

# NUCLEAR POWER IN CANADA DELIVERING PROJECT SUCCESS



NEA FINANCING NUCLEAR NEW BUILD TODAY  
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# THE DEBATE IS OVER

At COP 28 in Dubai more than 20 countries signed a pledge to triple the amount of nuclear in the world

At the first ever nuclear summit in Belgium the list grew to more than 30



Now comes the hard part  
Figuring out **HOW** this goal can be met

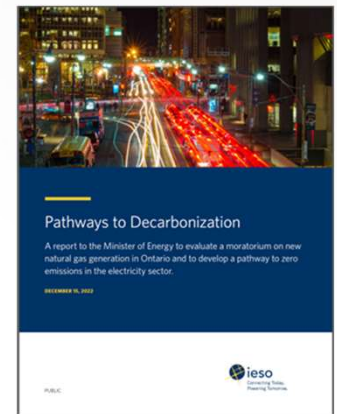
# THE CANADIAN EXPERIENCE ON TIME AND ON BUDGET

- Large CDN\$26 Billion refurbishment projects (life extension) are underway at both Darlington (4 units) and Bruce (6 units)
- Different project models
  - Darlington is publicly owned (OPG) and regulated
  - Bruce is privately operated (Bruce Power) and contracted using a Contract for Difference (CfD) model
- Both projects are on time and on budget
  - Darlington third unit is nearing commercial operation, and fourth unit is in the disassembly phase
  - Bruce first unit back in service and second unit is nearing completion of disassembly phase



# CANADA IS MOVING FORWARD

- Ontario Independent Electricity System Operator issued the “Pathways to Decarbonization (P2D)” report in 2022 stating need for 17,800 MW of new nuclear by 2050 (total cost of P2D estimated at \$400 Billion)
  - Darlington New Nuclear Project BWRX-300 4 units, in project validation phase, submitted application for Licence to Construct
  - Potential refurbishment of Pickering B
  - New Large nuclear at Bruce C – ready to submit application for Licence to Prepare site
  - Additional large nuclear at new sites to follow
- New Brunswick Strategic Plan calls for 600 MW of new nuclear at Pt Lepreau by 2035
  - Made application for Licence to Prepare site for ARC unit at Point Lepreau
- Saskatchewan - 4 or more SMRs to replace fossil generation in the 2030s and micro reactors for remote communities
  - – Site selection underway
- Alberta considering nuclear to replace fossil generation and to decarbonize industry



# GOOD PROJECTS WILL ATTRACT FINANCING LESSONS FROM CANADA

- Extensive project planning – only set the project cost and schedule once sufficient work has been done to properly define the project
- Use a strong set of project metrics together with a high level of transparency to clearly show how the project is performing
- Implement a robust risk management program. Use it as the basis for project contingencies
- Create a culture of success using collaborative contracting to align all parties' objectives
- Get the best possible people you can – train for proficiency, not qualifications
- Ensure adequate independent oversight



# FINANCING SOURCES OF FUNDS

- Green bonds (Bruce Power and OPG have issued)
- Specialty financial institutions (Canada Infrastructure Bank committed to DNNP early works, interest in International Bank for Nuclear Infrastructure IBNI)
- Investment Tax Credits (applicable to public institutions, duration)
- Customer payments during construction
- Support for early project development work

**No project has been delayed due to lack of funding**



# SUMMARY

- Canada is “all in” on nuclear
- Current projects are on time and on budget
- Project structures focus on success – collaborative contracting is key
- Global leaders in issuance of Green Bonds for nuclear
- Government incentives in the form of ITCs and low-cost financing from specialty institutions

**THANK YOU!**

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