May 2025 Collaboration Update

Message from Rachna Clavero

Dear Conexus members, participants and partners:

On May 1, Unit 1 of CNNO's Qinshan nuclear plant was taken offline following 738 days of continuous operation. This represents a new record for the longest uninterrupted operation of a power reactor in China, as well as a world record operating run for a CANDU-6 reactor. Unit 1 will soon undergo refurbishment, which will allow it to generate power for an additional 30 years.

That CANDU reactors are achieving these performance milestones at this stage in their design life, while being prepared to operate for second and potentially third lifecycles, demonstrates the exponential, inimitable value that comes from decades of innovation and continuous improvement to the technology through Conexus collaboration.

Our members' shared commitment to safety, performance excellence, environmental and plant sustainability has delivered decades of benefits across the fleet, while establishing a trusted, proven collaboration framework that can meet today's needs and help the industry build for tomorrow.

It's why we rebranded. In Latin, Conexus means "connection". Connecting the dots. Connecting the industry. Connecting people. This is at the heart of what we do. Over the next 5-10 years, the nuclear industry is facing unprecedented opportunity. Achievement of our members' collective performance, life extension, and growth objectives is dependent on the ability to deliver safely, successfully, and at the lowest possible cost. This will require coordination, cooperation and coalition. Or to sum it up in another c-word – collaboration.

Our new name reflects our expanding role in a rapidly evolving energy landscape and our commitment to connecting people, ideas, and innovation across borders and disciplines, as summed up in these three goals:

- A sustainable, scalable Collaboration Model, that can support our CANDU utilities through their second lifecycles while planning for a potential third.
- The capability to bring existing expertise together with emerging technologies such as SMRs for successful deployment.

- The ability to rapidly respond to time-sensitive technical challenges while maintaining robust regulatory confidence.

While our name has changed, our mission remains the same: to support excellence through collaboration for CANDU and advanced nuclear technologies. Our members can continue to rely on the same services, agreements, and partnerships while benefiting from a renewed brand identity that reflects who we are today - and where the industry is headed, together.

Rachna Clavero
President and CEO

Conexus Rebrand - Learn more:

Read the Press Release

Visit our New Public Website

Check out the Brochure

Watch the Launch Video

Delivering Innovation, Quality and Exponential Value: Joint Projects and Services

Joint Projects and Services is a trusted, flexible space to address nuclear industry challenges and opportunities. Through Conexus, members engineer new approaches for longer, more robust plant life, develop innovative solutions to common opportunities and challenges through shared resources, and cost-effective auditing, inspection and qualification services. JP&S is also a CANDU industry go-to for tackling materials-related issues such as the acquisition of obsolete parts, sharing of spare parts and obsolescence management.

With management by Conexus and oversight by a committee of project partners, a joint project (JP) can be developed to pool funding, resources and technical expertise. Each year, Conexus manages 30 to 50 active projects, with members investing about $30 million into safe and efficient CANDU operations. These investments often lead to substantial cost savings and revenue increases far exceeding the initial investment.

Currently, Conexus has 40 active Joint Projects totalling more than $40 million, with 24 new JPs launched in the 2024- 25 fiscal year. These projects span a range of critical areas, including:

- CSA standards modernization to help shape national policy and code updates.
- Cyber Security Peer Group advancing engineering change control process for cyber assets, hardware and software bill of materials.
- Continued Fuel Channel Life Management (FCLM) and Pressure Tube Surveillance (PTS) efforts, including coordinated testing, data integration, and regulatory collaboration to extend operating life of aging assets.
- CANPAC and CANIAC supplier qualification programs, which continue to grow, streamlining assessments, promote vendor readiness, and support procurement efficiency across Canadian and international nuclear operators.
- The creation of five working groups under our Decommissioning and Waste Management Peer Group, focused on finding practical solutions to common challenges across the fleet. Through our Supply Chain, Obsolescence and Procurement Program, we are delivering critical components like in-core flux detectors and potentiometers for Conexus members, highlighting our commitment to supply assurance and outage readiness, and advancing DCC system component design to support Pickering refurbishment

Conexus' Inspection Qualification Bureau (CIQB) manages review and certification of inspection procedures by qualified subject matter experts for Conexus' utility members. They are currently overseeing five active projects, including automated analysis for steam generators and testing an

upgraded digital record system. Our ongoing work supports ENIQ and CSA standards by ensuring stringent nuclear oversight and quality assurance.

JP&S also manages Conexus ' CANDU 6 Fleet Forum, facilitating collaboration and knowledge sharing among C6 operators and other CANDU stakeholders worldwide. For example, NB Power recently hosted KHNP for Periodic Safety Review benchmarking. The Steering Committee's 2025 annual meeting will be held in Romania in September.

Over the past five years, Conexus members have collectively reaped the rewards of over $160 million in Joint Projects, at a minimum doubling and in some cases gaining a 5 to 1 leverage for every dollar spent. In addition to cost savings, members benefit from increased plant efficiencies, life extension of plants, bulk purchase discounts, and exponential value creation.

We've seen deep engagement from across the membership in areas such as outage management, operational excellence, supply chain, equipment reliability, and regulatory response. Every dollar reflects a shared belief in the power of collaboration — and in the strength of the CANDU fleet.

Strengthening International Collaboration: Member Visit with NA-SA, CNEA and CONUAR

Earlier this month, members of the Conexus Nuclear team travelled to Argentina for a series of strategic meetings with long-standing member utility Nucleoeléctrica Argentina S.A. (NA-SA), operator of the Embalse Nuclear Power Plant, and with the National Atomic Energy Commission (CNEA). Notably, 2025 marks 50 years since the start of construction at Embalse. Today, the facility is a cornerstone of Argentina's nuclear program and represents a major achievement in national engineering and energy infrastructure.

Embalse is a CANDU 6 reactor currently in its second operating cycle as of 2019, following a successful refurbishment. In 2024, the plant helped Argentina achieve a record-setting 10,449,015 MWh of nuclear electricity generation, representing over 7% of the country's total energy mix. The performance underscores both the resilience of the CANDU design and the commitment of NA-SA to safe, efficient operations.

CNEA (subsequently NA-SA) was one of the first international members to join Conexus in 1986, reinforcing the shared vision among CANDU 6 operators for collaboration, transparency, and continuous improvement. Over the decades, NA-SA's engagement has helped shape joint initiatives in equipment reliability, outage

performance, aging management, and knowledge transfer across the CANDU fleet. Their sustained involvement continues to strengthen Conexus' global network and contributes to the broader mission of delivering reliable nuclear energy through cooperation

The team engaged in focused discussions with NA-SA senior leaders in addition to a working session with CNEA representatives. Topics discussed included outage and performance benchmarking, fuel channel integrity, long-term asset management, and innovation pathways for refurbishment-era stations. Insights gathered during the visit will inform upcoming technical exchanges and joint initiatives.

The team also met with CONUAR, a CNEA subsidiary with over 40 years of Argentine-driven expertise in nuclear development and high-precision technologies.

The dialogue and shared learnings between Conexus and NA-SA help us to connect the dots across our membership to support the success of the industry worldwide.

CANDU Decommissioning: WM 2025

Conexus collaboration spans the full nuclear plant lifecycle. At the Waste Management 2025 Conference in Phoenix, Arizona, Conexus' John Krasznai, Technical Advisor, and Ralph Stube, Program Manager, Strategic Research and Development, presented on the unique challenges in CANDU plant decommissioning, with a focus on the distinct characteristics of CANDU reactors that require tailored dismantling, waste management, and planning approaches.

The presentation outlined Conexus-led and supported work to address the need for dedicated technologies and strategies in areas such as:

- Field characterization methods for contaminated construction materials
- Business case development for Canadian steel and concrete reuse
- Optimization of ILW container size and segmentation technologies
- Creation of a searchable artifact characterization database to support future planning.

CANDU-specific solutions support safe, cost-effective and environmentally sustainable decommissioning, enabling smarter dismantling strategies and reducing overall project and disposal costs. Working together facilitates knowledge sharing and consolidation and lowers risk while accelerating readiness for decommissioning, including environmental and regulatory preparedness.

WM SYMPOSIA 2025 EDUCATION & OPPORTUNITY IN RADWASTE MANAGEMENT
A NON-PROFIT ORGANIZATION

organized in cooperation with the

IAEA Atoms for Peace and Development

SMR Readiness - Key Takeaways from Industry Experts

As Canada accelerates its efforts toward Small Modular Reactor (SMR) deployment, Conexus Nuclear is proud to be at the forefront. At a recent panel hosted by the Brilliant Energy Institute at Ontario Tech University in partnership with the IAEA, Sonia Iqbal, Conexus' SMR Program Director, joined industry, academic, and Indigenous leaders for a focused discussion on advanced nuclear and SMR readiness, infrastructure, and inclusive innovation.

The discussion emphasized the significant coordination and cooperation required as Canada looks to scale advanced reactors:

Sonia Iqbal, Conexus Nuclear Inc.: "The Conexus SMR Program brings together diverse partners across the nuclear sector to de-risk deployment and accelerate innovation. Canada's collaborative model is a powerful tool for scaling clean, inclusive energy solutions both nationally and globally."

Dr. Igor Pioro, Ontario Tech University: "SMRs are not just a new technology - they represent a shift in how we think about reactor design, modularity, and deployment in diverse environments. There's tremendous potential for innovation, but we must build the right infrastructure and supply chains to support it."

Dazawray Landrie-Parker, Mokwateh: "Indigenous communities don't just want consultation - they want to be co-creators of clean energy solutions. Real partnership means engaging early, valuing local knowledge, and building energy sovereignty from the ground up."

Brian Fehrenbach, OCNI: "To build 40 gigawatts of nuclear across Canada, we need to triple the size of our supply chain, and that means investing in people, partnerships, and Indigenous economic inclusion at every stage of the process."

Moderated by Hossam Kishawy, Dean of Engineering and Applied Science, the event also featured keynote remarks from Dr. Hadid Subki, Technical Lead of SMR Technology Development for the IAEA, who outlined the global context for SMR development and highlighted the importance of international alignment.

The panel reinforced that collaboration is at the center of sustaining the operating CANDU fleet while supporting the evolution of next-generation reactors. Conexus' SMR Program exemplifies how the industry is working together to accelerate innovation and advance the infrastructure, partnerships, and policy needed to build the next generation of nuclear.

Conexus Supports Strategic Role of Advanced Nuclear Technologies in the Global Fight Against Cancer

In addition to producing clean, reliable nuclear power, CANDU reactors play a vital role in the production of medical isotopes. As such, Conexus is pleased to share that we have joined the Canadian Nuclear Isotope Council (CNIC).

"Our 40-year history of fostering CANDU performance excellence and collaboration across the nuclear value chain positions us to support the collective achievement of global goals and help our members shape the future of nuclear technologies that will impact lives across the world for years to come." said Rachna Clavero, President and CEO of Conexus.

"Conexus joining the CNIC will strengthen our collective ability to promote the strategic role of advanced nuclear technologies in the global fight against cancer" said James Scongack, Chair of the CNIC. "Conexus' international network and commitment to collaboration aligns with the CNIC's goal to expand international partnerships and strengthen global supply chains. Together, we will work collaboratively to advocate for continued investment and research in Canadian isotopes and technology."

Read more HERE.

Conexus Collaboration Updates

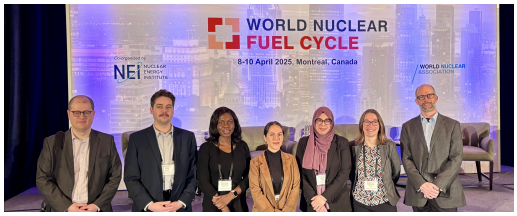
Learning Through Collaboration

In March, Conexus and WANO (Paris Centre) met to align on development of a joint nuclear leadership program that will bring together global experts to train and mentor high-potential middle managers from across the international nuclear sector. The program is expected to be launched in March, 2026.

The program will emphasize leadership development grounded in operational excellence, safety culture, and global perspective. As the industry builds the leadership capacity needed for a changing nuclear landscape, they are increasingly looking to Conexus' customizable, internationally recognized, technology-neutral learning and development programs. Learn more here.

Concrete Working Group

In April, the Chemistry, Materials and Components (CM&C) R&D program held a highly productive meeting with Concrete Working Group members and EPRI to support knowledge-sharing on emerging research and development. The session facilitated strong information exchange on key topics such as automated inspection techniques, non-contact leakage detection tools, non-destructive examination methods, and assessing concrete strength in existing structures.



2025 World Nuclear Fuel Cycle Conference

Conexus Program Director Sonia Iqbal and Program Manager Brad Denman attended the 2025 World Nuclear Fuel Cycle (WNFC) conference in Montreal, co-hosted by NEI and WNA. The event brought together global leaders to discuss the fuel cycle's critical role in achieving net-zero goals.

Conexus members, including the SMR Fuel Supply Task Team, were well represented. Key themes included innovation in supply, transportation, and fuel technologies—with a clear message: the fuel cycle must lead the way. Canada was highlighted as a global leader in nuclear growth and collaboration.

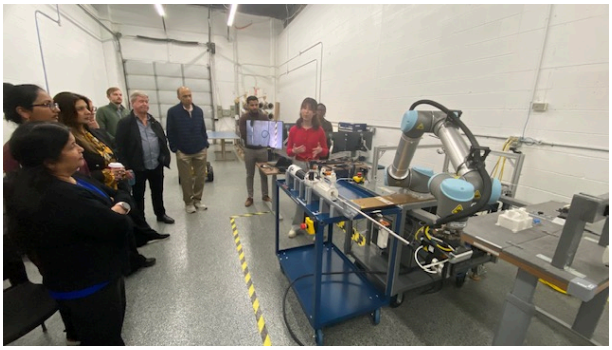
Conexus hosts KHNP

Earlier this month, Conexus hosted delegates from KHNP and then joined them for a visit at Kinectrics headquarters. It was a valuable opportunity to strengthen international collaboration, share expertise, and explore opportunities.

Conexus Supplier Participant Meeting

Conexus' most recent bi-monthly Supplier Participant Program (SPP) meeting was hosted by Mirion Technologies at their Vaughan facility. Discussions covered a range of topics, including OPEX and industry updates from Canadian and international Conexus members and participants.

Conexus' SPP is a vital platform for suppliers to exchange insights, best practices, and lessons learned. Regular forums provide ongoing opportunities for nuclear industry suppliers to connect with one another as well as operators to address shared challenges and strengthen the CANDU industry's robust network of suppliers.



Staying current on industry developments

Last week the Conexus team visited **Calian Advanced Technologies**' new R&D facility in Mississauga. The team had the opportunity to see some of Calian's cutting-edge developments in robotics, automated scrape retrieval, and mobile radiation protection systems. These technologies show strong potential to support and enhance several Conexus programs.

Thank you to the Calian team for the warm welcome, insightful demos, and meaningful discussions. We look forward to ongoing collaboration to accelerate innovation.

In addition, **Eclipse Automation** joined us at our May Town Hall to educate our team on how their advanced automation solutions are supporting the nuclear industry - from refurbishment and life extension to decommissioning and waste management.

A Conexus Supplier Participant since 2023, Eclipse shared case studies and updated the Conexus team on their capabilities and commitment to innovation across the nuclear lifecycle. These visits help ensure the Conexus team stays current on the latest developments across the nuclear industry while strengthening relationships and providing opportunities for learning and collaboration.

Upcoming Events: CCW 2025

We're excited to invite you to CCW 2025! Join us in Toronto, Ontario for Conexus' premier industry event, taking place from September 28 to October 2. CCW is Conexus' biennial conference where nuclear professionals, technical experts and decision makers from Canada and around the world come together to network, share knowledge, and drive innovation.

Register HERE **Sponsor CCW** **Exhibitor Info**

Our theme for CCW 2025 is "Forging the Future," emphasizing the collective effort required to drive the industry forward. CCW 2025 will explore how partnerships, innovation, and forward-thinking approaches can lead to sustainable solutions and lasting industry improvements. Attendees will gain insights into future focus areas, learn how to foster and accelerate innovation, and discover new ways to apply technology in operating plants.

Hear from CCW 2023 Attendees:

"The uniqueness of CCW is that it brings together technical experts and decision-makers under one roof. Conversations here don't just stay at the conference—they drive the innovation that shapes the future of our industry." Julie West, Kinectrics

"The conference has been outstanding. I went in expecting one thing and came out elated. The energy, collaboration, and sheer amount of knowledge-sharing exceeded my expectations." Stephen Werlick, Curtiss-Wright Nuclear

Industry News

44th Annual CNS Conference taking place June 8-11 in Toronto. Theme: Our CANDU Past; Our CANDU Present; Our Can Do Future. Stop by the Conexus booth! Conexus President and CEO Rachna Clavero will participate in the Industry Associations' Update Plenary on Monday June 9 at 10:20 a.m. and will moderate a fireside chat with CNSC President and CEO Pierre Tremblay at 12:35 p.m.

Ontario Leads the G7 by Building First Small Modular Reactor - The Province of Ontario has approved Ontario Power Generation's start of construction of the first of four small modular reactors planned for the Darlington New Nuclear Project site.

Westinghouse, University of Saskatchewan to collaborate for eVinci deployment - Technical cooperation under a newly signed Memorandum of Agreement between Westinghouse Electric Company and the University of Saskatchewan will help accelerate deployment of the microreactor in Saskatchewan.

AtkinsRéalis secures supply of Heavy water and future of CANDU technology around the world - Candu Energy Inc. has signed a memorandum of understanding with the National Atomic Energy Commission (CNEA) of Argentina to produce heavy water. The MOU provides for the restart of the Industrial Heavy Water Plant (PIAP) in Neuquén, Argentina, along with the long-term acquisition of its heavy water output. It also provides for planning related to the establishment of one or more similar heavy water production facilities in Canada.

Stay up-to-date on Conexus News and Information

- Conexus has a **YouTube channel** – watch our videos.
- Follow us on **LinkedIn** for weekly news and updates.

- Visit **Conexus.Online,** our one-stop collaboration tool and information access portal with more than 45,000 OPEX data entries, a calendar of events, and a workspace for peer teams, forums and committees.
