

# Safe Clean Reliable Affordable

Ontario ratepayers are top priority for Bruce Power

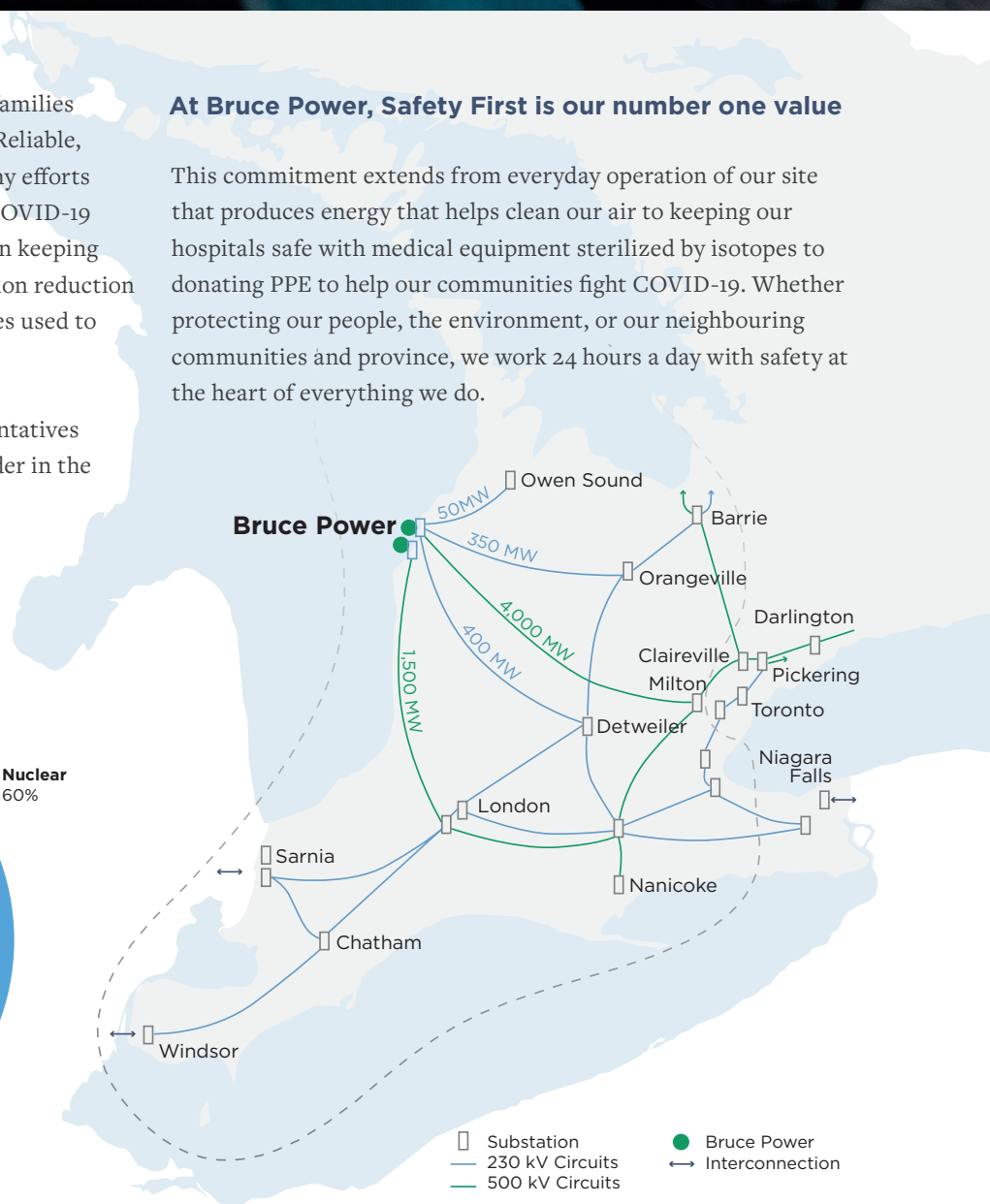
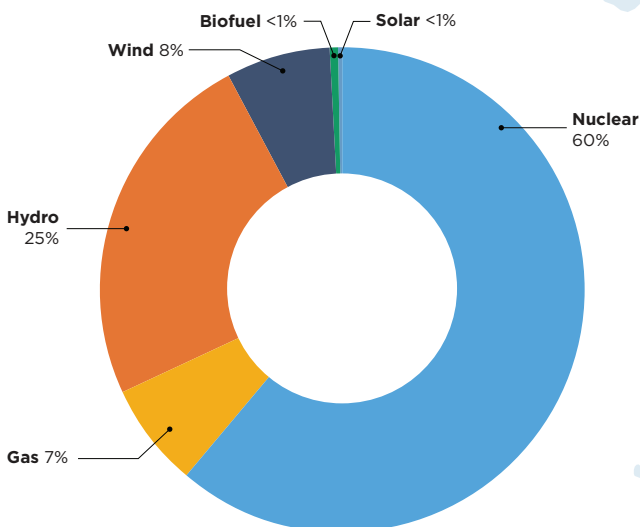
Bruce Power is proud to be able to provide Ontario families and businesses with 30 per cent of their electricity. Reliable, emissions-free power is an essential ingredient to any efforts to kick start economic recovery in the wake of the COVID-19 pandemic. Bruce Power is proud of the role it plays in keeping Ontario's air clean and helping to meet global emission reduction targets, and in producing life-saving medical isotopes used to support domestic and global health care.

We look forward to continuing to work with representatives from across Ontario's political spectrum to be a leader in the economic recovery of our province.

## At Bruce Power, Safety First is our number one value

This commitment extends from everyday operation of our site that produces energy that helps clean our air to keeping our hospitals safe with medical equipment sterilized by isotopes to donating PPE to help our communities fight COVID-19. Whether protecting our people, the environment, or our neighbouring communities and province, we work 24 hours a day with safety at the heart of everything we do.

Ontario Electricity Production in 2020



# Life Extension

## The Economic Opportunity

The nuclear industry supports 76,000 direct and indirect jobs across Canada. Bruce Power ongoing operations support 22,000 direct and indirect jobs annually while also producing \$4 billion in annual economic benefit to Ontario through direct and indirect spending.

Our Life-Extension Program is Canada's largest private sector infrastructure project. Ninety per cent of Bruce Power's spend is in Ontario and 98 per cent in Canada on this project making it truly a Canadian led infrastructure project. Nearly 500 supply chain companies across Ontario and Canada are supported through this initiative.



Delivery of this infrastructure project remains on track, a key priority of Bruce Power and the industry as a whole.

## Powering Ontario Forward

Bruce Power is implementing its Powering Ontario Forward plan to contribute to a 'Made in Ontario' economic recovery, investing \$3 billion through the company's Life-Extension Program, isotope development, and asset optimization strategy. By leveraging the scale of our infrastructure project – the largest private-funded project of its kind in Canada – we can create and sustain highly-skilled jobs, while keeping costs of electricity low for consumers.

Bruce Power has donated two million units of personal protective equipment (PPE) to assist communities across Ontario through the pandemic, one of the largest private-sector donations in Canada. Our supply chain partners, who form our Retooling and Recovery Council, have stepped up to assist with producing new ventilator designs, medical gowns, testing and more. Bruce Power committed to powering Ontario through COVID-19, deploying pop-up hospital resources and supporting multiple vaccination sites across Ontario. We partnered with the Grey-Bruce Health Unit to deploy our locally-created Hockey Hub vaccination model at home, then in Lambton County, and Peel and Waterloo regions among others. We stand ready to do more to assist the province in its economic recovery efforts and support high-skilled, good paying jobs in our communities.

# The Facts

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Number of jobs expected to be created and sustained annually

**22,000**

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Amount injected into GDP

**\$4 billion**

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The estimated Life-Extension impact on GDP to be between

**\$4-7 billion** for Ontario and between **\$5-\$7.8 billion** for Canada

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**76,000 jobs** direct and indirect jobs across Canada.

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**\$10 billion** per year of economic activity related to Life-Extension

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# A Clean Air Future for Ontario

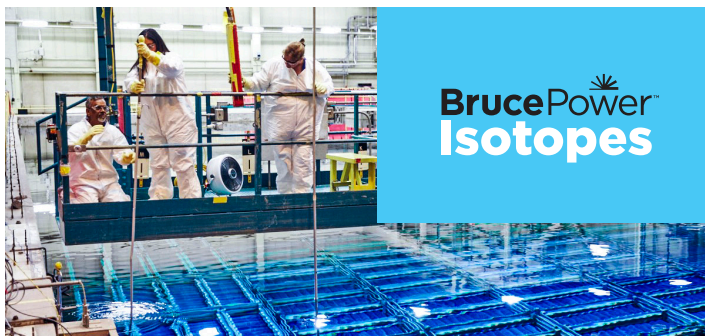
Nuclear innovation is critical to meeting our climate emissions targets. As a non-emitting source of electricity, nuclear power was essential in enabling Ontario's phasing out of coal-powered generation, and can continue to be a driving force in greening our economy. Ontario emissions are many times less than California and Germany thanks to this. As the C.D. Howe Institute recently highlighted, "economy-wide decarbonization will not happen in the laboratory, and governments should help test promising, new technologies by investing in demonstration-scale projects — for example, development of small modular nuclear reactors, hydrogen production, grid-scale battery storage and carbon sequestration." These are all areas of focus for Canada's nuclear industry moving forward.

The Green Ribbon Panel, representing a diverse range of stakeholders including Bruce Power, has issued a 10-recommendation report on how nuclear power can help Canada reach the target of net zero emissions by 2050. The Panel found that while nuclear and hydro

are low cost, other forms of generation in Ontario cost 3.4 times more, and that pursuing a smartly integrated solution including extensive use of nuclear generation could be up to 28 per cent less costly than Ontario's system today.

As Ontario demand due to zero-emission vehicles (ZEV) and electrification is expected to increase, we support exploration of investment and innovation opportunities for additional generation from existing assets, including optimizing those assets in terms of output, performance, capabilities and/or applications and long-term asset life management.

**The federal government has recently acknowledged that there is no credible path for Canada to reach its target of net zero emissions by 2050 without nuclear power. Bruce Power is pleased to be able to make significant contributions to achieving this goal.**

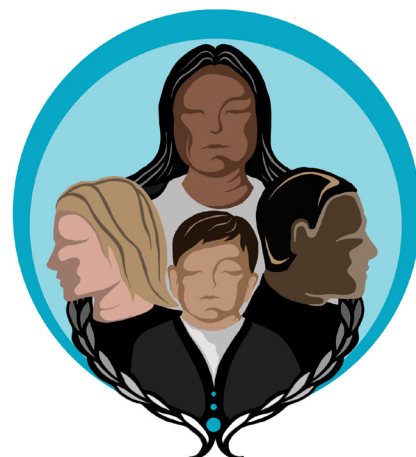


## MEDICAL ISOTOPES

The importance of many medical isotopes, such as Cobalt-60 which is produced at four of Bruce Power's reactors, has been underscored during the COVID-19 pandemic, in which the nuclear industry supplied the isotopes critical to sterilizing medical equipment and keeping hospitals safe and clean.

Canada is a leader in the production and global supply of isotopes that play a major role in diagnosing and treating many forms of cancer. The need and demand for medical isotopes will continue to increase.

Bruce Power's vision to use the power of nuclear energy to aid in the fight against cancer advanced today with the formation of the Ontario Isotope Innovation Hub earlier this year, which included the unveiling of Kinectrics Center for Medical Isotopes and Nuclear Chemistry. Together, these announcements strengthen Ontario's position as an international leader in research, innovation and production of life-saving medical isotopes.



## Gamzook'aamin aakoziwin FIGHTING CANCER TOGETHER

This Saugeen Ojibway Nation (SON) – Bruce Power partnership allows us to jointly market new isotope production (Lutetium-177) in support of the global fight against cancer and to create new economic opportunities within the SON Territory.

The agreement leverages Bruce Power's isotope project to produce Lutetium-177 with production starting in 2022, following regulatory and other approvals. The active collaboration with First Nations communities in a project of this nature is historic and is a tool of reconciliation that engages with First Nation communities in securing critical infrastructure key to Ontario and Canada's economic and strategic strength in this area.

# The Future **New Nuclear, Hydrogen and more**

Bruce Power is implementing 'NZ-2050,' the company's strategy to contribute to a net zero Canada, while growing the economy and supporting innovation. NZ-2050 builds off the strong foundation laid by Canada's largest clean energy infrastructure project at Bruce Power, which contributed the majority of the clean, reliable, low-cost electricity Ontario needed to phase out coal-powered generation in 2014 — one of the largest emissions-reduction initiatives in North American history.

**Bruce Power recently committed to the goal of achieving Net Zero emissions in its operations by 2027.**

## The NZ-2050 strategy consists of five pillars:

- Optimize and leverage existing investments in Canada's largest private-sector infrastructure project to drive further decarbonization;
- Foster innovation in new energy technologies including new nuclear and fusion energy;
- Utilize nuclear power generation to produce clean fuels and electrify industrial processes and transportation with an historic opportunity to contribute to a national hydrogen and clean fuels strategy;
- Create an ecosystem of "green collar" jobs including the nuclear, manufacturing, and energy development sectors with a focus on diversity and more representation from women, visible minorities and Indigenous peoples; and
- Inspire innovation by supporting strong social responsibility and sustainability, and providing contributions to global health such as life-saving medical isotopes as the world battles COVID-19.



**Bruce Power Net Zero (BPNZ) Inc.** was formed in fall 2021 and owns and operates a 9 Megawatt renewable energy project located adjacent to Bruce Power. Its purpose is to advance projects that deliver a clean energy mix for the province and Canada by:

- Investing in Net Zero infrastructure that generates offset credits.
- Capitalizing on the potential of nuclear power to enable innovation in the pursuit of decarbonization.
- Leveraging government support to unlock investment opportunities that further contribute to a Net Zero future.
- Engaging potential proponents through memberships in the Hydrogen Business Council and Energy Storage Canada.

BPNZ recently issued expressions of interest to partner on projects in four key areas: Storage (pumped, battery), Hydrogen, Zero Emission Vehicle Infrastructure, and Hydro/Solar/Wind

## BRUCE POWER CENTRE FOR NEXT GENERATION NUCLEAR AND NUCLEAR INNOVATION INSTITUTE

## Part of the Solution

Bruce Power has been recognized as a key partner critical to achieving Ontario and Canada's emissions reductions targets through:

- [Federal SMR Action Plan](#)
- [Hydrogen Strategy For Canada](#)
- [Emission Reduction Plan 2030](#)
- [Interprovincial Strategic Plan for the Deployment of Small Modular Reactors \(SMRs\)](#)
- [Ontario's Low-Carbon Hydrogen Strategy \(BPNZ is conducting a feasibility study with local partners\)](#)
- [2022 Ontario Budget](#)

Innovations in nuclear energy will help support new technologies like cancer-fighting isotopes, energy storage and hydrogen development by using infrastructure investments that will drive the economy now and power the world of the future.

Bruce Power is continuing its contributions to a net zero Canada by releasing a new report that lays out its vision for the next 50 years of operation. The report written with the Nuclear Innovation Institute (NII), finds the Bruce Power site provides critical building blocks for a clean energy Canada, including:

- A baseload of clean, affordable generation needed to meet rising electricity demand;
- Opportunities to optimize the site further, increasing output while introducing new flexibility;
- Support of 22,000+ direct and indirect jobs and generating between \$9-11 billion in economic impact;
- A site for ongoing innovations in robotics, artificial intelligence, and advanced manufacturing;
- An ideal location for testing and deployment of new clean energy technologies, including hydrogen, batteries, solar, and new nuclear builds;
- Expanding production of life-saving medical isotopes.

### For more information, contact us:

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