



The Global Nuclear Isotope Landscape: Canada's Role- Summary

On February 7th, 2024, The Canadian Nuclear Isotope Council (CNIC) in partnership with the Organization of Canadian Nuclear Industries (OCNI) hosted a webinar titled "The Global Nuclear Isotope Landscape: Canada's Role." Led by esteemed leaders in the global and domestic nuclear isotope industry, the panelists took part in an insightful discussion on current developments, emerging challenges, and future opportunities in the medical isotope landscape. The discussion was moderated by Bill Walker, President & CEO of OCNI, who navigated the discussion to explore in depth Canada's vital contributions to nuclear medicine, advancements in scientific innovation, supply-chain challenges, and next steps for the industry.

Panelists:

- **Jennifer Edey**, Senior Vice President, Operational Services and Business Development – Bruce Power
- **Dr. Mark Harfensteller**, Chief Operating Officer – ITM Group
- **Ram Mullur**, Vice-President of Isotope Business – Canadian Nuclear Laboratories (CNL)
- **Lindsay Greenland**, Vice President of Technical Services and Projects – Laurentis Energy Partners
- **Moderated by Bill Walker**, President & CEO of the Organization of Canadian Nuclear Industries (OCNI)

Summary:

The webinar began with an exploration of Canada's collaboration with Indigenous communities to enhance opportunities in the nuclear sector. Panelists highlighted partnerships and equity stake initiatives aimed at fostering economic growth and advancing isotope research, emphasizing the importance of trust and reconciliation in building a sustainable future for all stakeholders.

The discussion transitioned to Canada's adaptive response to the growing demand for medical isotopes, emphasizing strategic partnerships and innovative approaches to production and distribution. Panelists outlined key initiatives, such as Bruce Power's Isotope Production System and OPG's Target Delivery System, aimed at addressing supply chain gaps and positioning Canada as a global leader in isotope production.

A spotlight was cast on the current demand and challenges surrounding actinium-225, with panelists acknowledging the scarcity of supply and emerging opportunities for innovation. Despite existing hurdles, the panel expressed how overcoming barriers in the supply and production of critical isotopes spurs creativity and innovation, introducing new isotope capabilities to treat healthcare. Nevertheless, the need for collaborative efforts to overcome production limitations remains a vital exercise.

Canada's attractiveness to international business was a key point of discussion, with panelists citing the country's robust infrastructure, research capacity, and supportive government policies as key factors driving international collaboration and investment. The discussion highlighted Canada's leadership in



isotope innovation and emphasized the importance of research and development activities in propelling the industry forward.

Challenges and Next Steps:

The webinar addressed pragmatic barriers to commercializing radioisotopes in Canada, including lengthy approval processes and workforce shortages. Panelists identified the need for sustained government support, enhanced educational initiatives, and modernized regulatory frameworks to facilitate industry growth and innovation.

Opportunities and challenges within the supply chain were also examined, with panelists emphasizing the importance of infrastructure scalability, collaboration, and quality assurance in meeting the growing demand for medical isotopes. The discussion highlighted the need for continued investment, partnership, and regulatory support to unlock the full potential of Canada's nuclear industry.

Final Remarks

This discussion highlighted the industry's commitment to innovation and collaboration, setting the stage for continued growth and impact in the global nuclear landscape. Knowledge-sharing forums as such are vital to ensure that Canada's leadership in nuclear isotope innovation remains impactful in advancing healthcare around the globe.

About the CNIC

The Canadian Nuclear Isotope Council (CNIC) is an independent organization consisting of representatives from various levels within the Canadian health sector, nuclear industry and research bodies, convened specifically to advocate for our country's role in the production of the world's isotope supply.

The CNIC invites leaders from Canada's isotope community and abroad to discuss common issues and strategic opportunities at the **Canadian Radiotheranostics Leaders' Summit 2024 on June 6-7, 2024**. Registration opens soon – please visit www.canadianisotopes.ca or follow us on [LinkedIn](#) and [Twitter \(X\)](#) for more. To learn more about how to get involved, please refer to the sponsorship information package [here](#).