POWERING A GREEN NOVA SCOTIA, TOGETHER The Integrated Resource Plan: 2023 Updates

We're on a path to a cleaner energy future for our province as we work to phase out coal and reach 80% renewable energy by 2030. These are ambitious goals set by the federal and provincial governments to address climate change, and we're committed to achieving them together with our partners, customers, stakeholders and Mi'kmag communities.

WHAT IS THE INTEGRATED RESOURCE PLAN?

The Integrated Resource Plan (IRP) is a long term planning tool that looks at how we can dramatically reduce carbon emissions over time, achieving our environmental targets while continuing to reliably meet the energy needs of our customers in a way that best manages costs. The process includes gathering input from over 100 key stakeholders and is a continuously evolving or "evergreen" approach that adapts to consider new information or policies.

2023 EVERGREEN IRP KEY FINDINGS

On August 8, 2023, we released our latest update to the IRP Action Plan and Roadmap. Key findings based on current modeling projections to 2030 are below, with full details at **irp.nspower.ca**.



Wind/solar: Another 1500MW of wind energy needs to be added to the system. Adding 200MW more solar energy is also a consistent finding.



Battery storage can help us store renewable energy and provide back-up power when the sun isn't shining or the wind isn't blowing. Many scenarios call for adding at least **100MW of battery storage** starting as soon as 2025.



Fuel conversion: At our Lingan Generating Station, our existing coal units **can already generate** power using Heavy Fuel Oil (HFO), and at Point Tupper Generating Station, we would **convert the facility** to operate on natural gas. These facilities would operate infrequently, during periods of high demand. Since these units wouldn't be used very often, their annual carbon emissions will be low.



The Atlantic Loop is a proposed 1000 KM two-way transmission line that would expand Atlantic Canada's connection to Quebec and the broader North American Energy Market.

A reliability tie: This project consists of a new transmission line from NB to NS to ensure access to a reliable flow of energy from our neighbours. This will enable us to continue providing reliable power to customers, with or without the proposed Atlantic Loop.

New fast-acting generation: The addition of new natural gas/hydrogen generation is observed in all scenarios, most add at least 150MW. This will support our rapid growth in renewable energy, while ensuring we have quick access to reliable power when we need it most. The potential future use of hydrogen is also an important consideration for these units.



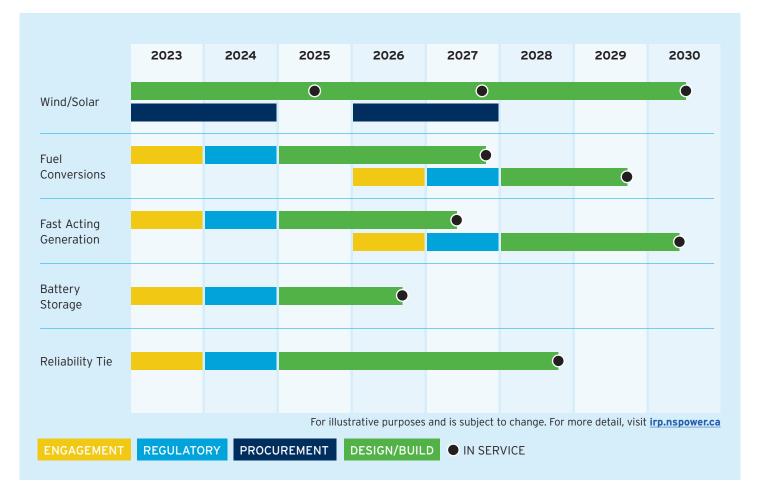






THE PATH TO 2030

While the evergreen IRP provides a range of scenarios over the next 25 years, the Action Plan outlines our path forward to meet the 2030 environmental targets. Major components of our path to 2030 are shown in the high level plan below.



WHAT DOES THIS MEAN FOR THE COSTS OF THE CLEAN ENERGY TRANSITION (THE PATH TO 2030)?

There's no question there are significant costs involved in achieving government's clean energy targets, which reinforces the need for additional funding to offset these costs for our customers. Ensuring we meet our shared climate goals by 2030 is key and we continue to work with both the federal and provincial governments to collaboratively pave the way for a greener future in a way that best manages costs for customers.



To read the 2023 IRP Roadmap and Action Plan, **visit** <u>irp.nspower.ca</u>

