



*Electrifying
life*

Expanding Hydro Generation in Northeastern Ontario

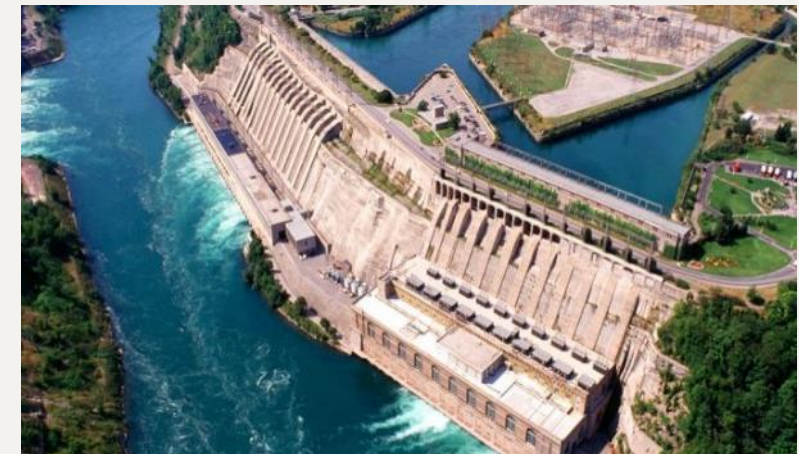
Powering the province through (re)developments

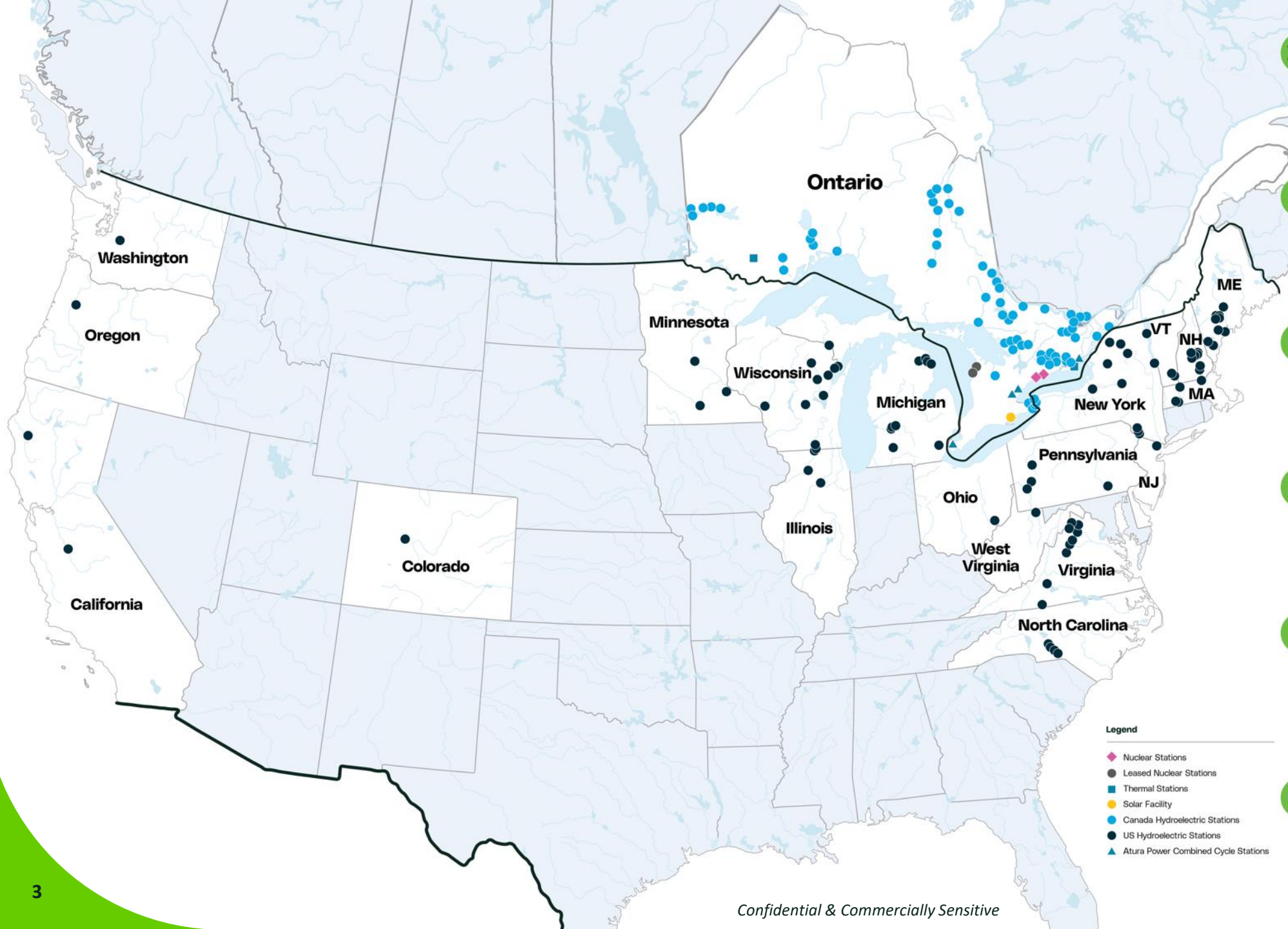
May 6, 2025

Matt Sikstrom, Director, Renewable Generation Projects

About OPG

- We generate about half of the province's electricity (18,000+ MW of Capacity in Ontario)
- 11,000+ employees, from Kenora to Cornwall and across the U.S.
- 100+ years of operating experience
- A diverse fleet including nuclear, hydroelectric, thermal, natural gas, and solar generation





2

Nuclear
Generating Stations



66

Hydroelectric
Generating Stations
in Canada



2

Thermal
Stations



1

Solar
Facility



85

Hydroelectric
Generating Stations
in the U.S.



4

Atura Power
Combined-Cycle
Generating Stations

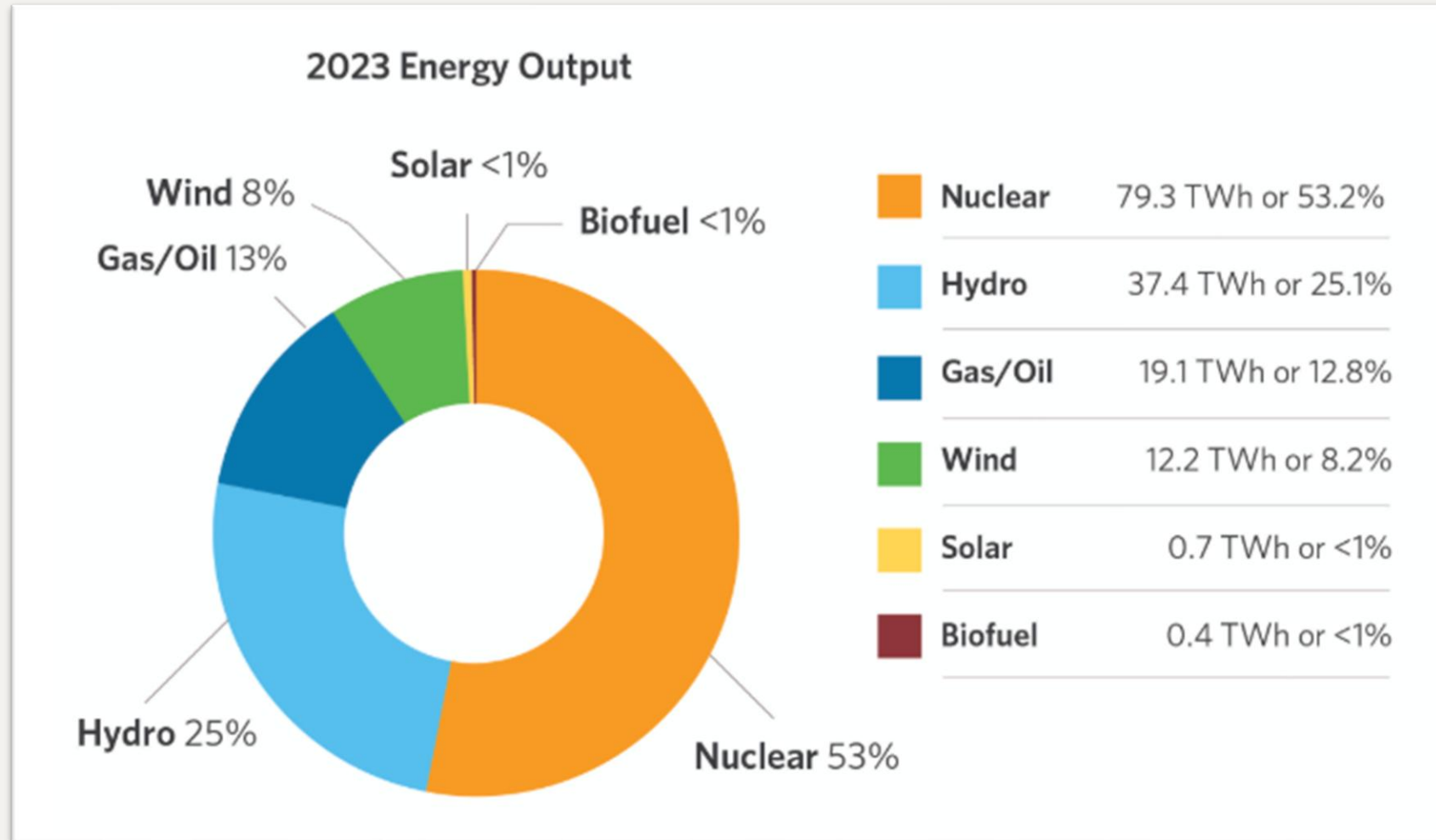


Our Subsidiaries

Atura Power



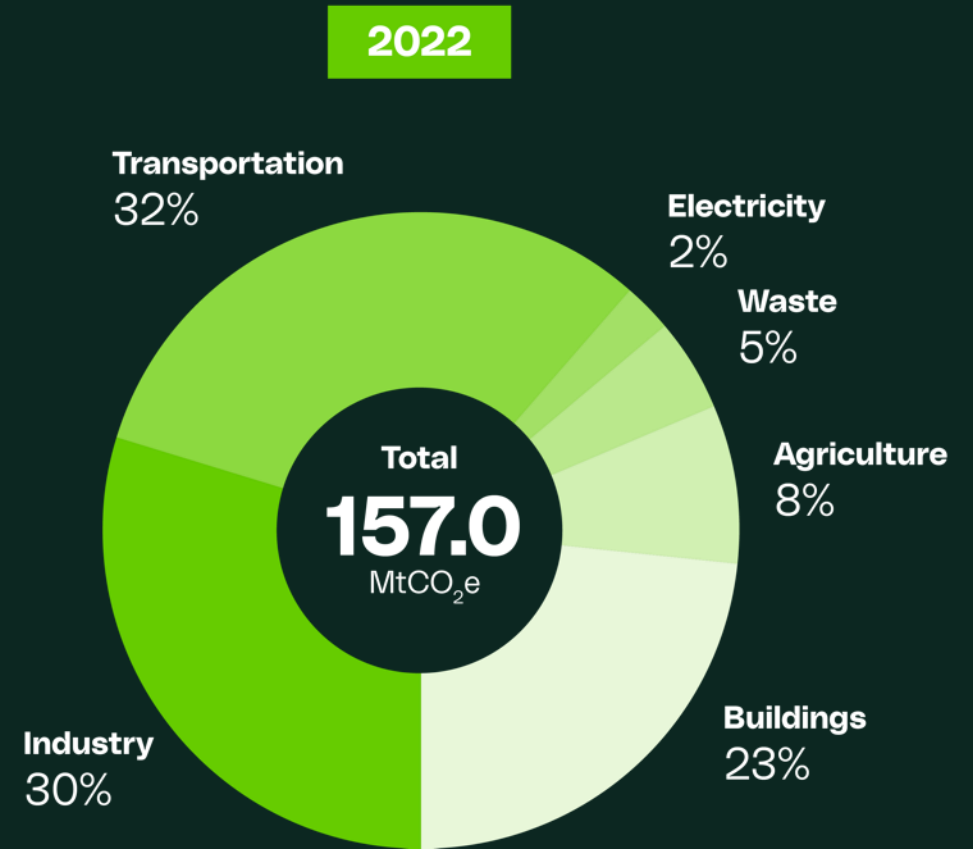
Ontario Energy Mix



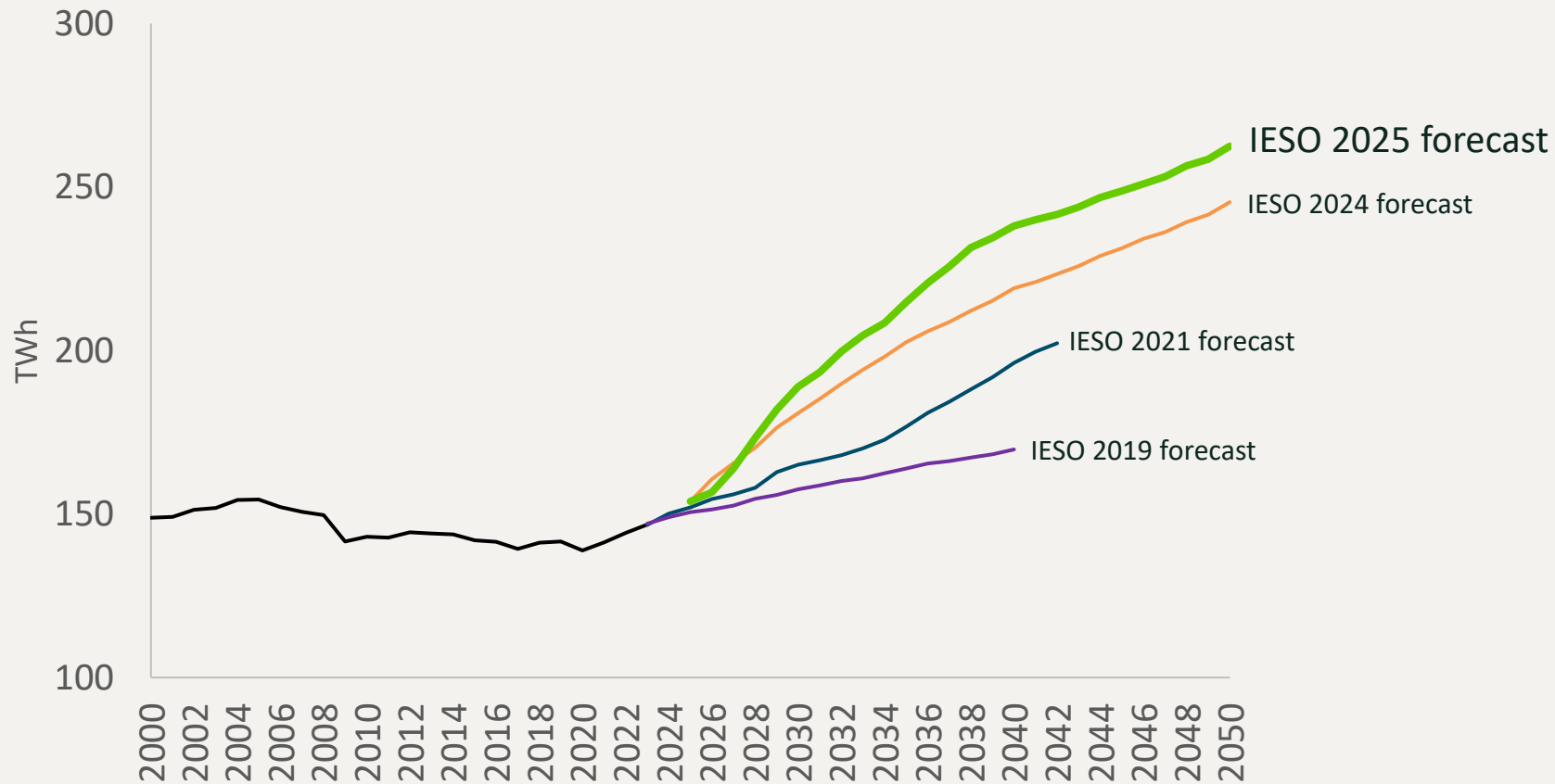
Source: IESO [2023 Year in Review](#)

2022 Ontario emissions by sector

- Ontario already has a low-carbon electricity grid
- The electricity sector now accounts for just 2% of the province's carbon emissions



In the Immediate Future, hydro development will help Ontario electrify



Hydropower is poised to support economic growth and the electrification of other sectors.

OPG is evaluating high potential opportunities today to ensure projects are shovel-ready to meet growing electricity demands.

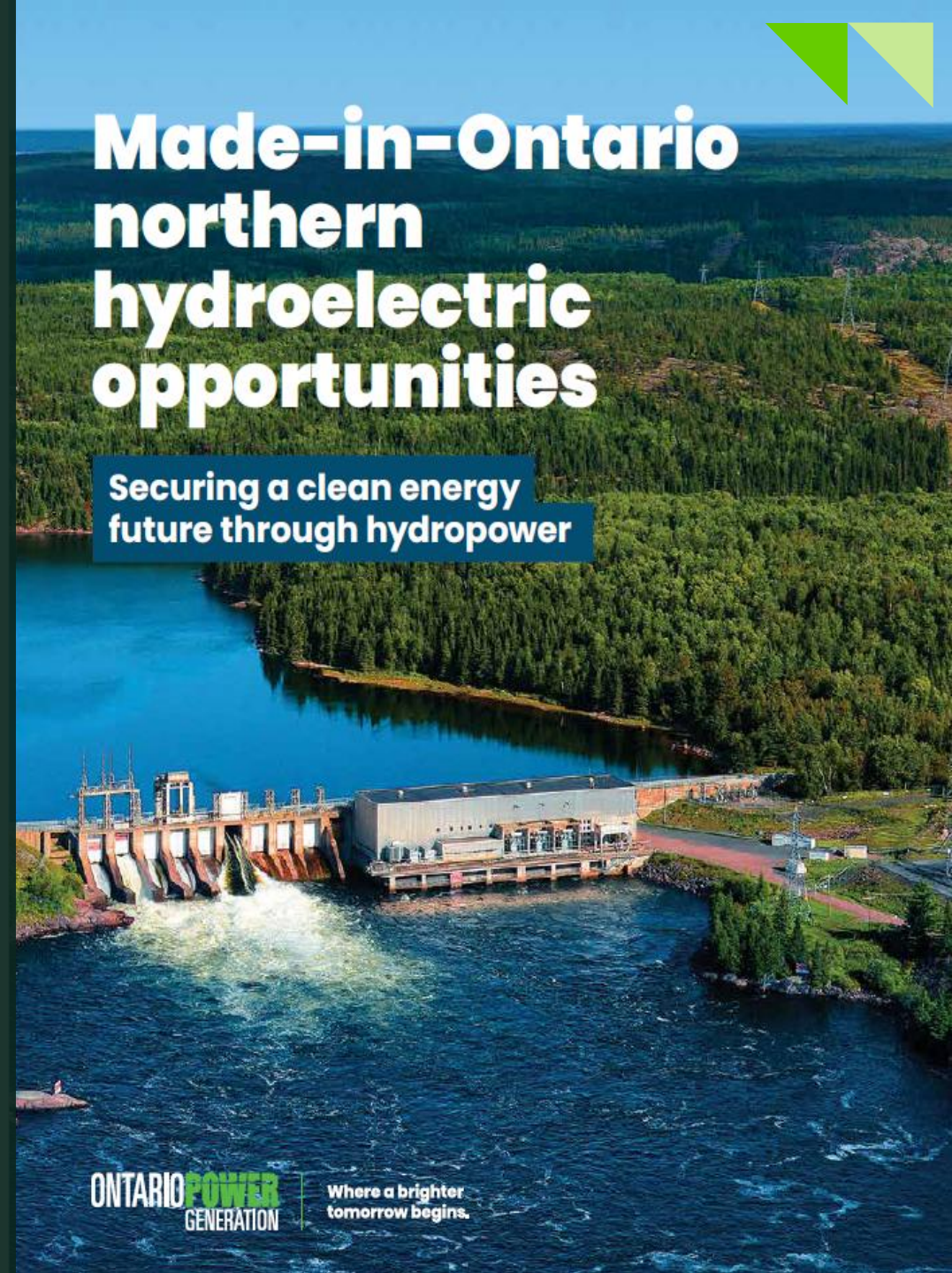
Northern Hydro Opportunities

2023 Report highlights approx.

4,000MW of potential new hydro in Northern Ontario.

Hydroelectric projects are unique, providing:

- Intergenerational opportunities for First Nation economic growth with plant life >100 years;
- Reliable, low-cost, zero-emission electricity;
- Economic development opportunities for Northern Ontario



Made-in-Ontario northern hydroelectric opportunities

Securing a clean energy
future through hydropower

ONTARIO POWER
GENERATION

Where a brighter
tomorrow begins.

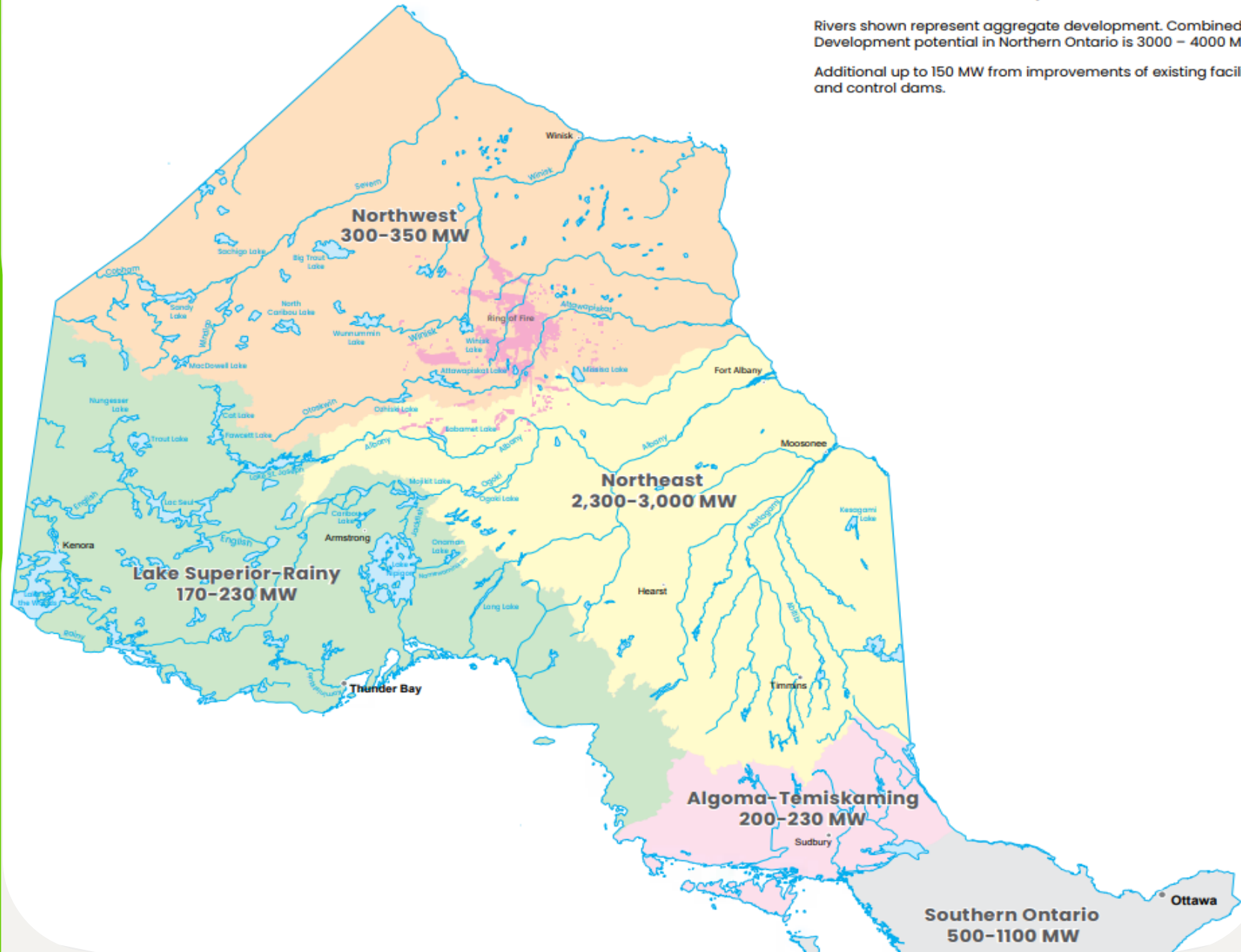
Where Are the Opportunities?

Legend

— Major Rivers

Rivers shown represent aggregate development. Combined Development potential in Northern Ontario is 3000 – 4000 MW.

Additional up to 150 MW from improvements of existing facilities and control dams.



Redevelopment in Northeastern Ontario

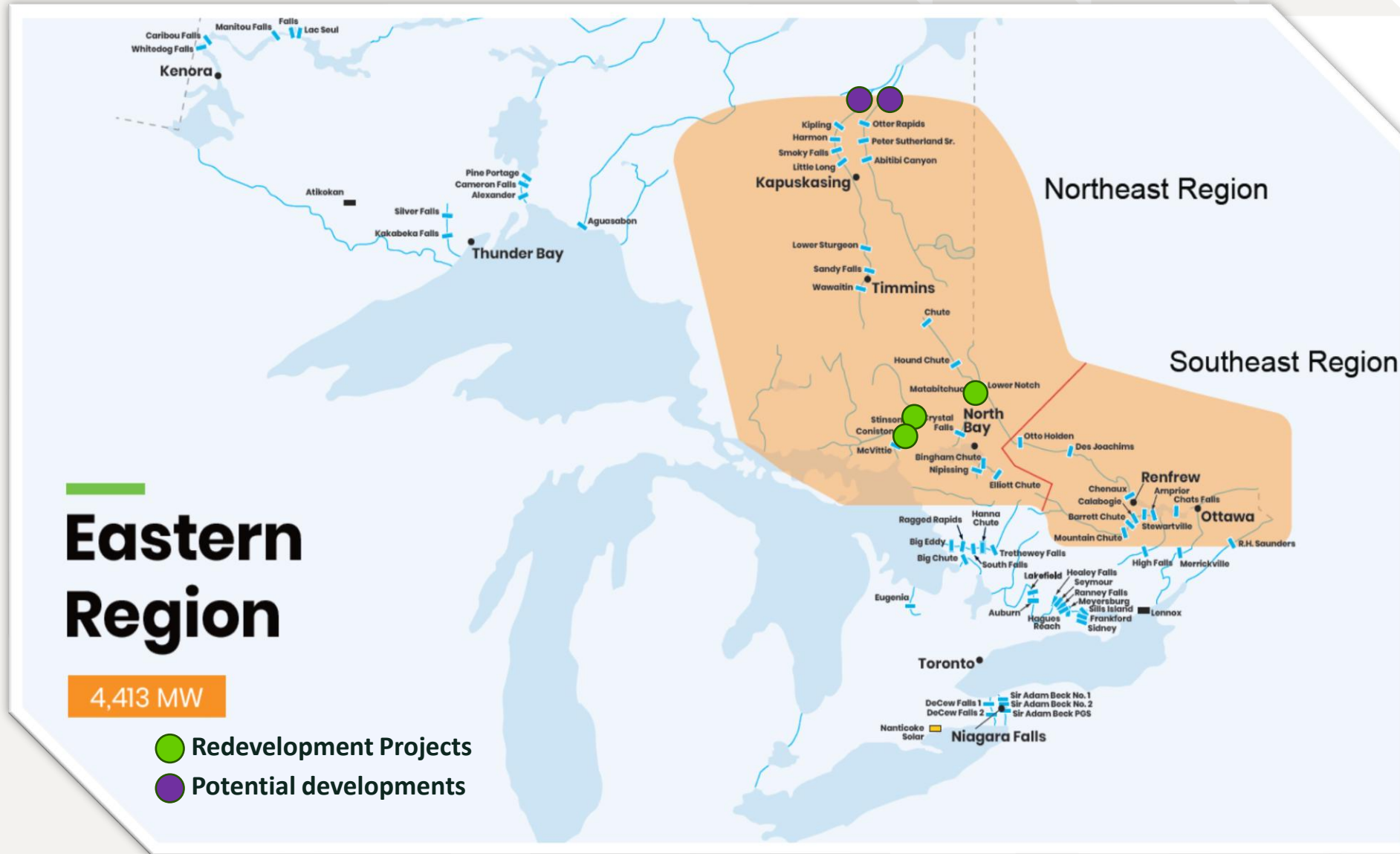
Hydroelectric redevelopment (life-extension) projects are an important piece of asset maintenance and will help add capacity to the grid.



Twilight at the Lower Mattagami
Project – Mattagami River

Northeastern Hydroelectric Operations

- **14 stations on 7 river systems** (Mattagami, Abitibi, Montreal, Matabitchuan, Sturgeon, South, Wanapitei)
- **6 work centers** (Timmins, Kapuskasing, Abitibi Canyon, Dymond, North Bay, Coniston)



Coniston GS

Wanapitei River,
Sudbury District

Built: 1905

Project Status:

Executed early 2025

MW increase:

2.7 MW → 6 MW

Work includes:

New headworks dam and two new headgates, two new penstocks, new powerhouse with DIVE turbine units, upgrades to other equipment.

Expected completion:

Summer 2027



Stinson GS

Wanapitei River,
Sudbury District

Built: 1925

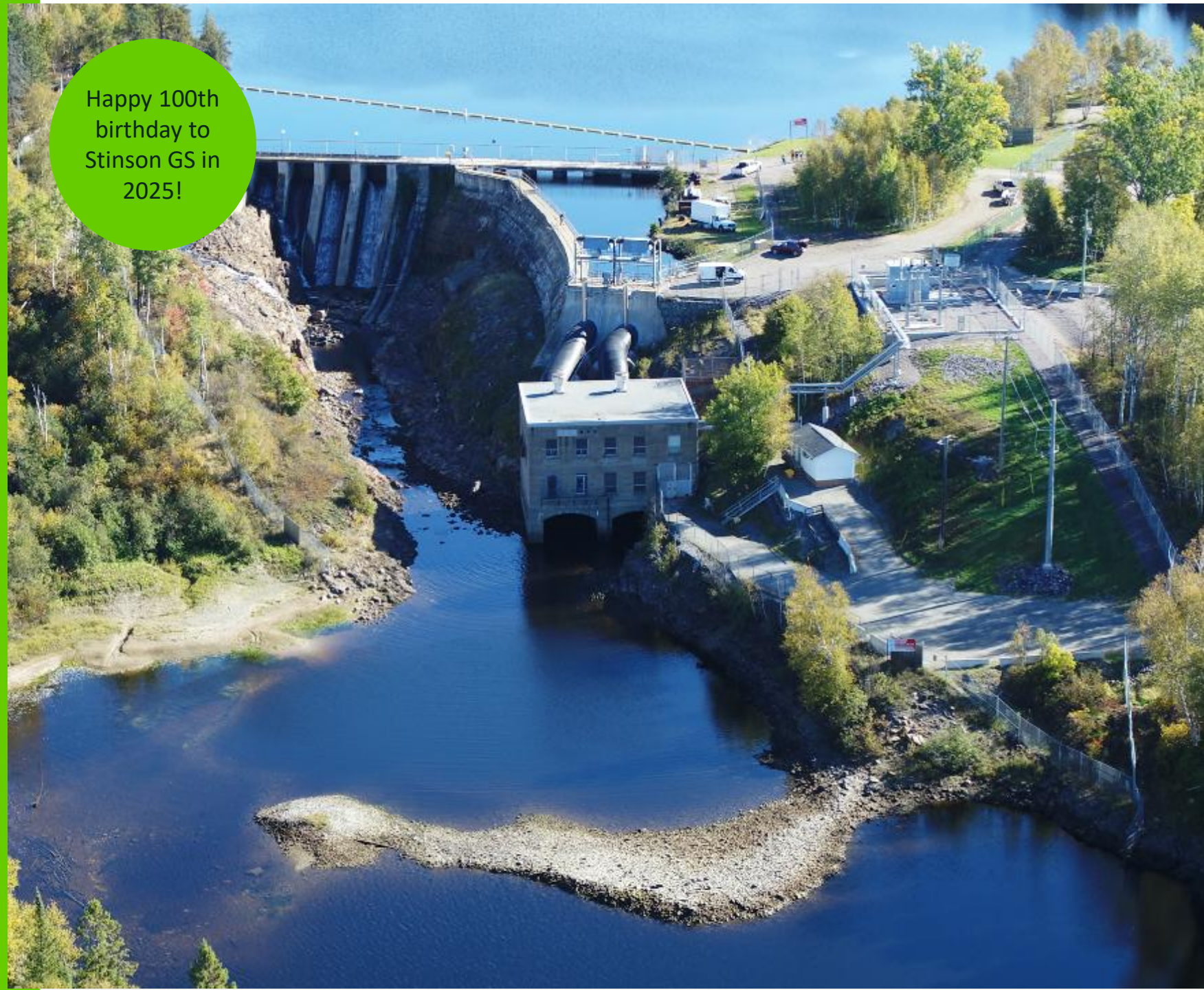
Project Status:
Executing Spring 2025

MW increase:
5.4 MW → 6 MW

Work includes:
New powerhouse, two new generating units, replacement of powerhouse mechanical and electrical equipment, refurbishment of existing isolation gates, new hoist structure and motor installed.

Expected completion:
Summer 2027

Happy 100th
birthday to
Stinson GS in
2025!



Matabitchuan GS

Matabitchuan River, Temiskaming District

Built: 1910

Project Status:
Executing Spring 2025

MW increase:
7.5 MW → 12 MW

Work includes:

New powerhouse, two new generating units, replacement of part of penstock, replacement of electrical and mechanical equipment.

Expected completion:
Winter 2027



Recent Announcements





April 16, 2024

Minister of Energy announces refurbishment of Niagara Falls generating stations

- Minister supports OPG's refurbishment of hydro stations in the Niagara Region.
- Expected to create more than 200 highly skilled jobs in the Niagara region over the next 15 years.



June 27, 2024

Province announces refurbishment projects in Eastern Ontario

- Province supports OPG's plan to refurbish 45 units at eight generating stations in Eastern Ontario.
- Highlights Ontario's commitment to expanding hydroelectric operations in the east.



January 24, 2025

Province announces supports OPG's plan to refurbish hydro stations across Northern Ontario

- Province supports for OPG's plan to refurbish and expand hydroelectric generating stations across Northern Ontario

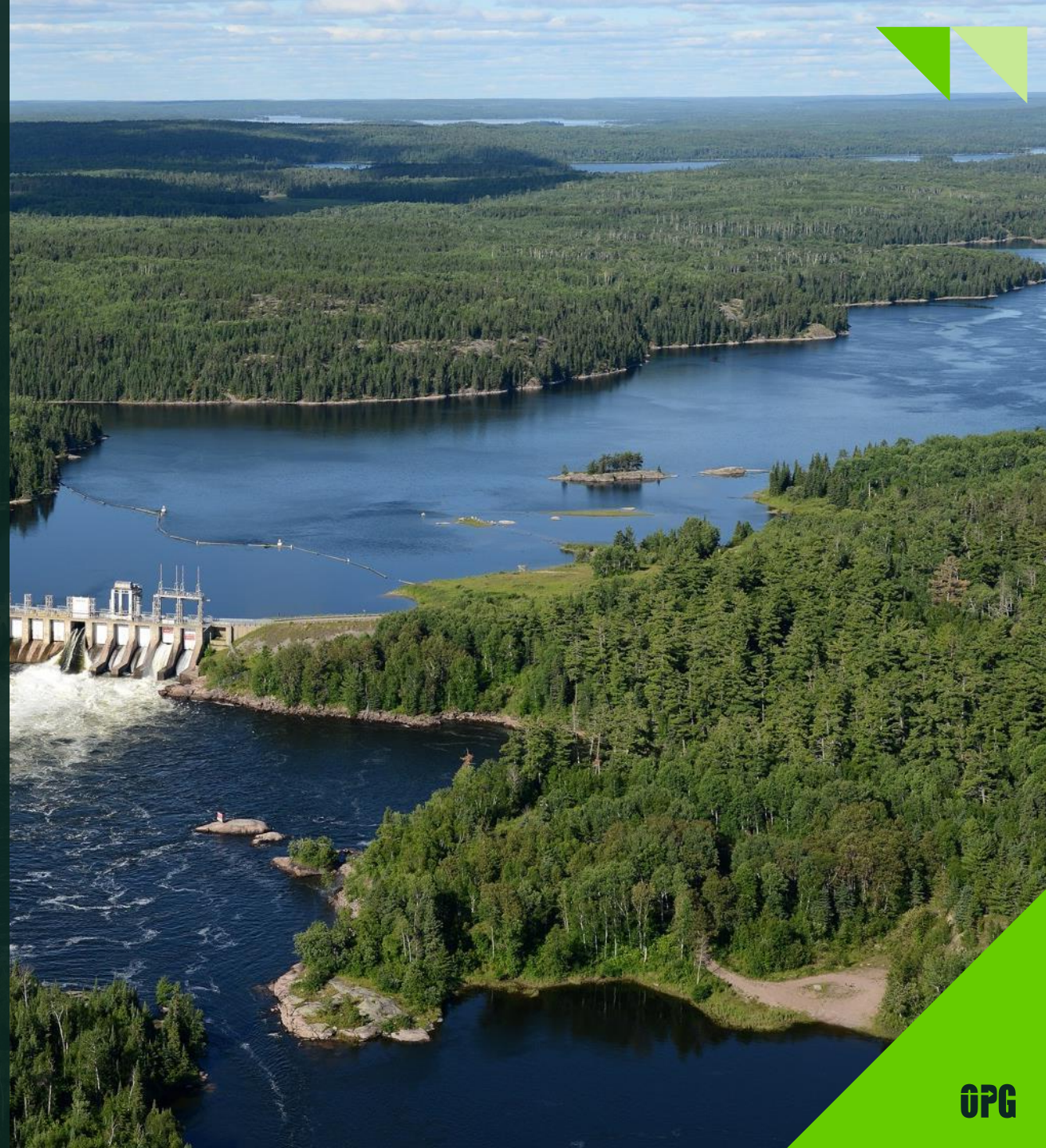
April 9, 2025

Province announces support for early development work around new hydroelectric stations in the Moose River Basin.



Hydroelectric refurbishments

- We are investing billions into our hydroelectric fleet in Ontario and the U.S.
- We are executing unit refurbishments, improvements, and station redevelopments
- This will ensure hydro assets continue to provide clean power to support electrification and fight climate change



Economic Benefits of Hydro



GDP/Revenue

Every \$1 on new greenfield hydro = **GDP Increase of \$0.95** (89% concentrated in Ontario)



Skills and Capacity Building

- Hydro projects provide **opportunities for apprenticeships and skilled trades development.**
- Project pipelines provide opportunities for longer-term skills and capacity building in Northern Ontario.
- Typical hydro projects employ Operator Engineers, Carpenters, Electricians, Teamsters, Painters, Millwrights, Ironworkers, etc.

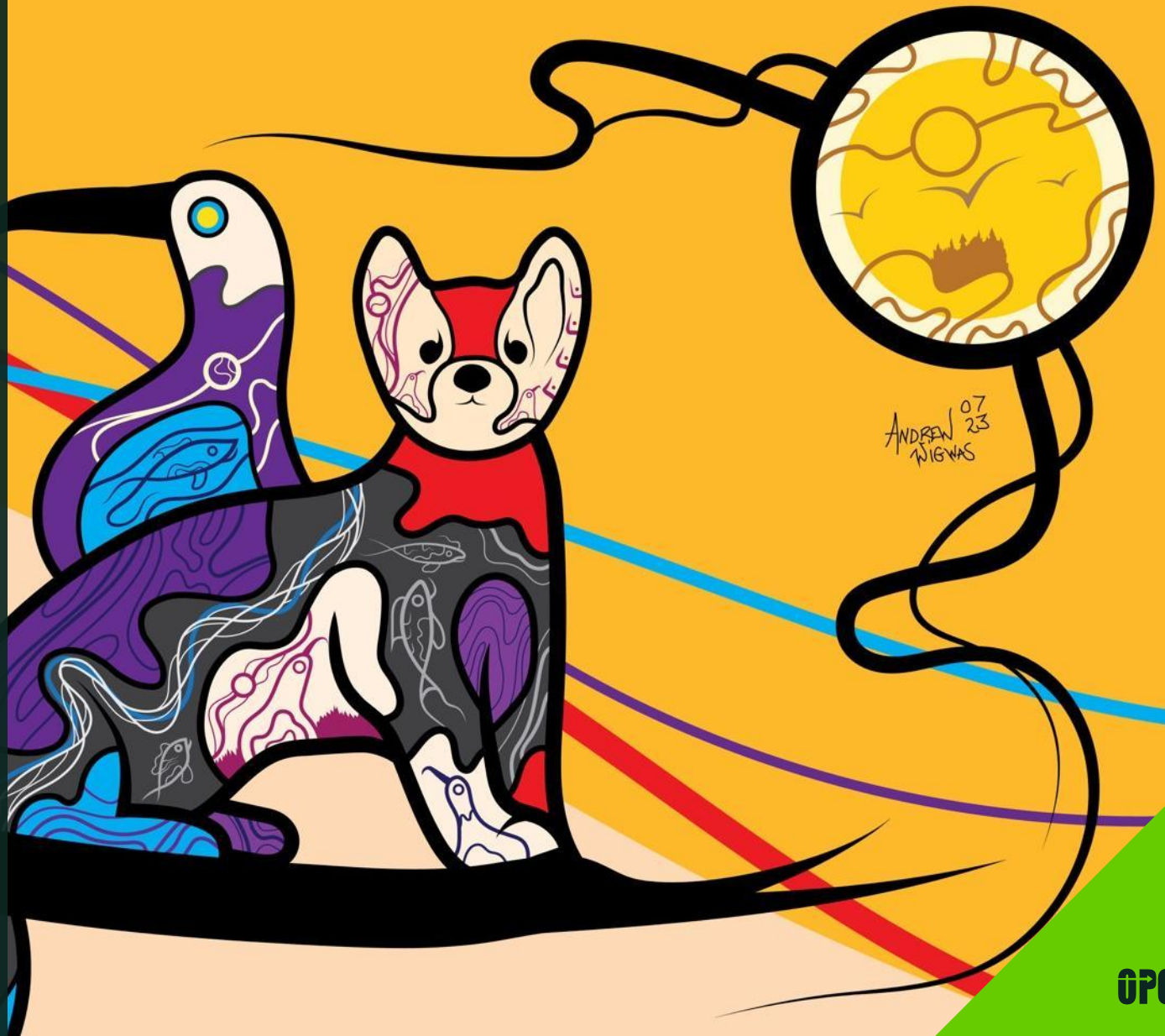




Indigenous Partnerships

Our RAP commitments

- Growing our economic impact on Indigenous communities, businesses by \$1 billion by 2031
- Increasing Indigenous representation at all levels across the company
- Strengthening environmental stewardship
- Improving awareness and understanding of Indigenous culture, history, and perspectives



Building Indigenous Partnerships

To date, OPG's equity partnership contributions to First Nations have **totaled \$167M.** Partners include:

- Lac Seul First Nation
- Moose Cree First Nation
- Taykwa Tagamou Nation
- Six Nations of the Grand River
- Mississauga of the Credit First Nation

The long-life nature of hydroelectric generation means that future equity partnerships on greenfield hydro will provide **sustainable revenues to partner First Nations over many years.**

- In 2023, 60% of Indigenous procurement was through our hydro business (\$84M of total \$140.8M)



Case Study

Lower Mattagami River Redevelopment Project

- \$2.6 B Redevelopment Project (2015)
 - 3 station expansions
 - 1 new station
- Equity partnership (25%) created with Moose Cree First Nation on new assets
- ~\$1B in contracts awarded to Ontario business over the course of the project, including ~\$350 M in the North
- ~1,800 people worked on the project, including over 250 First Nation & Métis workers





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life

Questions?

Electrifying life

OPG