## News Release

July 19, 2011

## Canada's Annual Energy and Mines Ministers' Conference

Energy Ministers support collaborative approach to energy

**KANANASKIS, ALBERTA** — Federal, provincial and territorial energy ministers supported a collaborative approach to energy at their annual meeting today in Alberta. The ministers agreed to a shared vision for Canada as a recognized global leader in secure and sustainable energy supply, use and innovation. The meeting was co-chaired by the Honourable Joe Oliver, Minister of Natural Resources, and Alberta Energy Minister Ron Liepert.

"With our country's unique capacity to innovate and build a reliable and resilient energy sector, Canada has great potential to help meet Canada's and the world's energy needs," said Minister Oliver. "Collaboration will put us in a better position to harness our country's energy potential, grow our status as an environmentally responsible energy supplier and user, and create more prosperity and jobs for Canadians."

This approach to energy collaboration is founded on a set of common principles and objectives to guide energy policies in Canada.

"The world is watching Canada's efforts to develop its energy resources wisely and efficiently," said Alberta Energy Minister Ron Liepert. "We all have a stake in reducing greenhouse gas emissions through clean energy production. A pan-Canadian approach to energy will involve all Canadians and ensure that we are all starting on the same page as we move forward."

The ministers discussed common issues, which could be addressed collaboratively by the federal, provincial and territorial governments under this approach. Areas of possible collaboration identified by ministers included regulatory reform, energy efficiency, energy information and awareness, new markets and international trade, and smart grids and electricity reliability.

They also noted that over the past year, all governments continued to improve regulatory review processes. The ministers reaffirmed their commitment to working toward the shared objective of one-project/one-review for environmental assessments and associated regulatory processes to position Canada for long-term growth and job creation while maintaining the highest standards of environmental protection. They underlined the importance of an effective and efficient regulatory system with timely, transparent, fair and predictable processes.

Ministers also heard presentations from representatives of the Winnipeg Consensus Group, the Energy Policy Institute of Canada, and environmental non-governmental organizations, think tanks and other stakeholders. A number of ministers also toured an oil sands mining operation and visited a reclaimed oil sands mining site. Now home to over 300 wood bison, the site illustrates the important technological advances made in sustainable extraction of the world's third-largest oil reserve. As global energy demand is expected to grow over the coming decades, Alberta's oil sands are a responsible and sustainable major supplier of energy to the world.

Progress will be reviewed by the ministers at the next Energy and Mines Ministers' Conference, to be hosted by the Government of Prince Edward Island, in Charlottetown, from September 9<sup>th</sup> to 11<sup>th</sup>, 2012.

The ministers also released the *Canada as a Global Energy Leader* paper and related Action Plan. These documents can be found at <a href="https://emmc2011.alberta.ca">https://emmc2011.alberta.ca</a>.

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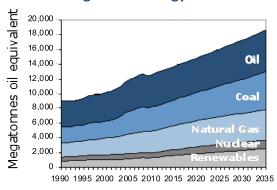
# CANADA AS A GLOBAL ENERGY LEADER: TOWARD GREATER PAN-CANADIAN COLLABORATION

#### Introduction

Federal, provincial and territorial governments have a key leadership role to play in establishing a principles-based approach to securing Canada's energy future. This approach will respect the distinct constitutional jurisdictions, government authorities and circumstances that make up our regionally diverse country. The pan-Canadian approach to energy outlined here is based on solid principles, including a strong market orientation governed by effective, efficient and transparent regulatory systems.

To be successful, a pan-Canadian approach to energy needs to be situated in a global energy context that is undergoing unprecedented change. First, world energy demand is driving higher. **Emerging** economies contributors to this increase in demand, reflecting faster rates of growth in economic activity, population and urbanization. particular, the growing importance of China to global energy markets is critical. Second, there are mounting concerns regarding supply constraints and the need for energy security globally and within North America. In part, this trend is related to greater economic volatility

### **Growing Global Energy Demand**



Source: International Energy Outlook 2010

and geopolitical uncertainty. Third, the world is at the beginning of a longer-term transition towards a lower-carbon economy. While fossil fuels will remain the dominant source of global energy for decades to come, leading economies are making major investments to diversify energy sources and position themselves as low-carbon technology leaders.

This document presents some of the key energy opportunities and challenges facing the country and outlines elements of greater Pan-Canadian collaboration, including a shared vision, common principles and key objectives. This proposed approach reflects the desire of federal, provincial and territorial governments to build on the strengths of Canada's energy sector and grow its status as a global energy leader within a changing world.

#### An Abundant and Diverse Supply of Energy Resources

Within Canada, there is a large, unique and diverse energy endowment. Canada ranks second in global production of hydro electricity. Canada is also the second largest global producer and exporter of uranium. These are both clean energy sources that are essential to economic development and efforts to address climate change. It has the world's third largest oil reserves. It is the only OECD country with growing oil production and is the world's third largest exporter of natural gas. Canada's nuclear generating stations operate with strong regulatory oversight nationally and adhere to the highest safety standards internationally. We are also leaders in clean electricity with 75 percent of our power generation coming from non-emitting

#### Canada's Position in the World

- 2<sup>nd</sup> in hydroelectricity production, behind China
- 2<sup>nd</sup> in uranium production & exports, behind Kazakhstan
- 3<sup>rd</sup> in natural gas exports, behind Russia & Norway
- 3<sup>rd</sup> in oil reserves, behind Saudi Arabia & Venezuela
- 6<sup>th</sup> in oil production
- Significant potential in wind, biomass, solar, tidal & geothermal

sources, contributing to both economic and climate change objectives. Notably, the country is well positioned to generate energy from other renewable sources such as wind, solar, geothermal, marine, and biomass. As well, Canada's northern regions are relatively untapped, extremely energy-rich areas, with higher costs of living and where having affordable energy is a challenge. Development of these energy resources will ensure a vibrant northern economy and sustainable communities. These endowments provide an unparalleled economic advantage to secure our place as a global energy leader.

The Canadian energy sector is continually evolving, integrating new technologies and practices to improve efficiency and to develop new and unconventional sources of energy. This is aligned with global trends including a shift from conventional oil and gas to resources such as oil sands, shale gas and renewable fuels, and we will need to encourage the development of these resources and related transportation infrastructure. Similarly, technological developments such as smart grids and carbon capture and storage promise cleaner power generation in Canada. Further advancements will be made as electricity systems integrate increased volumes of cleaner fuels, including natural gas, nuclear, hydro (large-scale and small-scale), and other renewable sources. As well, significant strides are being made to improve energy efficiency and conservation. These diverse sources strengthen Canada's and the world's energy security. At the same time, there is recognition, in Canada and elsewhere, of the need to ensure that all sources of energy are developed and used in ways that are environmentally responsible and socially acceptable.

## Contributions of Energy Sector to Canada's Economy\*

		2008	2009
GDP**	\$В	\$85.5	\$80.9
% of Total		6.9%	6.8%
Employment (Direct)		282,000	263,000
% of To	tal	1.9%	1.8%
Capital Expenditures	\$В	اب <b>ھ</b> .82\$	y 18\$ <b>@0</b> 121
% of Total		23.5%	20.0%

<sup>\*</sup>includes coal

The energy sector is critical to our economy as a source of employment and wealth creation. In 2009, the sector represented 6.8 percent of Canada's gross domestic product (GDP), providing direct employment for over 260,000 people. Its capital expenditures amounted to \$61 billion, representing 20 percent of total new capital investment in the country. The sector represents the largest single private investor of capital and a primary driver behind foreign direct investment. It also has a positive economic impact on other industries, such as financial services, engineering services, equipment manufacturing and construction. In 2008, revenues from this sector to provincial, federal and some territorial treasuries were about \$35 billion in taxes and royalties, making an important contribution to critical social programs across the country while dampening the need for government revenue derived from other sources.

Regional diversity in energy resources, supply and demand is a source of strength that continues to shape our economy. Several provinces and territories are

## "Our diversity is our strength"

endowed with large hydroelectric resources and are significant exporters of electricity. Others have abundant fossil fuel resources and are large producers, exporters and users of oil, natural gas and coal. Nuclear energy makes a significant contribution to the electricity system in some jurisdictions and one province is a world leader in the production of uranium. As well, there is growing development of other renewable resources, with vast potential across the country. These regional differences lead to diverse challenges but also unique opportunities.

#### **SEIZING GLOBAL OPPORTUNITIES**

Canada is one of the few countries in the world that is energy-rich, has a highly skilled work force and strong innovation system, and is also capable of increasing its energy production in an environmentally and economically sustainable manner. We also recognize that open markets are essential to our economic sustainability. With the International Energy Agency (IEA) projecting global energy demand to increase by 36 percent by 2035, we are well positioned to grow our status as a politically stable, competitive and

Canada's Energy Exports (2008)\*

	Total	to US
Total Energy	\$128.4B	\$124.9B
Petroleum	\$92.0B	\$88.5B
Natural Gas	\$32.6B	\$32.6B
Electricity	\$3.8B	\$3.8B
Energy as % of Total Exports		26.6%
US Exports as % of Total Energy		97%

<sup>\*</sup>excludes coal and uranium

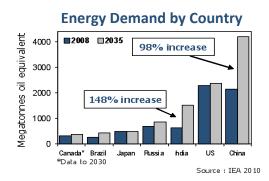
reliable energy producer by maintaining a positive investment climate.

Canadian energy resources and expertise are particularly important to North American energy security. The US is our leading energy export market and will remain a strategic partner for decades to come. In 2008, Canadian exports of electricity, oil and natural gas amounted to \$128.4 billion with 97 percent going to the US. Due to the economic downturn, exports fell to \$85 billion in 2009 but are now rebounding. The two countries have highly integrated electricity grids, and supply almost all of each other's electricity imports. Notably, the electricity trade between the provinces and their neighbouring US states exceeds interprovincial transfers.

Canada and the US also share an extensive oil and gas pipeline network that further shows the interconnection of our shared energy systems and the importance of energy to the broader economic partnership.

Canada's energy sector also needs to expand its presence beyond its traditional market given

the extent of changes taking place in today's world. Global energy demand is being driven by emerging economies, led by China. The IEA indicates that China has already overtaken the US as the world's largest energy user and is projected to consume over one fifth of world energy by 2035. Our energy resources, technologies and industry expertise provide a competitive advantage and a basis to aggressively develop new markets. Cultivating



relationships with China and other emerging economies, while also developing new infrastructure to enable the transportation of energy products to diverse markets, including markets within Canada, will go a long way to growing our global energy leadership and maximizing the benefits of its energy resources for Canadians.

Consequently, we have to situate its energy approach within the forces shaping the world's energy future. This includes the evolution toward a global low-carbon economy. One estimate put the global market for low-carbon goods and services at \$6.5 trillion in 2007-08. These new market opportunities along with the need to reduce greenhouse gas (GHG) emissions is why leading economies are making major investments to position themselves as low-carbon leaders. Within Canada, it is no different. We are also making large scale investments, recognizing the importance of building on our energy mix and clean technology capacity to better serve Canadians and to capture global market share. In addition to large world-class firms, we have

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many small and medium-sized (SMEs) firms developing innovative, clean energy technologies and services. Increasing global demand for renewable energy and alternative energy solutions provides opportunities for these SMEs to grow and prosper.

"Canadians need to stay in tune with world trends"

#### Managing Growth and Change at Home

As with the rest of the world, our energy demand is expected to increase in the coming decades, albeit at a slower rate. According to the National Energy Board's 2009 Reference Case Scenario, end-use energy demand in Canada is projected to increase at an average of 0.7 percent per year to 2020. This is considerably lower than the historical rate of 1.6 percent since 1990.

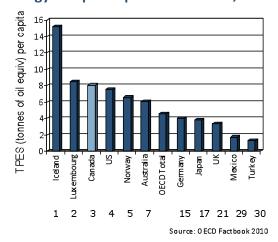
Federal, provincial and territorial governments are committed to improving energy efficiency. While Canada's per capita energy use is high amongst OECD countries, this is related to our cold climate, vast geography, a widely dispersed population and an energy-intensive resource-based industrial sector. With these challenges, continued improvement in energy efficiency is critical to the competitiveness of the economy and the Canadian standard of living.

Federal, provincial, territorial and local authorities have been making concerted efforts to promote energy efficiency and conservation across the country (e.g., improved building codes, use of smart meters, more stringent energy efficiency product standards, investments in integrated community energy systems). Real gains have been made in slowing the demand for energy. The Canadian economy has experienced an 18 percent improvement in energy efficiency between 1990 and 2008. Canada was recently rated as one of the top three IEA countries for fully implementing a range of energy efficiency policies and programs. However, more action on this front is required to help Canadians reduce consumption and save money, while decreasing the environmental impacts associated with energy use.

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At the same time, changes in Canada's industrial and manufacturing sectors are shaping the future of energy demand. Outside of the upstream fossil fuel and electricity sectors, growth in industrial output has been accompanied by structural shifts to less energy-intensive industries and by substantial efficiency gains within industries such as metal mining, chemical production, and petroleum refining. In fact, industrial energy intensity decreased by 15 percent from 1990 to 2008. All sectors will need to continue to invest in machinery, new equipment and clean technologies and more efficient operations to realize further improvements in energy efficiency, conservation and savings - knowing that, in today's global economy, this will increase competitiveness.

#### **Energy Use per Capita in the OECD, 2008**

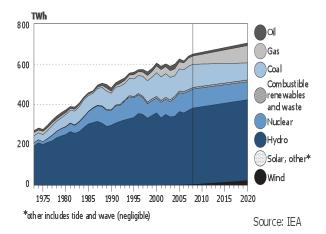


#### **MEETING THE CHALLENGE**

Diversifying our energy sources, meeting growing demand at home and securing access to global markets will require significant investment over the coming decades. A major challenge is the aging energy infrastructure in Canada. Going forward, it is expected that hydro will remain the dominant source of power generation, with nuclear power remaining a significant source of electricity and both natural gas and other renewable energy sources increasing in importance.

With respect to pipelines, it is estimated that industry will invest \$43 billion in expansion over the

## Canadian Electricity Generation by Source, 1973 to 2020



next 15 years. If the Alaska and Mackenzie pipelines are included, total investment could be as large as \$100 billion, based on latest estimates. As oil and gas development in Canada expands to new areas, additional pipeline infrastructure will be required in Western and Eastern Canada.

Notably, there are also concerns about the physical security of Canada's energy systems which will impact infrastructure investments and require closer coordination amongst industry and government players to mitigate risk and enhance reliability and safety.

The massive scale of upcoming energy investments provides an opportunity to sustain economic growth while also supporting the transition to a lower-carbon future. Investments in the development of all new energy sources, as well as energy transportation infrastructure, will present challenges around public acceptance related to impacts on energy costs and the environment. These projects will also require an efficient and effective regulatory approach, ongoing environmental protection and public and stakeholder engagement, including with

Aboriginal peoples. In particular, efficient, effective, transparent and market-oriented regulation will provide greater certainty for investors and will support effective stewardship of the resources.

"Investments made today will shape our energy future"

Innovation is central to developing clean energy technologies and is critical to improving competitiveness and enabling the federal government to meet its Copenhagen Accord commitment of reducing GHG emissions by 17 percent by 2020 relative to 2005 levels. Clean energy technology has the potential to transform Canada's energy systems. It is an important dimension for improving environmental performance and facilitating a longer-term shift to a lower-carbon future. At the same time, it is an emerging industry with significant global and local market opportunities, and is a means for generating wealth and high-quality jobs. An assessment of our clean tech capacity shows strengths across the country and in a number of areas including carbon capture and storage (CCS), advanced materials for vehicles, electric

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vehicles, gas turbines and photovoltaics. We have a solid research and innovation base upon which to build, yet there are also critical challenges to address. Greater collaboration amongst federal, provincial, territorial and local authorities will help to ensure that we become global leaders in the development and use of clean energy technology. The Canada-US Clean Energy Dialogue (CED) is another way by which we are deepening our approach to clean energy technology and innovation.

#### **MOVING FORWARD**

Higher global energy demand and the evolution toward a lower-carbon economy are drivers shaping today's world. In Canada, energy makes a critical contribution to the wealth and well-being of all Canadians. Going forward, there are significant opportunities to strengthen our energy systems and to capitalize on rising global demand for energy and clean energy technology. As well, major investments in our energy sector in coming years can make a critical contribution to Canada's transition to a lower-carbon future.

Developing our energy resources has benefited all regions of the country and contributed to our prosperity. Canadians need to better understand the energy sector, its supply chain and the contributions it makes to the Canadian economy. They also need to learn more about the economic and environmental benefits associated with being more efficient users of energy. At the same time, the world also needs to know that we, as energy leaders, take environmental stewardship and energy development seriously.

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#### **TOWARDS GREATER PAN-CANADIAN COLLABORATION**

We have a proud record of energy development and environmental stewardship. In today's changing world, growing our status as a global energy leader will require leadership and federal, provincial and territorial cooperation. The proposed vision, principles and objectives outlined below provide direction for the development and use of our vast resource endowment while transitioning to a lower-carbon future.

#### **Shared Vision**

To seize the tremendous opportunities available to our energy sector and address challenges involved in developing and using our energy resources, Energy Ministers will work together toward realizing a shared vision that:

Canada is a recognized global leader in secure and sustainable energy supply, use, and innovation.

#### **Principles**

The following principles will guide our action:

- Acknowledge the need for an adequate and reliable supply of energy.
- Recognize the importance of socially and environmentally responsible development, transportation and use of energy.
- Maintain a market-oriented approach to energy policies governed by effective, efficient and transparent regulatory systems.
- Recognize that federal, provincial and territorial cooperation is essential while respecting distinct constitutional jurisdictions and government authorities.

#### **Key Objectives**

To achieve this vision, the following key objectives have been identified:

Responsible Energy Supply

- To work in collaboration with industry, communities, stakeholders and First Nations to promote socially and environmentally responsible development, use and transportation of energy.
- To provide regulatory efficiency, policy clarity and predictability to the public, stakeholders and investors regarding the development of energy resources in Canada.
- To collaborate on a long-term transition to a lower-carbon economy.

#### **Economic Prosperity**

- To diversify and expand global markets for Canadian energy products and services.
- To provide energy security for Canadians through a diversity of supply and open markets.
- To enhance inter-provincial collaboration in the development and commercial trade of Canadian energy resources.

#### Efficient Energy Use

- To improve energy conservation and the efficient use of energy in Canada.
- To collaborate on the creation of codes, standards and best practices required for energy efficient houses, buildings and communities.
- To leverage improved energy efficiency into opportunities to grow new businesses and improve the international competitiveness of Canadian businesses.

#### Knowledge and Innovation

- To accelerate the development of clean energy technologies, innovation, investment and a skilled work force, supported by improved collaboration with industry, research organizations and governments.
- To collaborate and share knowledge and experience obtained in the development and implementation of energy policies within federal, provincial and territorial governments.
- To engage Canadians in an energy dialogue to improve awareness and understanding on energy development and use.

#### **Action Plans**

Action plans are under development, focusing on priority areas for energy sector collaboration amongst federal, provincial and territorial governments. The action plans shall identify common issues on which the federal, provincial and territorial governments could agree to cooperate on a voluntary basis through subsequent agreements. Federal, provincial and territorial working groups will report annually through Deputy Ministers to Ministers at the Energy and Mines Ministers Conference on progress made under the action plans.

#### CONCLUSION

How energy is supplied and used in Canada is critical to the prosperity and the well-being of Canadians across the country. The decisions made today – in resource development, energy infrastructure investments, resource use, technology development and energy efficiency – will shape our future prosperity. Establishing a shared vision, common principles and objectives will strengthen the efforts of all governments in working together to grow the energy sector by building on existing advantages, overcoming challenges in an uncertain world, and planning for a transition to lower-carbon economy.

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### **Collaborative Approach to Energy - Action Plan**

Ministers agreed to initiate voluntary collaborative work in the following areas:

## I. Economic Prosperity & Responsible Energy Supply

- 1. Intensify efforts to streamline regulatory project reviews to improve efficiency and effectiveness, with timely, transparent, fair and predictable processes. The goal is one project, one review for environmental assessments and associated regulatory processes.
- 2. Collaborate and focus efforts on capturing new markets and promoting international trade opportunities for energy and energy-related technology and service exports to global customers.
- 3. Engage with the US on electricity grid issues (grid reliability, cyber security and smart grids) and support further development of the US market for Canada's clean and renewable electricity (including hydro).
- 4. Share information and best practices on (1) the development and integration of emerging renewable sources of electricity and (2) developing and regulating oil and gas resources, including shale gas.
- 5. Collaborate on the development of infrastructure to facilitate the diversification and expansion of efficient and competitive markets for energy products and services.

## II. Efficient Energy Use

- 1. Build on the energy efficiency accomplishments derived from EMMC 2010 commitments, including:
  - a. Publish more stringent model energy code for buildings and commit to a cycle of further improvements.
  - b. Collaborate on next generation home energy rating system to support labelling, codes and incentives.
  - c. Strengthen business capacity to finance energy efficiency projects in the built environment by providing tools.
- 2. Advance the energy efficiency of freight transportation in Canada.
- 3. Improve the energy efficiency of energy-using products purchased by Canadians.
- 4. Improve industrial energy performance by adopting the ISO 50001 international energy management standard.

5. Collaborate with the goal of identifying and implementing new trends in integrated community energy planning.

## III. Knowledge and Innovation

- 1. Identify critical energy technology areas to enable Canada's transition to a lower-carbon emission economy and develop an action plan to advance them through collaborative, public-private sector research, development and demonstration. Critical energy technology areas may include:
  - a. Smart grid technologies
  - b. Renewable fuels and sources of electricity
  - c. Shale gas
  - d. Marine renewables
  - e. Electric vehicles
  - f. Carbon capture and storage (CCS)
- 2. Benchmark the performance of Canada's energy innovation system against key international competitors.
- 3. Develop a collaborative approach to energy information, including collaboration on increasing energy awareness and literacy.
- 4. Collaborate to find innovative and effective ways to develop and educate a workforce for the energy industry.

Ministers tasked officials to advance work in the following initial priorities for action, leading to EMMC 2012:

- 1) Regulatory Reform
- 2) Energy Efficiency
- 3) Energy Information and Awareness
- 4) New Markets and International Trade
- 5) Smart Grid and Electricity Reliability