province. Despite the overall competitiveness of the province's transportation infrastructure, Alberta's northern and landlocked location makes it less conducive for transporting goods to and from major markets. As a result, Alberta manufacturers in some cases face higher costs and longer lead times than manufacturers in competing jurisdictions.

Summary statistics

2005	2006	2007	2008	2009	Average
13.8	16.3	15.7	16.8	12.1	14.9
47.2	51.4	51.6	53.7	41.4	49.1
2.8	3.1	2.9	2.9	2.3	2.8
5.1	6.2	7.7	7.9	5.8	6.5
	13.8 47.2 2.8	13.8 16.3 47.2 51.4 2.8 3.1	13.8 16.3 15.7 47.2 51.4 51.6 2.8 3.1 2.9	13.8 16.3 15.7 16.8 47.2 51.4 51.6 53.7 2.8 3.1 2.9 2.9	13.8 16.3 15.7 16.8 12.1 47.2 51.4 51.6 53.7 41.4 2.8 3.1 2.9 2.9 2.3

Excludes Primary Metals (no estimates available)

Like other industries, the manufacturing industry also faces difficulty recruiting and retaining workers - a trend that will continue as the population ages. Although this is a Canada-wide issue, it has been identified specifically by Alberta manufacturers as a concern. A survey by the Canadian Manufacturers and Exporters (CME) in 2008-09 notes that about half (48 percent) of Alberta manufacturers feel that attracting or retaining skilled workers is one of the most pressing challenge facing their business, compared to just over 30 percent of Canadian manufacturers.

The dominance of Alberta's oil and gas industry compounds the labour force challenge. The skills required by manufacturing companies and oil and gas companies are often quite similar. During periods of strong resource prices, it becomes much more challenging for manufacturers to source the workers they require. This results in higher labour costs for Alberta manufacturers.

Manufacturers also face pressures from ever-evolving market dynamics, including the emergence of new global supply chains, increasing competition from lower-cost international markets, and the rising value of the Canadian dollar.

Enhancing the competitiveness of Alberta's manufacturing industry requires urgent attention to two major drivers: people and productivity. These two areas are highly interrelated; without qualified people, manufacturers cannot keep pace with developments that will make them more productive in the future. Action on both fronts is required to enhance the manufacturing sector's competitiveness.

IMPROVING PRODUCTIVITY

Given the complex pressures and cost realities facing the industry, Alberta's manufacturers must focus on productivity improvements to remain competitive. This means examining their business models to identify ways of creating more value for each hour of effort.

Process improvement, technology adoption, and product development are some of the key strategies that Alberta firms will need to employ to remain nimble and adaptable in the marketplace. A commitment to continuous improvement and innovation will be essential for the industry's long-term success.

Innovative activities may take a variety of forms, including investments in skills and training, research and development (R&D), leading-edge machinery and equipment (M&E), and information and communications technology.

Alberta manufacturers have demonstrated a commitment to investments in M&E. The Council's benchmarking report ranked Alberta second among 10 comparator jurisdictions in 2008 for business investment in M&E. However, there are indications many of these investments have gone into conventional technologies, rather than the cutting-edge technologies that often boost productivity improvements. More than half (55 percent) of Alberta manufacturers have reported that less than 5 percent of capital investment in M&E was spent on advanced technologies between 2005 and 2007.17

Statistics Canada data also indicates that Alberta manufacturers invest less on research and development per dollar of GDP (value-added output) than their provincial counterparts. Moreover, as a share of manufacturing employment, relatively few manufacturing employees are engaged in research and development activities in Alberta compared to other provinces.

The industry's competitiveness will depend on shifting these trends in more positive directions.

¹⁷ Source: Statistics Canada Survey of Advanced Technology, 2007.

It is clear to the task team, from quantitative data and from conversations with leaders in Alberta's manufacturing sector, that Alberta manufacturing firms have the mettle and the ambition to succeed and become more productive. To leverage that ambition, government and industry must work together to help manufacturing firms access information and tools to assist them in examining opportunities to enhance their innovation and productivity.

In addition to the actions identified by the task team, Alberta's manufacturing leaders will have the opportunity to benefit from the federal government's extension of the Accelerated Capital Cost Allowance program and the expanded Industrial Research Assistance Program. These will help foster further industry investment in equipment upgrades, innovation, and process improvements that will enhance the productivity and competitiveness of Alberta manufacturing firms.

ACTION: STRENGTHEN PRODUCTIVITY ALBERTA THROUGH AN INCREASED ROLE AND OWNERSHIP BY INDUSTRY.

Productivity Alberta, an organization established by the Government of Alberta, executes a specific mandate to "enhance value-added activity, increase innovation, and build a skilled workforce to improve the long-run competitiveness and sustainability of Alberta's economy." It is currently managed by Alberta Finance and Enterprise. Productivity Alberta responds to the need to connect Alberta businesses with information, tools, and resources to help them identify ways of enhancing productivity. It offers:

- → leading edge web-enabled information to assist entrepreneurs in understanding issues related to productivity and government programs;
- → a catalyst to form networks and local groups to share experiences and best practices for businesses; and
- → productivity assessments for business to pursue process improvements in the workplace.

The impact of *Productivity Alberta* is demonstrated by the productivity growth achieved by over 300 participating Alberta businesses. Successes have included improved use of workforce, lower costs, better services and products, increased profits, and enhanced visibility and credibility of connected government programs.

Productivity Alberta receives guidance from an industry advisory committee, which ensures the organization is consistently meeting its industry-driven mandate. The advisory committee is examining ways of optimizing delivery of the organization's services, so that current service levels can be expanded to benefit more Alberta firms.

The Government of Alberta and industry will work together to develop an evolved business model for Productivity Alberta, independent of government, to enable industry to assume a greater role in the organization's governance, management and funding.

This approach will enable Productivity Alberta to provide more nimble and effective program and service delivery, while enhancing its credibility with Alberta businesses. The result will be greater use of resources and services which, in turn, will help bring about productivity enhancements throughout the economy, including the manufacturing industry.

ACCESS TO SKILLED PEOPLE

As an industry depending on greater innovation and improved productivity for future success, the manufacturing industry must have access to highly skilled labour. Alberta's manufacturing leaders stressed to the task team the urgent need to train, attract, and retain more skilled workers in the province.

Given its diverse number of subsectors, the manufacturing industry requires a range of highly skilled people in staff and management positions in various trades and vocations. Companies need people with solid problem-solving, verbal communication, and technical skills. As manufacturing firms introduce new technologies and production techniques, they will increasingly require workers will higher skill levels to perform complex tasks and use new types of machinery.

Despite the recent economic downturn, which relieved some labour market issues, the manufacturing industry is quickly facing significant labour pressures once again. Economic growth is returning, making it challenging for manufacturers to source the skilled people they need. Without action, the competitiveness of Alberta's manufacturing industry will gradually erode.

Demographic realities are such that Alberta will increasingly rely on interprovincial migration and immigration to develop its labour force. Industry and the Alberta government must work together to encourage the federal government to make improvements to immigration policy to better enable firms to obtain workers with the requisite skills. Helping workers transition to life in Alberta is another key area where industry and governments must work together.

Alberta must also do all it can to build its domestic labour force. Our province leads the country in apprenticeship completions - a success that must be continued.

An important contributor to that success is a basic education system that provides high school students with early exposure to the skilled trades. Anecdotal evidence suggests that rural students often benefit from this approach, and are likely to remain and work in Alberta after completing an apprenticeship program. Ensuring ongoing alignment between our education system and our workforce needs will be essential for building the skilled labour market required for our long-term competitiveness.

There is also an ongoing need to continuously train Alberta's existing labour force. Enhancing the skill levels of current employees is one important pathway to improving innovation and productivity. Given the advances in technology and processes that will occur in the future, it makes good business sense to invest in upgrading employee skill levels.

ACTION: UNDERTAKE A DEMONSTRATION PROJECT TO FACILITATE MORE EMPLOYER-SUPPORTED TRAINING.

Upgrading skill levels of employees through employersupported training is an important pathway to achieving improvements in productivity.

More than 80 percent of Alberta's manufacturing firms are small businesses with fewer than 50 employees. While they employ the majority of the manufacturing industry's current workforce, they experience the most challenges to providing employer-supported training. These often include issues such as:

- → Concerns about the costs of training and lost work time as barriers to training;
- → Lack of information about where to get training, how to organize and provide it, and what training is effective:
- → Employers are not convinced about the return on training investment compared to physical capital and equipment or other investments;
- → Many firms worry about "poaching" losing workers and their training investment; and
- → Many employers view training as a government responsibility, particularly basic, transferable skills, such as literacy, English language, and essential skills.

To support industry's long-term competitiveness, it is important that manufacturing firms recognize the value of employer-supported training. Enhanced innovation and productivity will depend in part on their support for developing current workers and building a culture of learning in their organizations.

To inspire employers to engage in employer-supported training and champion a continuous learning culture in their workplaces, industry and the Alberta government will work together to undertake a demonstration project to facilitate more employer-supported training. The project will assess industry need and design a program to:

- → Educate employers on benefits of employer-supported training by addressing challenges and barriers, and building awareness on return on training investment;
- → Develop a web-based assessment tool to assist small and medium-sized enterprises in determining training gaps, identifying appropriate training programs/ providers, and evaluating training outcomes;
- → Create networking opportunities for manufacturing sector employers to share best practices and support joint training programs; and
- → Evaluate the outcomes of the demonstration project, including assessing options for continuing and expanding service delivery.

Petrochemicals / Chemicals



Petrochemicals / Chemicals

Alberta is Canada's leading producer of petrochemicals. The petrochemicals/chemicals industry represents significant value-adding activity in Alberta's economy, processing, and upgrading natural gas liquids into higher-value products. This includes products such as ethylene, polyethylene, ethylene glycol, and other chemicals that are used to manufacture a range of finished products, such as flooring, plastics, detergents, synthetic lubricants, and cable. In 2010, Alberta's industry produced products valued at over \$10.2 billion.

Alberta's petrochemicals/chemicals industry grew for decades, built on the province's endowment of abundant ethane supplies – a critical feedstock for petrochemical facilities. As natural gas production in Alberta expanded, so too did the industry. Over \$10 billion was invested in the industry between 1991 and 2010.

Most of the industry is centered in Fort Saskatchewan and Joffre. It includes four ethane-cracking plants, including two of the world's largest, with a combined annual capacity to produce 8.6 billion pounds of ethylene.

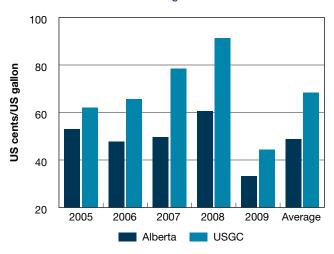
The petrochemicals/chemicals industry provides good jobs and income to thousands of Albertans. It also adds to the tax base of the province and municipal governments, contributing significant revenues that help finance important services such as health and education. Petrochemical companies are also active participants in their communities, supporting a range of local organizations, services, and events that enhance Albertans' quality of life.

Alberta's petrochemical industry has some advantages compared to that of the U.S. Gulf Coast (USGC), the province's main competitor. One key advantage is that Alberta's petrochemical producers have historically paid lower prices for ethane feedstock than USGC producers. In addition to being world-class, Alberta's petrochemical facilities are also generally newer than those in the USGC, making them more efficient and more competitive.

Summary statistics

	2005	2006	2007	2008	2009	Average
Revenues (in billions of dollars)	27.3	28.5	29.3	32.2	22.6	28.0
# of Employees (thousands)	19.7	18.8	19.4	17.9	17.8	18.7
% of GDP	2.9	2.7	2.6	2.4	2.1	2.5
Value of Exports (in billions of dollars)	7.8	8.4	8.7	9.7	6.8	8.3

Annual Average Ethane Prices



Despite these advantages, the industry's long-term competitiveness and viability is now at risk due to dwindling feedstock supplies.

Alberta's petrochemicals/chemicals industry is a success story in value-added economic growth. It is extremely important to position the industry for continued growth in the 21st century in ways that help achieve our province's desired economic, social and environmental outcomes. Alberta has the opportunity to use its foundation of natural resources and highly trained and motivated people to further enhance a sector that provides good careers and investment opportunities.

The industry is at a crossroads. While there are opportunities for the industry to expand, there is also a risk that it may erode over time if key issues are not resolved. Although there are many diverse interests at play, it is in the best interests of Alberta that industry members work together with the Government of Alberta and with each other to develop strategic solutions that will ensure the industry's long-term competitiveness.

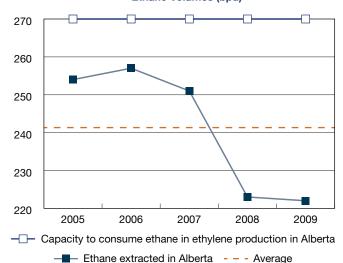
CHANGES IN THE MARKETPI ACE

To remain competitive, Alberta's petrochemical producers depend on having access to competitively priced ethane feedstock. Alberta's petrochemical industry was established and grew based on easy access to inexpensive and plentiful supplies of ethane from natural gas production in the province.

Changes in the natural gas marketplace over the last several years have resulted in decreasing ethane supplies. One contributing factor is the maturity of Alberta's conventional natural gas basins and declining production from those basins. Expansion of U.S. shale gas production has contributed to decreased domestic natural gas production. Compounding the challenge is that not all natural gas produced in the province undergoes ethane extraction processing in Alberta.

Consequently, Alberta's petrochemical industry now operates below capacity, which undermines its productivity. Current ethane demand to support the industry is approximately 270,000 barrels per day. In 2009, a total of 222,000 barrels per day of ethane were extracted in Alberta.





In the USGC, petrochemical producers have greater flexibility to choose among several feedstock supply options - including ethane, propane, other natural gas liquids or products produced from crude oil. By contrast, Alberta's facilities were designed for ethane feedstock, as this offered lower capital costs and better conversion efficiencies and leveraged Alberta's abundant supplies of natural gas. The competitiveness of Alberta's petrochemical industry therefore depends on improving

Off-gases produced by Alberta oil sands operations offer a possible feedstock source. These off-gases are typically burned as fuel, but are rich in natural gas liquids that could benefit the petrochemical industry. Exploiting this source will require industry cooperation and investments.

its ability to obtain more ethane at a competitive price.

Another option is to extract more ethane from natural gas produced in the province. This too will depend on industry cooperation and capital investment.

Yet another possibility is to import ethane from sources outside the province, or extract ethane from natural gas as it is transported through Alberta from other jurisdictions. Natural gas production projects in British Columbia, Alaska, and the Northwest Territories offer potential sources in the future. This will depend on Alberta's ability to position itself as an attractive and competitive location for extraction of ethane and other natural gas liquids.

ACTION: ENHANCE THE INCREMENTAL ETHANE EXTRACTION PROGRAM.

In March, 2011, the Government of Alberta announced enhancements to the Incremental Ethane Extraction Program, which will help encourage more ethane extraction in the province.¹⁸ The program enhancements are based in part on the findings and work of the Petrochemicals / Chemicals task team.

First introduced in 2007, the program provides incentives to companies to build new ethane extraction and production facilities by defraying some of their costs against royalties paid to government. Initially designed to encourage extraction of ethane from natural gas, the enhanced program will now also apply to ethane extracted from off-gases produced from bitumen refining or upgrading.

Currently these off-gases are typically burned by bitumen producers for use as fuel in their operations. Capturing off-gases for ethane extraction will help increase feedstock supplies for petrochemical producers in the near-to-medium-term, while improving Alberta's environmental performance. Using off-gases for valueadded production can reduce greenhouse gas emissions from the oil sands by up to one million tonnes each year.

ACTION: LEVERAGE AND ENHANCE THE ALBERTA NATURAL GAS HUB.

One of Alberta's key competitive advantages in natural gas and natural gas liquids is the province's extensive infrastructure and state-of-the-art complexes that include natural gas processing, pipeline, storage and trading systems. Alberta currently transports up to 17 billion cubic feet per day of natural gas to domestic and United States markets through a network of pipelines and infrastructure.

Alberta has become one of the major natural gas centres in North America, and is a major price setting location. The Alberta natural gas trading price is one of the continent's leading price-setting benchmarks.

While the Alberta Natural Gas Hub provides physical infrastructure for handling, storing, and exchanging primary energy products and upgrading them to higher-value manufactured products, building on this reputation and strengthening our position for growth will provide significant opportunities for the industry in Alberta. This vibrant market for natural gas is an efficient trading point where participants benefit from having many buyers and sellers.

A Hub is a central marketplace where related companies, people, research, generation, distribution and related activities and projects are located. This gathering creates a natural attraction and serves as an incentive for others to locate and invest.

¹⁸ This announcement can be found at: http://www.alberta.ca/acn/201103/ 30115E426C4C3-F72A-F4D6-FFC522BDF9E535CF.html

The development of other jurisdictions' gas resources and transportation systems, including those in Alaska and the Mackenzie Delta, presents opportunities to enhance the Hub beyond Alberta. Positioning and marketing a western Canadian Hub as an appealing option for Alberta and other jurisdictions will attract larger volumes of gas shipped through the system, thereby decreasing tolls and increasing the province's competitiveness. Developing a natural gas liquids extraction rights and commodities trading hub would encourage transactions for natural gas liquids, including ethane, which would support the competitiveness and continued viability of Alberta's petrochemicals/ chemicals industry.

The Government of Alberta will work with industry to:

- → Develop a proposal for the western Canadian natural gas and natural gas liquids Hub to highlight the benefits of participating in the Hub; and to promote the Hub concept to the western Canadian and northern regions;
- → Develop an agreement with western provinces on the creation of a western Canadian natural gas and natural gas liquids Hub;
- → Implement a new regulatory convention to provide a framework that is attractive to all interested jurisdictions (including western provinces, the federal government, and other gas producing areas such as the Canadian north and Alaska); and
- → Develop the concept for a natural gas liquids trading hub in Alberta.

REGULATORY ISSUES

Alberta's location and its long history of natural gas and petrochemical production position the province favourably to access additional feedstock of ethane and other natural gas liquids. Current and future natural gas production from outside the province - including British Columbia and northern gas projects - have the potential to be transported through Alberta. This is due in part to geography and due to the significant pipeline infrastructure that exists in the province. However, regulatory uncertainty threatens Alberta's ability to capitalize on these opportunities.

Currently, ownership of all natural gas liquids is in the hands of gas exporters; producers are generally not involved. This places exporters in control of how the liquids are used and sold. Movement is now underway to change the protocol of ownership from exporters to producers. This would change which parties determine the fate of natural gas liquids - including where they will be recovered, traded and used for petrochemical feedstock, and who captures the incremental value of the natural gas liquids components of the natural gas stream.

This issue is significant at a time when Alberta's petrochemical producers are concerned about access to feedstock supplies. Unless and until the natural gas liquids ownership issue is resolved, the sector is hampered by regulatory uncertainty. Producers of natural gas and natural gas liquids need to know how feedstock supplies will be extracted, marketed, and sold in the province and whether they will be able to capture a greater share of the value-added components of the natural gas stream. Certainty of these issues is essential to avoid the risk that producers will simply transport their products through Alberta and sell them elsewhere.

ACTION: CHAMPION REGULATORY CERTAINTY TO IMPROVE THE EXTRACTION AND PROCESSING OF NATURAL GAS LIQUIDS IN THE PROVINCE

The future of ethane availability in Alberta is uncertain given developments in federal regulation and interplay among various business segments of the industry. Securing access to greater ethane supplies over the longer term will in part depend on enhancing policy and regulatory certainty for the natural gas and natural gas liquids extraction industry. Alberta has the opportunity to develop and champion policy positions that will help bring about that certainty.

One opportunity is the upcoming regulatory hearings before the National Energy Board regarding tariffs on the NOVA Gas Transmission Ltd. pipeline system. This system includes 23,570 kilometres of pipeline in Alberta, which moves natural gas for use within the province and also delivers it to provincial boundary points for connection with export pipelines. The outcome of these regulatory hearings has the potential to impact Alberta's competitive position in natural gas and natural-gas liquids. Intervention by the Government of Alberta in the National Energy Board hearings is needed to influence the decisions to strengthen Alberta's position.

At the same time, there is a need to provide leadership and guidance to the various business segments involved in the industry. Industry would benefit from a clearer understanding of the Alberta government's expectations for the direction of value added industries, including the petrochemicals/chemicals industry. At a time of transition in the natural gas and natural gas liquids marketplaces, such policy direction will assist in pointing a strategic way ahead.

In consultation with industry, the Government of Alberta will:

- → Develop a policy statement affirming the government's commitment to facilitating value-added development in the province to guide regulation and development moving forward;
- → Develop a policy position regarding how proposed tariffs should be designed to enable greater access to petrochemical feedstock in Alberta at a reasonable cost; and
- → Seek intervener status at the National Energy Board hearings to advance that policy position on issues relating to the natural gas and natural gas liquids industry.

Moving Forward Together

Sustaining and enhancing Alberta's competitiveness is everyone's concern – government and industry, academics and investors, and employers and employees. All Albertans have a role to play in becoming more innovative, more productive, and more competitive.

Likewise, we all share the benefits of those efforts, through sustained prosperity and a higher quality of life – socially, economically, and environmentally.

The actions identified in this report are not presented as an exhaustive framework for enhancing Alberta's competitiveness. Rather, they are intended to complement ongoing efforts by industry and government to seize opportunities and address challenges to better position our province for sustained prosperity.

Industry and government have a responsibility to move forward together to implement these actions and identify additional ways in which our province can improve its competitive position.

The success of these actions will be reflected in Alberta's performance on the measures identified in the Council's benchmarking report. These measures will be regularly evaluated, to assess how well Alberta is maintaining and enhancing its competitiveness.

The Competitiveness Act requires the Alberta Competitiveness Council to report annually on its activities and progress in enhancing Alberta's competitiveness. This reflects the ongoing need for our province to take stock of our competitive position and to work to improve our position.

In the year ahead, the Council will monitor progress in implementing the actions identified in this report – throughout the economy and in the key economic sectors examined this year. The Council will also consider research and other information to identify a new series of economic sectors for task team examination.

Working together – industry, government, and all Albertans – we will build on our current competitiveness, and position Alberta for even greater success in the new global economy.

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Government of Alberta ■