

Canadian Statement at the International Atomic Energy  
Agency Ministerial Conference

Abu Dhabi, United Arab Emirates

(October 30, 2017)

**Introduction**

Mr. President, member states, I am pleased to be here representing the Government of Canada as the Head of Delegation to this Ministerial Conference.

I want to begin by commending the United Arab Emirates for hosting an impressive conference. This is an important time for the world to be coming together, and to recognize that nuclear power is a key source of clean energy – now more than ever – and will make a significant contribution to helping us meet our climate change objectives.

I also want to recognize the success of the 2017 IAEA General Conference this past September. Canada is pleased to see continued and expanded commitment among long-standing partners to strengthen international cooperation in nuclear science and technology, safety, and security, while ensuring that non-proliferation obligations are adhered to. We are also encouraged to see expanded cooperation that is bringing new partners into the fold.

Canada is also excited about the work we highlighted at our General Conference side-event with Japan and the United States to support the launch of a nuclear energy work-stream under the Clean Energy Ministerial Framework, where we will bring nuclear energy to broader multilateral discussions about clean energy and climate change. We encourage and welcome each of you to support this work-stream as we move forward.

Today, I would like to speak specifically to the four themes of this conference, and the ways that Canada is committed to making progress on these fronts.

### **Energy, Economy, Environment Trilemma**

I want to begin with the role of nuclear energy in Canada's fight against climate change. Nuclear energy is an important part of Canada's clean energy initiatives and will continue to play a key role in Canada's low carbon future.

From a domestic perspective, nuclear energy now accounts for about 15 percent of Canada's overall electricity supply— including approximately 60 percent of the province of Ontario's electricity mix and a third of the province of New Brunswick's.

In fact, Ontario became the first jurisdiction in North America to phase out coal power, largely thanks to our substantial nuclear fleet, and Canada has one of the cleanest electricity markets in the world with more than 80 percent of it decarbonized.

While no new nuclear builds are currently planned in Canada, maintaining nuclear as a key component of our baseload electricity supply will be instrumental to realizing our climate-change goals by 2030.

To that end, Ontario utilities are in the process of refurbishing ten of their nuclear reactors — a total investment of \$26 billion. These investments ensure that nuclear energy will continue to be a primary

source of clean, reliable energy in Canada for decades to come.

## **Challenges in developing nuclear power infrastructure**

Next I would like to turn to the challenges in developing nuclear power infrastructure. We see representatives of Canada's nuclear industry as innovators and leaders among Canada's energy industry in the area of stakeholder involvement and public acceptance.

At the front of the nuclear cycle, Canada is the world's second-largest producer and exporter of uranium, with 23% of world production in 2016. Use of Canadian uranium in nuclear power reactors avoids between 300 and 500 million tonnes of carbon dioxide emissions worldwide every year.

Canada's uranium industry is committed to Corporate Social Responsibility and protecting the environment. For more than 25 years, it has been a model of how resource sectors and Indigenous peoples can work together on job, training, business opportunities, as well as infrastructure development and environmental protection. In fact, public support for the uranium industry in the province of Saskatchewan, where uranium mining is concentrated, is greater than 80 per cent.

At the back end of the fuel cycle, Canadian companies are addressing concerns related to the safe, long-term management of nuclear fuel waste. Canada's Nuclear Waste Management Organization – an organization established by Canadian nuclear electricity producers – is advancing an open, transparent, and collaborative siting process. This process is unparalleled in our country in its innovative and broad engagement of the public,

stakeholders, and Indigenous groups. We point to it as a best practice for identifying a willing host community for a radioactive waste repository.

## **Safety and reliability aspects of nuclear energy**

Canada's commitment to nuclear safety and security is steadfast. We continue to be a proponent of strong, independent nuclear regulators to ensure the safe applications of nuclear technologies, and are proud of the Canadian Nuclear Safety Commission's status as a world class regulator.

We also recognize the central role that the IAEA plays in ensuring effective and robust nuclear safety programs around the world and in helping Member States to meet their nuclear security responsibilities. I am pleased to note that at the recent General Conference, the CNSC signed a

memorandum of understanding with the UAE's Federal Authority for Nuclear Regulation for cooperation in nuclear regulator matters.

Nuclear safety and security remain essential for the peaceful uses of nuclear energy. Treaty-based obligations, as well as the IAEA safety standards and security guidance, provide the international framework to ensure that nuclear power plants continue to be operated in a safe and secure manner.

I would like to mention that we are honoured that a Canadian was elected to act as President of the Seventh Review Meeting of the Convention on Nuclear Safety. We are encouraged by actions taken at that meeting to strengthen the effectiveness of the Convention and increase participation in and transparency of the review process.



Canada hopes that the lessons learned will be carried forward to the upcoming review meeting for the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and we offer our full support to its President and officers.

Canada also recognizes the role that international peer reviews can play in strengthening global nuclear safety and security, through cooperation, accountability and transparency. Canada was pleased to host an Operational Safety Review Team Mission at the Pickering nuclear power plant in October 2016. We have begun preparations for an Emergency Preparedness Review mission in 2019 and our experts continue to lead and participate in missions around the world.

## **Innovations and advances in nuclear technology**

Moving now to innovations and advances in nuclear technology, Canada has a long history of excellence in this area, primarily at our Chalk River Laboratories. Over the years, this has included the development of the CANDU reactor, Cobalt-60 cancer treatment methods, and a range of novel applications for nuclear technologies.

The Government of Canada has outlined a strong commitment to supporting innovation with a range of initiatives that expand federal support for clean technologies. These initiatives could support nuclear energy technologies at different points in the innovation spectrum and further develop nuclear energy as an important component of Canada's clean energy mix. For example, we are investing \$1.2B for new and renewed science infrastructure to revitalize our national nuclear laboratories at Chalk River.

Canada has also joined Mission Innovation, a global initiative of 22 countries and the European Union. Members of this initiative have agreed to double investments in clean energy innovation over five years. Canada is one of nine countries that has identified nuclear energy as part of our clean energy portfolio under this initiative.

Looking to the future, Canada continues to build on our R&D strengths by laying the groundwork for Small Modular Reactors. Our national regulator has already received seven applications for pre-licensing vendor design reviews and our national nuclear laboratories have stated their interest in becoming a hub for demonstration SMRs.

While S-M-Rs are still in the early stage of their development, our Government recognizes their

potential to help us deliver on a number of our priorities, including innovation and climate change.

We see a variety of potential applications for S-M-R technology, including three key areas:

- First, we envision provincial utilities deploying them on their grids, especially as more provinces look to phase out coal.
- We can also see S-M-Rs being used in resource extraction so that companies, such as those in Canada's Oil Sands, can continue to green their industries.
- And, finally, we could see S-M-Rs potentially being deployed as *very* small modular reactors for remote communities that are off the grid.

By bringing together essential enabling partners

from across Canada, including our labs, national regulator, industry, and academia – as well as focusing on our international partnerships – we are establishing a solid foundation for S-M-R technology in Canada.

These partnerships are critical to advancing nuclear energy, both domestically and globally, and we are committed to fostering that collaboration.

## **Women in Nuclear**

Next, I want to highlight that Canada welcomes the special presentation on the vital role of women in nuclear as part of the conference programme.

Canada is co-leading, with Sweden and Italy, the Clean Energy Education and Empowerment Initiative, otherwise known as the “C-3-E” Initiative. This initiative was launched through the Clean Energy Ministerial and aims to work with our

international partners to attract more women to the field of clean energy.

We look forward to ensuring that women in nuclear is a strong component of this initiative and encourage others to support these efforts.

## **Closing**

In closing, I would like to once again highlight the key role that nuclear energy is playing in helping Canada to achieve a low carbon future. We remain committed to working with the international community to ensure that nuclear energy remains a safe, reliable and environmentally responsible part of the global energy mix.

Thank you. And thank you to our gracious hosts for making this conference possible.