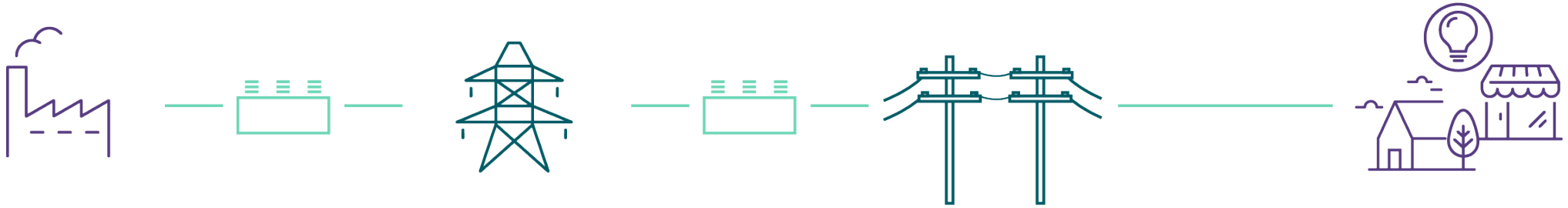
2023 COUNCIL FOR CLEAN AND RELIABLE ENERGY:
REGIONAL & INTER-REGIONAL PLANNING FOR ENERGY INFRASTRUCTURE

Megan Telford, EVP, Strategy, Energy Transition & Human Resources | Thursday, October 26, 2023

Ontario's Electricity System

Unlike other jurisdictions, Ontario's electricity system is not vertically integrated.



Generation | **Transmission** | **Distribution** | **Customers**

Nuclear Energy	**51.0%**
Water Power	**25.1%**
Alternative Power Sources:	**12.8%**
Solar	2.5%
Wind	9.9%
Bioenergy[2]	0.4%
Natural Gas[3]	**10.2%**
Non-Contracted[4]	**0.9%**

Hydro One operates 92% of transmission in Ontario.

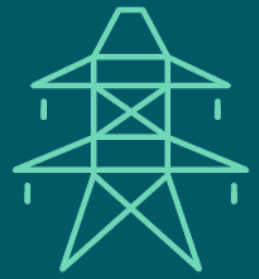
Hydro One distributes electricity to 26% of Ontario's population.

Hydro One

Our transmission network is the backbone of Ontario's economy and enables growth in communities.

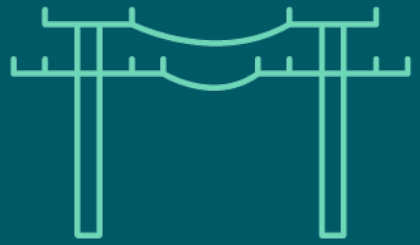
640,000 km²
service territory

1.5 million
residential and business customers across Ontario



30,000 circuit km
of high-voltage transmission lines

9,300
skilled employees who live and work across Ontario



125,000 circuit km
of local distribution lines

306
transmission stations

1.6 million
distribution poles

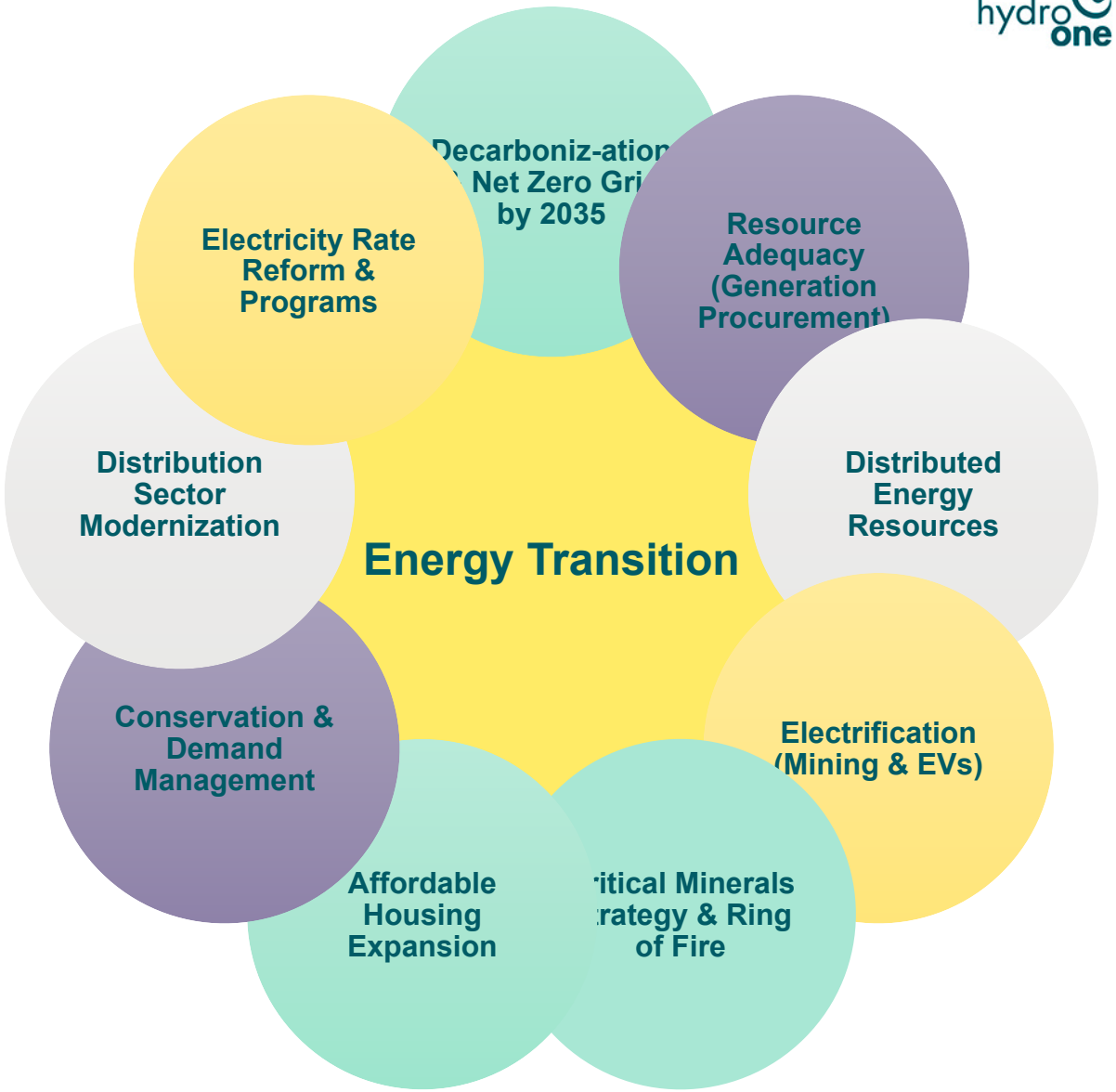
100 years
of experience

Hydro One First Nations Equity Partnership Model

- Our First Nations Equity Partnership Model applies to every new network transmission project over $100 million in Ontario
- All applicable First Nations are offered the opportunity to invest in 50% of the equity of a line built by Hydro One
- That equity attracts a guaranteed rate of return set by the OEB of 8-10% historically
- We actively support First Nations accessing capital for their investments at reasonable costs
- Includes significant employment and contracting commitments to all Indigenous communities (underpinned by corporate ESG Targets and Training)

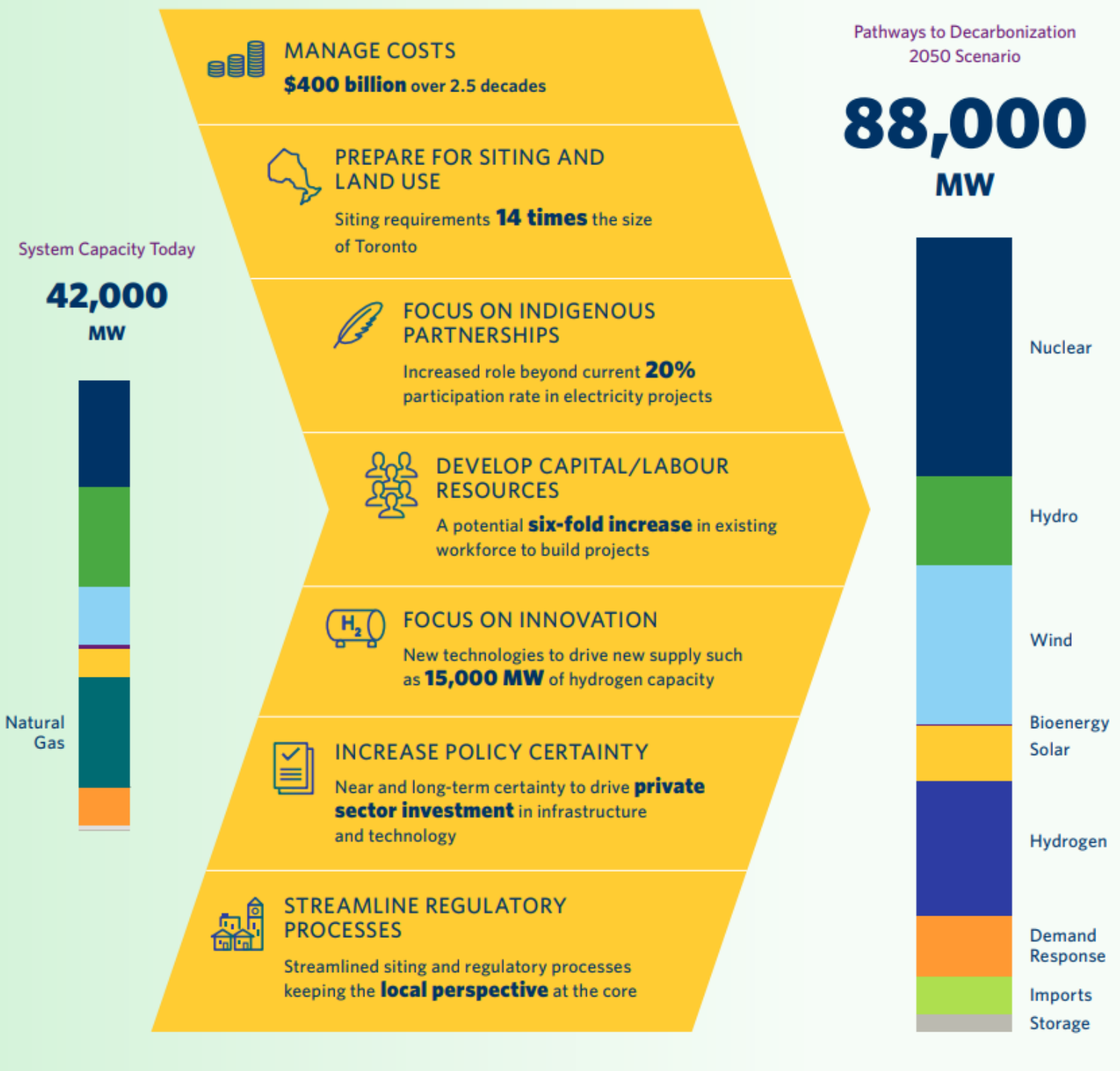
Enabling the Transition

- Ontario's **clean, reliable and affordable electricity** system is a competitive advantage that is **critical to economic growth**.
- It is **essential** to attracting jobs and investments to the province.
- Net zero targets, decarbonization along with industrial growth in the mining, greenhouse, major electrification projects as well as automotive manufacturing are driving significant growth in electricity demand.
- This requires Ontario to invest immediately in a suite of resources – transmission, generation, distribution and conservation & demand response to support customers and enable load growth.
- **Reliable, timely, coordinated investments in transmission is fundamental to enabling the energy transition and economic growth in Ontario.**



Decarbonizing Ontario's Economy

- According to the Independent Electricity System Operator's (IESO) Pathways to Decarbonization (P2D) report high-growth scenario, in less than 30 years Ontario could need more than double its electricity generating capacity, from 42,000 megawatts (MW) today to 88,000 MW in 2050.
- Up to 20,000 MW in capacity maybe needed just to replace generation that will come to the end of its life or be phased out over the next three decades.



Transmission Expansion

New electricity transmission infrastructure is the most cost-effective way to meet this growing electricity demand and continue to drive economic growth in the region.