



# Conexus Nuclear Inc. Update

**Virtual Spring Meeting of the Light Water Reactor Sustainability (LWRS) Program**

Presented By: John de Grosbois

April 29, 2025





# What We Do

## Overview

**Conexus is a well-established organization of expert talent in:**

- Management of complex, multi-member projects
- Manage a large industry R&D program portfolio (nuclear science and engineering)
- Coordinate industry level response on many nuclear safety, environmental and regulatory affairs issues
- Conduct procurement of goods and services across international jurisdictions
- Provide training and professional development
- Peer group/workshop facilitation
- Management of industry-wide OPEX and best practices to support continuous improvement and international benchmarking



***We generate powerful synergies for our members and nuclear partners to help them create solutions, transform and achieve performance excellence***



# Conexus – Excellence and Innovation Through Collaboration

## Members and Stakeholders

**11** members in 6 countries

**40+** supplier participants

**4** SMR vendor participants

**2** organization participants

**Funded** voluntarily by our members and participants

Multiple **Canadian** and **international** partners

**Founded** in **Canada** in 1984

## Canadian Technology with International Reach

**40+** operating CANDU units across 6 countries worldwide (including Indian PHWRs)

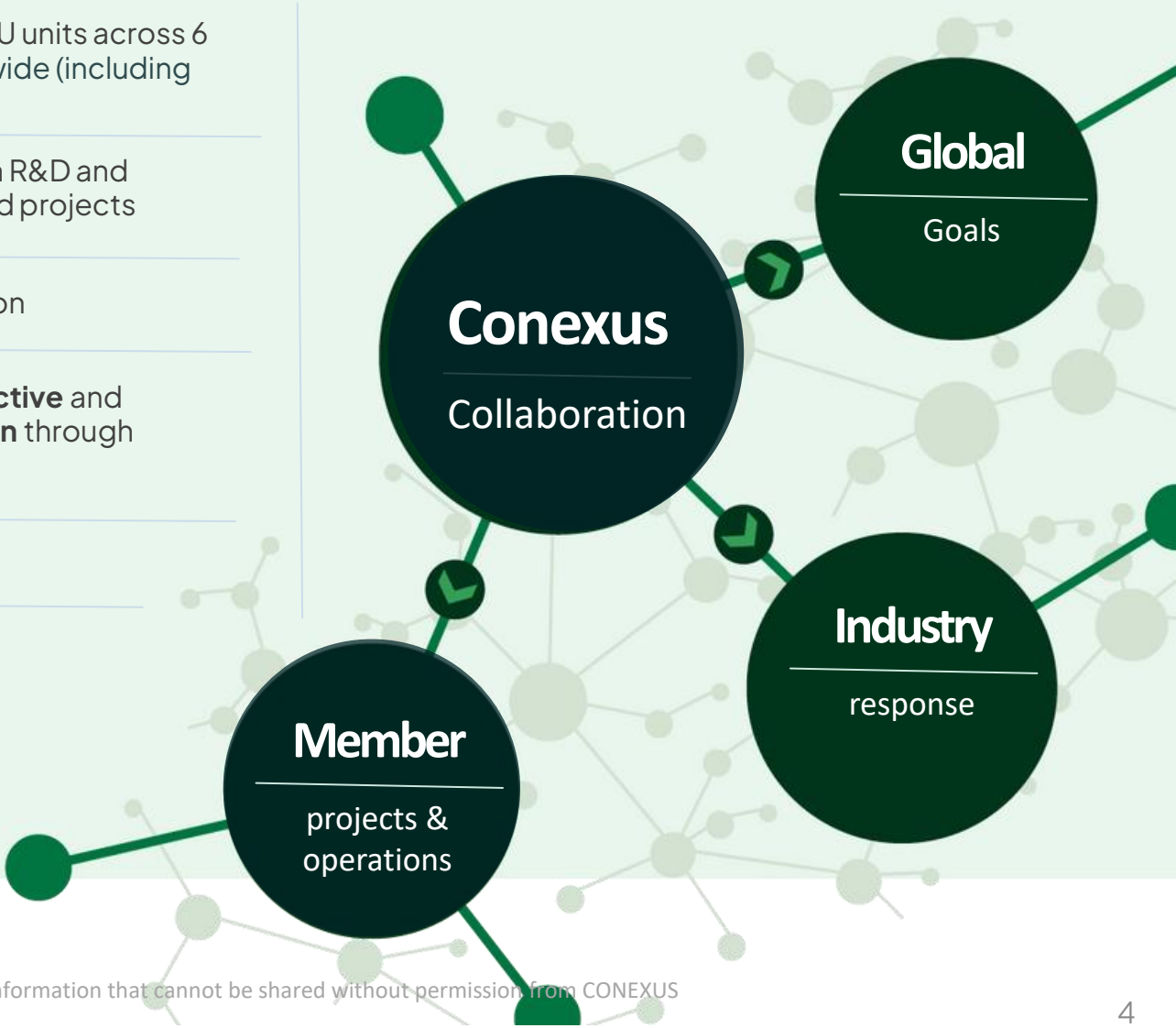
**\$75+** million annually in R&D and member-initiated projects

**Private**, not-for-profit corporation

**Enables safe, reliable, cost effective and environmentally sound operation** through knowledge and resource sharing

2020 – Achieved Equal 30

## CANDU and Beyond – Performance Excellence and Industry Sustainability



# Conexus Collaborative Solutions



## Information Exchange



## Research & Development



## Joint Projects and Services



## Nuclear Safety Environmental Affairs



## Learning and Development

Operating Experience	Strategic R&D	Joint projects (Two or more members) including FCLM	Nuclear Safety	Nuclear Professional Development Seminar
Technical conferences, workshops and meetings	Fuel Channels	Supply chain, obsolescence management and procurement	Environmental Affairs	Safety Culture Training
Benchmarking and operational effectiveness	Safety and Licensing	Shared supply chain auditing and inspection services	Common Standards and Regulatory Approach	Regulatory Affairs Training
Peer Groups	Chemistry, Materials and Components	CANDU-6 Fleet	Emergency Preparedness and Response	Engineering Proficiency Training
EPRI Coordination	Industry Standard Toolset		Decommissioning	Supplier First-Line Supervisor Leadership
	Health, Safety and Environment		Nuclear Waste Management	Other Custom Programs Based on Utility Needs
			Small Modular Reactors	



# Partnership for Greater Influence



Conexus serves as a common CANDU portal in organizations like EPRI and IAEA to strengthen member value.

Conexus leverages MOUs and partnership agreements with WANO, IAEA, NEA, WNA and others to provide members an aligned, coordinated response that avoids duplication of service and cost.



Through Conexus, members create aligned and robust input and responses to new and evolving standards and regulatory requirements.

## Industry organizations

Canada



UNENE  
University Network of  
Excellence in Nuclear  
Engineering



International



WORLD NUCLEAR  
ASSOCIATION



## Standards



## Government organizations

Canada



International



Regulator





# Conexus Members

## Canadian Members



Bruce Power



Canadian Nuclear  
Laboratories



New Brunswick  
Power



Ontario Power  
Generation



SaskPower



Saskatchewan  
Research Council

## International Members



CNNO, China



KHNP, Korea



NASA, Argentina



NPCIL, India



SNN, Romania



# CANDU Member Priorities



Successful completion of life extension of plants in Canada, and planning for refurbishments internationally. Planning for second refurbishments.



Using innovation, continuous improvements, and plant modernization to gain more capacity from the existing fleet



Deployment of MMRs, SMRs; first movers in Ontario for the BWRX-300



Review of technology options for new builds



Expansion of the supply chain to support future growth



Siting and planning in non-nuclear territories



Decommissioning and Waste Management strategies



Fuel and waste management for new reactor technologies



# Strategic Trends and Drivers

- Key decisions are underway between now and 2028 that will determine the path forward for industry, including (but not limited to):
  - technology selection for new builds,
  - licensing processes for SMRs,
  - siting decision for a DGR, completed
  - planning for decommissioning,
  - planning for a second refurbishment at Pt. Lepreau
- New CANDU units could be online at Cernavoda as early as 2032, and the COG R&D program will need to expand as a result.
- A number of Canadian and international units will be refurbished by 2032 and entering their second lifecycle. COG will need to assess if our programs align with the needs of those units.

# What this Means for Conexus



Development of collaborative R&D program for SMR technologies being deployed in Canada



Potential rapid expansion of the R&D program when new builds are in operations



Growth in joint projects to create a flexible space for members to partner on specific needs

# Rebrand – Overview

## Why did we rebrand?

- Modernize our company and adopt a new name that can grow with us
- Support our Members' expanding portfolios in reactor technology and leverage our successful collaboration model
- Reflect our company's evolution to support a broad range of clients, members and participants

## What has changed?

- Our Company Name
- Our Logo and visual identity
- We have refreshed our vision and values
- We are continuing to identify opportunities for sustainable growth in support of evolving member needs

## What hasn't changed?

- Our commitment to *excellence through collaboration* and CANDU excellence
- Membership structure; member, partner, and participant agreements
- Our programs and services
- Any contracts or agreements currently held with COG

*We are evolving our brand to be more reflective of our current mandate: to be a leading nuclear industry collaboration hub supporting achievement of Canadian and international net zero and energy security goals.*





# Collaboration in an evolving nuclear landscape



14th COG/IAEA technical committee meeting in 2017



2022 Women in Nuclear Conference



- The nuclear sector is built on a foundation of collaboration.
- Working together, we've achieved exceptional results and performance excellence through a shared commitment to R&D and continuous improvement, as demonstrated by recent performance milestones.
- The next 40 years can be even better for operating plants, as the industry builds the next generation of nuclear.

**Meeting industry targets will require significant communication, coordination and collaboration.  
We've done it before, we can do it again!**



COG visits China in 2018



Supplier Participants visit the Darlington refurbishment training facility







# Thank you!

## Questions?

