Bruce Power Sustainability Report

2023

Bruce Power™

Contents

A message from the President and Chief Executive Officer

Business leaders have a responsibility to look at their operations today and see what immediate actions can be taken to address climate change and to integrate Environmental, Social and Governance (ESG) principles into business strategies and operations. In our 2023 annual Sustainability Report we outline how Bruce Power is addressing these challenges with innovative solutions and supporting Ontario's plan for decarbonization and Canada's Net Zero commitments by 2050.

As a large-scale clean energy producer, Bruce Power has a responsibility to both the environment and to society to continue to implement sustainable business practices. Our mission supports both strengthening communities and protecting the community to secure tomorrow. As part of this, we have an integrated sustainability approach that reaches across the organization and has a positive impact on the local community and beyond by supporting provincial and federal carbon reduction goals, while contributing to economic growth, innovation, and environmental protection.

As we look to further decarbonize the economy and hit provincial and national Net Zero goals, Bruce Power's carbon-free nuclear power continues to play an integral role in this transformation to a low-carbon future.

In 2021, Bruce Power committed to Net Zero Greenhouse Gas Emissions (GHG) from our site operations by 2027. We were the first nuclear operator in North America with such an ambitious commitment. Two years into our Net Zero 2027 Strategy, we are progressing on meeting our established emissions reduction targets by identifying and implementing energy and emission-reduction projects in our operations. Our partnership with local agriculture-based carbon offset and sequestration projects continue to make progress entering into year two and on track to be available to support our future targets, while providing economic benefits to the agriculture industry.

We are leading the way in nuclear medicine through the production of life-saving medical isotopes that are used to help fight cancer and to keep hospitals safe and clean.

We continue to foster a strong connection with Indigenous communities through meaningful partnerships, employment for skilled workers, and training opportunities. We maintain a strong commitment to diversity, equity and inclusion in our workplace and communities and have initiatives in place to ensure this commitment results in meaningful action.

We care deeply about people and the environment while generating carbon-free electricity for about 30 per cent of Ontarians. We are proud to help shape a sustainable future and excited to share more about Bruce Power's innovative initiatives to support this vision.

Mike Rencheck,
President and CEO, Bruce Power

Indigenous Land Acknowledgment

Bruce Power acknowledges and honours the fact its site lies within the traditional treaty territory of the Saugeen Ojibway Nation and the traditional harvesting territory of the Métis Nation of Ontario (Region 7) and the Historic Saugeen Métis.

We continue to build relationships with our hosts as we work towards true reconciliation.

Welcome on behalf of the Environment and Sustainability Oversight Committee

In 2020, Bruce Power formed the Environment and Sustainability Oversight Committee. This top leadership-level governance was the next natural step in taking our ongoing Environmental, Social, and Governance (ESG) efforts to the next level. As a committee, we are dedicated to the integration of ESG monitoring and goals into our long-term business strategy, and that due consideration is being given to social and environmental trends that could impact the company's operations.

What is ESG?

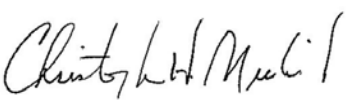
Environmental, Social, and Governance (ESG) criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance deals with a company's leadership, audits, and internal controls.

At Bruce Power, excellence means collectively living our common values, demonstrated through our behaviours, using our tools to achieve the results we want for the business – Safe. Reliable. Securing Tomorrow.

An important part of securing tomorrow is being responsible stewards of the environment and corporate citizens while maintaining excellent governance by integrating strong ESG principles into our business strategies and operations. Our aim is to continuously improve our performance in each of these areas to exceed industry, stakeholder and interested parties' standards. We are committed to maintaining transparency and accountability in our monitoring and reporting, and to implementing actions and initiatives that drive real, tangible benefits.

As leaders we commit to driving our ESG goals with forward-thinking innovation, making decisions for the greater good, and in doing so, strive to make the world a better place.

Sincerely,



Chris Mudrick, Chair
Environment and Sustainability Oversight Committee

Bruce Power Environment and Sustainability Oversight Committee

Chris Mudrick
EVP, Chief Nuclear Officer, as Chair

Kevin Kelly
EVP, Finance and Business Development and CFO

Karen Smith
VP and Chief Human Resources Officer

Eric Chassard
EVP, Projects and Engineering

Brian Hilbers
SVP and Chief Administrative Officer

Michael Rinker
VP, Regulatory, Environment and Nuclear Operations

Pat Dalzell
Head of Corporate Affairs

Danielle La Croix
Senior Director, Environment, Sustainability and Net Zero

Executive Summary

The 2023 edition of Bruce Power's Sustainability Report focuses on quantitative disclosure for 28 of our ESG KPIs. Our performance in each of these areas is monitored year over year. We ensure that our quantitative disclosure in the public ESG space is meaningful, assured and has rigorous methodology allowing for others to learn from our journey and inspire personal action.

Bruce Power's approach to sustainability is integrated across the organization and builds on well-established and existing efforts which have significant positive impacts on our local community, and on a wider scale as we support provincial and federal carbon reduction goals, while contributing to economic growth, innovation and environmental protection. Our Sustainability Program has always and continues to focus on four key areas: Environment, People and Safety, Products and Services, and Community.

Environment

Bruce Power's Environmental Protection Program is built upon an integrated monitoring approach that strives to understand environmental impact, verify environmental protection, and continuously improve our performance to achieve protection by driving strategic research and innovation through collaborations with industry and community.

Together, environmental monitoring and assessment verifies that emissions and effluents resulting from site operations have a minimal impact on the surroundings. Environmental safety and responsibility are woven into all aspects of the company's nuclear safety culture, and Bruce Power commits to meet or exceed all relevant legal and voluntary environmental requirements.

In addition to our net GHG emissions reduction targets, all other Environmental KPI targets were met in 2022, with the exception of those associated with tree planting.

People and Safety

Safety is our number 1 value. It means that safety is at the forefront of all we do at Bruce Power — it's a foundation we have built over the last two decades, and it's why we're

always applying best practices, innovating, and learning from leading-edge research.

In 2022, we continued to focus on our Industrial Safety Accident Rate (ISAR) for utility and contract employees seeing a slight rise from 0.03 to 0.07 for the utility rate while seeing no change in the contractor rate which remained 0.0 in 2022. Bruce Power's commitment to continually improve our safety culture is unwavering and is strategically learning from potentially serious events in an effort to build capacity into our systems.

In the ever-evolving nuclear industry, Diversity, Equity, and Inclusion (DE&I) are at the forefront of our organizational goals. We know that to maintain our commitment to performance excellence, to continue to innovate we need to leverage the diversity of talent, provide adequate resources, and cultivate a culture of belonging; where everyone feels invited to contribute and participate.

In 2022, 32 per cent of hires into non-traditional roles (trades, maintenance, and operations) were filled by women, meeting our target. The company will continue to focus on increasing the number of women into roles where they are traditionally underrepresented along with members of visible minorities, persons with disabilities, Indigenous peoples and members of the 2SLGBTQ+ community.

Products and Services

At Bruce Power, we take great pride in the relationships and collaborative partnerships we have with our suppliers, who are an integral part of our business. We work very closely to make sure they understand and are aligned with our core values. Responsible sourcing including local sourcing is a key focus and incorporated into our agreements with new suppliers.

At the Request for Proposal (RFP) evaluation phase, Supply Chain takes into consideration a variety of ESG factors, which are weighted according to the nature of the procurement at issue. Bruce Power expects its suppliers to support and respect human rights, Indigenous Relations, Diversity, Equity & Inclusion and provide equal opportunity within the workplace.

In 2022, 90.6 per cent of our services and materials were spent in Canada and 62 per cent of our services and materials were sourced from suppliers in the Indigenous Relations Supplier Network.

Community

At Bruce Power, we are proud to deliver clean, reliable, low-cost nuclear power to families and businesses across Ontario and cancer-fighting medical isotopes across the globe. Many of our employees have lived in Bruce, Grey and Huron counties for decades, and we are proud to have been an active member of the business community since 2001. We have the privilege to contribute to the community and encourage our partners to do the same.

Bruce Power invests more than $2 million annually to support initiatives that focus on health and wellness, youth development, minimizing environmental impacts, community engagement, and Indigenous youth development, cultural, recreational and educational programming.

In 2022, the company provided $2,060,000 in total value of sponsorships and donations.

About Bruce Power

Bruce Power is an electricity company based in Bruce County, Ontario. We are powered by our people. Our 4,200 employees are the foundation of our accomplishments and are proud of the role they play in safely delivering clean, reliable nuclear power to families and businesses across the province and life-saving medical isotopes around the world. Bruce Power has worked hard to build strong roots in Ontario and is committed to protecting the environment and supporting the communities in which we live. Formed in 2001, Bruce Power is a Canadian-owned partnership of TC Energy, OMERS, the Power Workers' Union and The Society of United Professionals.

Our approach to sustainability

Bruce Power's approach to sustainability is integrated across the organization and has a significant positive impact on our local community and on a wider scale. We support provincial and federal carbon-reduction goals, while contributing to economic growth, innovation and environmental protection.

Our Sustainability Program focuses on four key areas — Environment, People and Safety, Products and Services, and Community. We have a responsibility to both the environment and society to implement sustainable business practices and to foster a culture of equity. We recognize these practices can be achieved while ensuring the continued delivery of energy to the province at an affordable rate.

Bruce Power provides incentives to achieve key corporate ESG Key Performance Indicators through its annual management incentive program.

Sustainability Ratings and Assurance

In August 2022, Bruce Power received its third annual Environmental, Social and Governance (ESG) Risk Rating by the third-party ESG rating agency Morningstar Sustainalytics, with strong and improving ESG performance year over year while maintaining a Low-Risk ESG Rating (12.9). The latest ESG Risk Rating ranked the company a spot in the top three within its sub-industry on a global scale and in the top three per cent in the Utilities industry covered by Morningstar Sustainalytics. In 2023, Bruce Power was included on Sustainalytics' list of ESG Industry Top-Rated and ESG Regional Top-Rated companies[1].

In line with our commitment to ensuring that our disclosure in the public ESG space is meaningful, assured and has rigorous methodology, we have obtained third-party limited assurance for key performance indicators (KPIs) related to greenhouse gas emissions as well as two of our People and Safety KPIs related to the representation of women and visible minorities in our workforce in this year's report.

Green Financing

Green Financing Framework

Bruce Power's Green Financing Framework[2] (the Framework), published in June 2021, facilitates the alignment of business and financing activities to support and drive a more sustainable future. The Framework guides issuances of Green Bonds for eligible investments associated with the company's Life-Extension Program and Project 2030. These investments focus on Bruce Power's commitments of extending the facility's life beyond 2060, increasing efficiency, and continuing to play a critical role in providing clean, low-carbon electricity for the Province of Ontario.

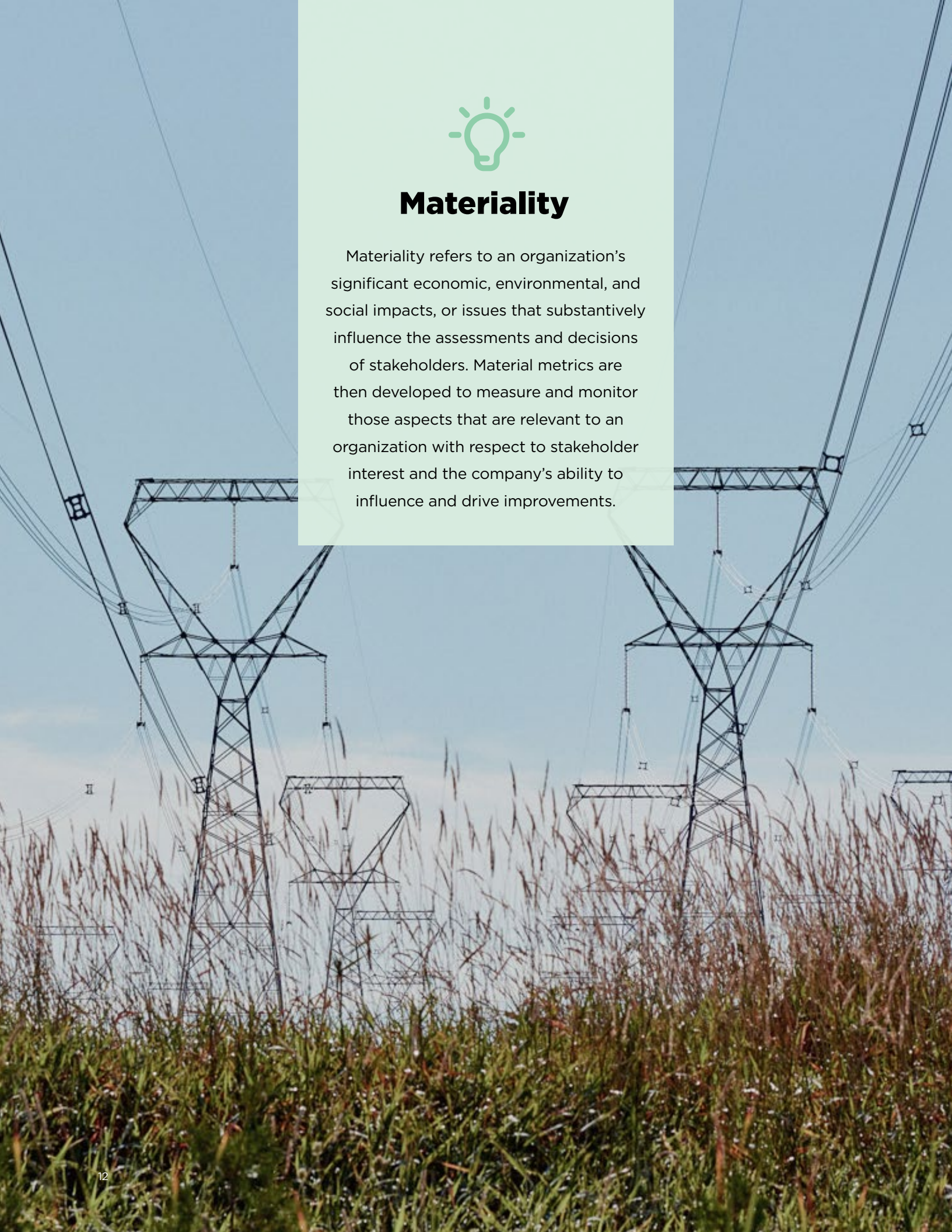
Bruce Power's Framework has received a Second-Party Opinion from CICERO Shades of Green (CICERO Green), an internationally recognized leading provider of independent review and second-party opinions on Green Bonds and Green Financing Frameworks. The Framework has received CICERO Green's overall 'Medium Green' shading on a scale of Light, Medium and Dark. It also received the highest possible governance score of 'Excellent.' CICERO Green also concluded that the management of proceeds under the Framework is in accordance with the Green Bond Principles issued by the International Capital Markets Association (ICMA) and the Green Loan Principles issued by the International Capital Markets Association (ICMA) and the Green Loan Principles issued by the Loan Market Association (LMA) and Loan Syndications and Trading Association (LSTA).

Green Bonds

Bruce Power has issued $1.1 billion in Green Bonds to date. The inaugural issuance of $500 million in Green Bonds in November 2021 was a global first for nuclear power, and a significant milestone in the recognition of the critical role nuclear technology plays in fighting climate change and enabling a Net Zero future. Released in June 2022, the Green Bond Impact Report[3], provides information on the allocation and impact of the Green Bond proceeds related to the November 2021 issuance. The next impact report will be released in mid-2023.

Sustainability Linked Loan

To further demonstrate our commitments to the environment and a diverse workforce, Bruce Power entered a Sustainability Linked Loan (SLL) in 2021. Bruce Power's SLL is structured with sustainability performance measures linked to reducing GHG emissions and increasing in gender and visible minority diversity. The performance results must be verified by a third-party agency at a set frequency as per the terms of the SLL.



Materiality

Materiality refers to an organization's significant economic, environmental, and social impacts, or issues that substantively influence the assessments and decisions of stakeholders. Material metrics are then developed to measure and monitor those aspects that are relevant to an organization with respect to stakeholder interest and the company's ability to influence and drive improvements.

How we Assess Materiality

These are identified key indicators and monitoring metrics that have linkages to significant economic, environmental, and social impacts. The materiality of a metric will be heightened if it is a concern to stakeholders or partners, as well as areas that the organization has a significant opportunity to influence to drive improvements. At Bruce Power we have identified 12 main areas of materiality: corporate governance being the overarching structure for our ESG program, and the remaining aspects of materiality falling within our four pillars of sustainability; Environment, People and Safety, Product and Services and Community.

Bruce Power's 12 main areas of materiality

1. Corporate Governance
2. Health and Safety
3. Community Relations
4. Product Governance
5. Business Ethics
6. Human Capital
7. Water Use
8. GHG emissions
9. Non-GHG Emissions
10. Effluents
11. Waste
12. Land Use and Biodiversity

Our materiality assessment is based on a wide variety of sources including but not limited to; our enterprise risk management system, input from public opinion research, routine community polling results, public inquiry information, surveys during stakeholder engagement events, routine engagement with local Indigenous communities, routine discussions with regulatory bodies, intervention submissions during our Power Reactor Operating Licene renewal process, as well as third party risk rating analyses.

Materiality Approach and Focus

We have developed more than 40 internal Key Performance Indicators (KPIs) and Targets to support our Sustainability Program, and to integrate sustainability into business decisions – our performance against these targets is linked to our incentive program. Our ESG KPIs were developed based on guidance from the United Nations Sustainable Development Goals (UN SDGs), Sustainability Accounting Standards Board (SASB), Task Force on Climate Financial Disclosures (TCFD) and the Global Reporting Initiative (GRI). It is important to note that at this time Bruce Power is not claiming full conformance to any of the standards above, rather has used each standard to guide disclosure based on materiality. In 2021, updates to our greenhouse gas emissions quantification approach and inventory were done in alignment with The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard (GHG Protocol).

The 2023 edition of Bruce Power's Sustainability Report focuses on quantitative disclosure for 28 of our ESG KPIs. Our performance in each of these areas is monitored year over year. We ensure that our quantitative disclosure in the public ESG space is meaningful, assured and has rigorous methodology allowing for others to learn from our journey and inspire personal action.

As we build upon our Sustainability Program, we continue to monitor best practices with regards to ESG reporting, disclosure, and performance on both an industry and a global scale, evolving our approach as necessary.

The United Nations' 2030 Agenda For Sustainable Development

As part of our sustainability strategy, we routinely review the United Nations Sustainable Development Goals (UN SDGs) to understand which are relevant to our business and how we can connect them to our ongoing sustainability efforts, as well as to identify further areas to grow our strategy and be a global contributor. Bruce Power identified and committed to 11 UN SDGs that we believe will have the greatest impact and guide our ongoing efforts, and we built our KPIs around these UN SDGs.

We wanted to acknowledge that the goal of Life Below Water does not explicitly state Freshwater, however, the Great Lakes are one of the largest aquatic ecosystems and vitally important to North America and we do take significant efforts to ensure the protection of Lake Huron, rivers running into the lake as well as the broader Great Lakes ecosystem. These efforts are identified within our environmental area of focus.

Environment

Bruce Power's Environmental Protection Program is built upon an integrated monitoring approach that strives to understand environmental impact, verify environmental protection, and continuously improve our performance to achieve protection by driving strategic research and innovation through collaborations with industry and community.

KPI	Standard guidance is taken from	2019 Baseline	2021 Target	2021 Actual	2022 Target	2022 Actual
Scope 1 GHG Emissions (tCO_2e)	IF-EU110a.1, GRI-305-1, TCFD	6,946	See Net GHG Emissions	7,813	See Net GHG Emissions	8,087
Scope 2 GHG Emissions (tCO_2e)	IF-EU110a.2, GRI-305-2, TCFDa	15,381	See Net GHG Emissions	14,201	See Net GHG Emissions	15,808
Carbon Offsets Retired (tCO_2e)	See Methodology	N/A	N/A	804	N/A	4,360
Net GHG Emissions (tCO_2e) - Scope 1, 2, RECs, Carbon Offsets[1]		22,327	↓ 5% from 2019 baseline 21,211	21,210	↓ 12.5% from 2019 baseline 19,536	19,535
Scope 3 GHG Emissions ($MtCO_2e$)	See Methodology	0.88	N/A	N/A	N/A	0.83

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
Carbon Removal via Tree Planting (tCO_2e)	See Methodology	17,148[2]	≥ 10,000	28,983	20,000	17,733
Emissions Avoidance via Operation (tCO_2e) Based on TWh	See Methodology	20,726,400	19,200,000	20,310,220	17,173,875	17,997,309
Total Value of Environment & Sustainability Fund Allocated	See Methodology	$375,200	N/A	$320,000	$400,000	$400,000
Total Value Assigned to Carbon Offset Accelerator Fund in 2022	See Methodology	N/A	N/A	N/A	$ 1M	$ 1M
Volume of Conventional Waste Generated (MT)	GRI-306-2	1,827.5	Disclosure	2,051.4[3]	Disclosure	2,604.1
Conventional Waste Diversion Rate (%)	GRI-306-2	69.8%	70%	69%[4]	71%	71.2%
Net Water Consumption from Lake Huron (million cubic meters)	GRI-303-3	2.2	≤ 2.3	2.1	≤ 2.3	2.0
Total Water Drawn from Lake Huron (million cubic meters)	GRI-303-3	9,409	Disclosure	8,637	Disclosure	8,940
Total Water Discharged to Lake Huron (million cubic meters)	GRI-303-3	9,406	Disclosure	8,634	Disclosure	8,937
Annual Dose to Public	CSA N288.1	1.8μSv/yr	<10 μSv/yr	1.6μSv/yr	<10 μSv/yr	2.4μSv/yr

1 GHG emissions data and allocation of offsets towards targets has been updated due to a correction in our emissions inventory. Additional details are in the Greenhouse Gas Emissions report section.

2 2020 performance for this indicator has been updated based on corrected data.

3 2021 performance for this indicator has been updated based on corrected data.

4 2021 performance for this indicator has been updated based on corrected data.

** Bruce Power does not claim to conform to any of the standards identified; rather guidance has been taken from those standards identified. ESG Metrics have been chosen that reflect items material to our business. As noted, we have a larger subset of internal metrics and as our program mature, we will continue to add to the metrics that we release into the public domain. Bruce Power remains committed to advocating for more standardized disclosure and remains committed to staying up to date on policy and frameworks that are attempting to bring more clarity to information that is crucial for disclosure from a financial, environmental, and social standpoint.*

Together, environmental monitoring and assessment verifies that emissions and effluents resulting from site operations have a minimal impact on the surroundings. Environmental safety and responsibility are woven into all aspects of the company's nuclear safety culture, and Bruce Power commits to meet or exceed all relevant legal and voluntary environmental requirements.

We are committed to environmental protection in all areas of our business and to minimizing our environmental footprint. We have adopted applicable best industry standards, such as the CSA N288 series on environmental management for nuclear facilities and comply with the requirements of ISO 14001 as a framework for achieving continual improvement and sustainable performance excellence.

For the thirty-first consecutive year, Bruce Power's contribution to the annual dose of a member of public is less than the lower threshold for significance (less than 10 microsieverts per year) and is considered de minimus.

2.4µSv, the amount of dose a person living next to Bruce Power recieved in 2022, is equivalent to eating 24 bananas.

Bruce Power's Environment & Sustainability Policy reflects our commitment to protect the environment and establishes guiding principles and environmental expectations for employees and those working on behalf of Bruce Power. The policy includes a description of sustainability principles, addresses work in strategic research and innovation, and demonstrates our commitment of meeting or exceeding requirements.

Our efforts and initiatives outlined in the Net Zero Strategy and Greenhouse Gas report sections help to support the following UN Sustainable Development Goals: #7

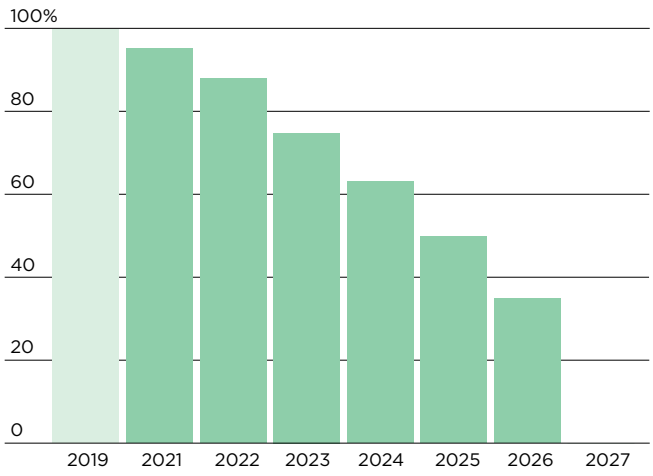
Net Zero Strategy

Bruce Power remains committed to seeking ways to lower the environmental impact of our operations, while aligning support with provincial, national, and global emission-reduction goals.

In March of 2021, Bruce Power made a commitment to Net Zero Greenhouse Gas Emissions (GHG) from our site operations by 2027. We were the first nuclear operator in North America with such an ambitious commitment. While the company reliably produces large volumes of emissions-free electricity, this next step ensures it minimizes and offsets emissions from routine undertakings, such as vehicles, machinery, buildings and equipment.

Our Net Zero 2027 target accounts for all direct and indirect GHG emissions that occur from sources that are owned or controlled by the company (Scope 1 and Scope 2 emissions). To drive continued progress towards this Net Zero target, increasing emission-reduction targets have been set against a 2019 baseline for the years leading up to 2027, from 2021 through 2027.

Interim GHG Reduction Targets relative to a 2019 baseline



% Reduction	2021	2022	2023	2024	2025	2026	2027
Cumulative	5%	12.5%	25%	37.7%	50%	62.5%	100%

In June of 2022 we released our Net Zero 2027 Strategy, outlining how emissions reduction targets will be achieved and our structured approach to supporting both Provincial and Federal Climate Change goals. This strategy includes reducing or avoiding GHG emitting sources through the optimization of building use on site, implementing energy and emission-reduction projects and initiatives in our operations, finding alternatives to high-emission energy sources and, where further reductions are not feasible, pursuing emission offsets.

Our Net Zero Strategy[4]

View our overview video — Our Road to Net Zero[5] on YouTube

Bruce Power
Innovation at work

BRUCE POWER'S

Environment & Sustainability Policy

You can count on Bruce Power to:

- Ingrain a healthy nuclear safety culture which promotes nuclear safety, radiological safety, industrial safety and environmental safety and sustainability;
- Commit to excellence by meeting or exceeding all relevant legal and voluntary requirements to which Bruce Power subscribes;
- Understand our environmental impact and verify environmental protection through monitoring the environment, collaborating with industry and the community, and driving related strategic research and innovation;
- Focus on continuous improvement by adopting applicable industry best practices and requirements of ISO 14001;
- Ensure our business decisions support the application and practice of sustainability principles by protecting, conserving, and restoring our resources through energy conservation, reducing water consumption, supporting waste diversion, and considering product life cycle in our Supply Chain;
- Hold ourselves accountable to prevent pollution through robust management of emissions, effluents and waste, as well as implementation of spill mitigation measures;
- Promote environmental stewardship and awareness at work, in the community, and across Ontario;
- Uphold the trust of the community through open and transparent communication with partners, Indigenous communities, and stakeholders on environmental interests;
- Play a leading role in keeping the air clean and fighting climate change; supporting emissions reduction strategies to achieve a Net Zero Canada by 2050; adopting ambitious net reduction strategies for Bruce Power to achieve Net Zero (GHG); and
- Support partners, communities and organizations to drive innovations and projects to offset and sequester carbon in a real and tangible way.

April 22, 2021

Date

Michael W. Rencheck
President and Chief Executive Officer

CS210134A R000 MAR2021

Greenhouse Gas Emissions

Bruce Power met emissions reduction targets in 2022 and continues to work on the implementation of on-site operational initiatives and partnering with local carbon sequestration and offset projects to support further reductions.

In 2022, our 12.5 per cent GHG emission reduction target was met, with net emissions totaling 19,535 tCO_2e. Reductions were achieved through the combination of operational emissions-reduction initiatives and the retirement and allocation of 4,360 tCO_2e in carbon offsets towards set targets.

By meeting our 2022 net GHG reduction target, the emissions reduced are equal to 855 passenger vehicles or 654 homes' energy use for one year.

Scope 1 and 2 GHG Emissions

In 2021, in partnership with our consultants, Bruce Power expanded our Scope 1 and Scope 2 GHG inventory to align with the principles and guidance provided in The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard (GHG Protocol) developed by The World Resources Institute (WRI) and World Business Council for Sustainable Development.

Using an Operational Control approach to define our GHG inventory boundaries, we report on Scope 1 and 2 emissions from operations and facilities that are owned by Bruce Power and/or where Bruce Power has controlling interest from an operational perspective.

Bruce Power's direct (Scope 1) GHG emissions include those that occur from sources that are owned or controlled by Bruce Power. These include:

- Stationary combustion: Combustion of fuels in owned or controlled stationary combustion sources, such as our emergency standby generator testing routines, and other standby generators
- Mobile combustion: Fuel combustion in on-road or off-road mobile combustion sources, such as fleet vehicles
- Process emissions: Emissions from physical or chemical processes
- Fugitive emissions: Intentional or unintentional fugitive releases of gases or vapours from minor equipment leaks, or planned purges and venting

The construction emissions generated on site from sources owned or controlled by Bruce Power during our life extension work are captured in our Scope 1 calculations and reflected in those numbers.

Bruce Power's indirect (Scope 2) GHG emissions include those that occur from the generation of electricity or energy (e.g., steam used for space heating) purchased and consumed by Bruce Power.

In 2022, it was identified that the back-up supply of electricity consumed by the Power Plants when a reactor unit is in outage had been erroneously omitted from Scope 2 calculations. This is the electricity that is purchased from the grid, via our System Service Transformers (SSTs) that have a grid connection and provide back-up power to the unit loads, including times when the unit is in outage, and is not supplying its own power. As the inclusion of this dataset would account for more than a 5 per cent change in Scope 2 emissions, this met the threshold to recalculate our baseline year emissions, as per our greenhouse gas inventory policy. This data has been corrected in this current report with updates applied to current and past GHG inventory data, including our baseline.

The correction also includes a re-allocation of retired offsets to support updated emissions reduction targets in 2021 and current emissions reduction targets in 2022.

Scope 3 GHG Emissions

Scope 3 emissions refer to GHG emissions that occur from sources owned or controlled by other entities in Bruce Power's value chain. These emissions are from activities from our supply chain that support Bruce Power operations, Life-Extension work, or a consequence of the activities of Bruce Power, but occur from sources not owned or controlled by Bruce Power.

In 2021, an initial screening exercise was completed to determine which Scope 3 emission categories were relevant to Bruce Power and to complete a baseline calculation to quantify emissions (based on 2019 data). In 2022 we built upon this work in collaboration with GHD and created our Scope 3 emissions inventory for 2022.

In 2022, purchased goods and services accounted for approximately 95% of Bruce Power's Scope 3 emissions. Other sources include fuel and energy-related activities that are not counted in Scope 1 or 2 emissions, waste generation, business travel, and employee commuting.

Although Scope 3 emissions are not included in Bruce Power's Net Zero 2027 targets, further efforts are being undertaken to improve data collection and refine the conservative assumptions used in the current Scope 3 estimation methodologies. In addition, we are looking to identify where Bruce Power can influence reductions in Scope 3 emission sources before setting targets.

Our plan to address our Scope 3 emissions include the following:

- Engaging with Bruce Power's top suppliers to attain GHG emissions data
- Engaging with top suppliers on committing to initiatives and targets related to GHG emissions and energy reduction
- Continue to invest in local decarbonization projects
- Identify further opportunities to reduce emissions from sources including waste generation and employee commuting

This addresses the upstream aspects of our Scope 3 emissions. We are also evaluating the downstream aspects of our product: non-carbon emitting, clean electricity. We have assessed the net positive impact: avoided emissions from the incremental clean electricity output that will be generated from investments in our plant through Project 2030 and Life Extension investments through Major Component Replacement.

Scope 3 Downstream Impact — GHG Emissions Avoidance

Ontario's electricity grid is deeply decarbonized, however, the capacity of electricity to replace that of the Bruce Power site could not be solely made up by existing renewable capacity or imports from neighbouring electricity grids without the use of more GHG intensive electricity generation. Therefore, for the Emissions Avoidance KPI in this report, the estimated carbon impact resulting from Bruce Power's annual generation, associated with zero direct emissions, is compared with the amount of direct GHG emissions that would result from the same power output being provided by natural gas electricity generation in the Ontario grid.

In 2022, as a result of non-carbon emitting clean electricity generation by Bruce Power, the potential emissions avoided was equivalent to approximately 18 million tCO_2e.

More detail on this calculation is found in the Methodology section. Please note that the calculation methodology has been updated for this report and applied to the data for this KPI for 2022. The methodology from our previous report is still applied to the data for this KPI for 2020 and 2021.

Energy and Emission-reduction Projects and Initiatives

On-site Initiatives

Emission-reduction projects currently underway to increase efficiencies in our on-site operations, buildings, and fleet include:

- Site building-use optimization and decommissioning of buildings no longer required to reduce space heating and energy demands
- Building heating; switching to more efficient heating sources
- Emergency generator testing frequency and duration optimization
- Adding buildings to Building Automation Systems (BAS) to allow temperature to be monitored and adjusted remotely based on occupancy timing and requirements
- Evaluation of additional metering opportunities in buildings to measure usage and identify reduction opportunities
- Fleet electric vehicle (EV) upgrades and fleet use optimization strategies, such as fleet size reduction and vehicle sharing, as well as implementation of anti-idling strategies
- EV infrastructure expansion for fleet and employee use
- Interior and exterior LED lighting upgrades – 167 of streetlight fixtures upgraded, over 9,500 fixtures upgraded in buildings and more in progress
- Regular inspection and maintenance of refrigeration equipment to reduce leaks of Halocarbons

As a part of monitoring our performance against our Net Zero 2027 targets, Bruce Power continues to track the results of implemented emissions reduction initiatives. From 2021 to 2022, decreased fuel consumption for stationary equipment resulted in a reduction in emissions of 400 tCO_2e. Increases in steam and station electricity consumption from outages resulted in an increase in emissions of 1,200 tCO_2e in 2022. To ensure that emission reduction targets for these years were met, regionally generated carbon offset credits from well-recognized voluntary carbon offset programs and projects were leveraged. We continue to identify and implement emission reduction initiatives in our operations, but where further reductions are not achievable in a given year to meet targets, offsets will be utilized, including those generated from more local projects that we have funded under the $1 million Carbon Accelerator fund.

In 2023, a reduction of 2,810 tCO_2e is expected as a result of implemented emergency generator testing optimization initiatives and additional buildings coming offline.

Carbon Offset Coalition and Carbon Offset Accelerator Fund

In November 2021, Bruce Power announced a $1 million Carbon Offset Accelerator Fund to support carbon sequestration and offset projects in the Clean Energy Frontier region of Bruce, Grey and Huron counties and throughout Ontario. Project proponents applied for funding and were selected through the Carbon Offset Coalition, introduced in partnership with the Nuclear Innovation Institute (NII).

In 2022, Bruce Power's Carbon Offset Accelerator Fund was allocated to support the New Acre Project with Alternative Land Use Services (ALUS). This project was identified through the Carbon Offset Coalition in partnership with the NII.

Bruce Power's investment in New Acre Project supports farmers and ranchers in Grey-Bruce in playing a productive role in conservation and sustainability by establishing and managing nature-based solutions on their lands. The initiative will establish 600 acres of nature-based projects on marginal agricultural land across Bruce and Grey Counties that sequester carbon and enhance and steward local ecosystems. The ecosystem goods and services produced by this project, like carbon sequestration and habitat creation, will help build community resilience and support biodiversity, and the associated carbon credits will contribute to Bruce Power's Net Zero 2027 goals when applied as offsets.

Throughout 2022, Bruce Power and the NII have supported 20 participants to deliver 200 acres of nature-based projects in Grey and Bruce Counties, meeting the initiative's year-one target of 200 acres of nature-based projects in the ground. These projects in Grey and Bruce Counties provide the following benefits:

- Build local environmental resilience to the impacts of climate change
- Improve soil health
- Support biodiversity including plants, beneficial insects, birds, bats and beneficial soil micro-organisms
- Improve water quality and protecting the health of Lake Huron by reducing erosion and runoff.
- Foster pride in local environmental stewardship amongst the agricultural community

Incremental Clean Electricity — Project 2030

With Ontario electricity demand set to increase in the coming years, new supply will be required to ensure the electricity system remains reliable. To reach its goal of achieving Net Zero emissions by 2050, Ontario and Canada need to increase electricity generation from clean energy sources.

In 2022, the Independent Electricity System Operator (IESO) released the Pathways to Decarbonization (P2D)[6] study to develop a strategy to achieve zero electricity sector emissions that considers reliability, cost and impacts on broader electrification efforts. The report maintains that a range of clean energy solutions will be required to meet climate targets and that nuclear energy has and will continue to play a crucial role in a clean energy transition.

The IESO forecasts increased demand will be met by an increase in electricity generation/output from the existing natural gas facilities to balance the rising demand with the reduced nuclear supply with facilities nearing end of life. As a result of the increase in natural gas generation, the GHG emission intensity of the grid is expected to increase substantially.

Bruce Power's investment in 'new' or incremental nuclear output in a series of power recovery projects under Project 2030 and the Life Extension Program will bring incremental output to 7,000 MW per year by 2030, avoiding emissions resulting from natural gas generation.

The avoided emissions from the initial phase of the project, which will grow site output to 6,750 MWs, are estimated to remove nearly 450,000 tCO_2e from the grid annually. This avoided emissions potential grows with incremental output to > 1,000,000 tCO_2e at the final stages of the power recovery program.

Given that these investments will generate additional clean energy and are forecasted to result in avoided emissions from natural gas generation, it is our opinion that the case is strong for this incremental clean energy output, as well as other clean energy projects, to be considered eligible to register for GHG offsets or clean energy credits.

Nuclear Carbon Offset Protocol Development

In November 2022, Bruce Power joined the Canadian delegation at the 27th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP27), to promote the role of nuclear energy in global decarbonization efforts. During the conference, Bruce Power announced the development of a Nuclear Carbon Offset Protocol for new or incremental non-emitting nuclear power, in partnership with GHD.

The offsets are based off increasing the nameplate capacity of Bruce Power's existing operations by 700 MW of incremental output via Project 2030 to offset the increased GHG emission intensity across the grid caused by natural gas fired generation for electricity production. Project 2030 is planned to be registered on the Canadian Standards Association (CSA), GHG CleanProjects® Registry, which is based on ISO 14064 standards for greenhouse gas inventory and reporting.

Creating Clean Energy Credits

At the end of March 2023, Ontario launched the Clean Energy Credit (CEC) registry, an online tool that allows for the recognition, display of certification, and tracking (including transfers and retirements) of CECs generated in Ontario. The CEC registry will enable Ontario businesses to purchase any combination of clean energy credits from nuclear, wind, solar, hydro, and bioenergy generation in Ontario to meet their sustainability goals.

Bruce Power expects to generate 1.2-1.5 TWh of CECs from incremental clean electricity output in 2023. The new and incremental output is primarily from Project 2030 and the Life-Extension Program.

More detail on Bruce Power's role in CEC production is outlined in the Products and Services report section.

Tree Planting and Carbon Sequestration

Although, not officially included as offsets in our GHG inventory supporting our Net Zero strategy, Bruce Power continues to support local tree planting projects and initiatives through our Environment & Sustainability (E&S) Fund. These planting projects help to mitigate climate change through carbon sequestration while providing other important ecosystem services including the enhancement of natural habitats and erosion control.

Since 2018, Bruce Power has partnered with the Saugeen Valley Conservation Authority to expand their seedling planting program. In 2022, Bruce Power funded the planting of 20,200 trees, bringing the total number of trees planted via this partnership to 208,400. Bruce Power has committed to continue to fund this program through 2025.

In 2022, Bruce Power's E&S Fund also supported the planting of 2,000 trees with the Penetangore Watershed Group and 200 trees with Outdoor Adventures, helping to enhance riparian habitats along the Penetagore River and Upper Sydenham River watersheds.

Support of these initiatives in 2022 resulted in an estimated 17,733 tCO_2e in carbon removal via tree planting, slightly below our 2022 target. The target was not met due to an increase in the price of trees and decreased landowner uptake in planting projects supported by Bruce Power funding. Since 2018, our support of tree planting projects and initiatives has resulted in an estimated 172,835 tCO_2e in carbon removal. Details on this calculation are outlined in this report's Methodology section.

In 2023, the Environment & Sustainability Fund continues to support tree planting projects as well as projects that incorporate tree planting as a wider part of habitat restoration and enhancement efforts.

Our efforts and initiatives outlined in the Climate Change report sections help to support the following UN Sustainable Development Goals:

Climate Change

Climate-related risks can affect several important aspects of an organization's operational and financial performance. At Bruce Power we are actively continuing to integrate principles and recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD) to assess and disclose actual and potential impacts of climate-related risks and opportunities on our short, medium, and long-term business strategy.

Governance

Oversight of climate-related risk (i.e., threats/ opportunities) is incorporated in Board-level governance through the Risk Review Committee of the Board. An annual high level climate change risk profile is provided to the Risk Review Committee for review and discussion.

More detailed climate change risk factors are assessed and addressed by management through governance and procedures as defined by Bruce Power's Management System Manual, including safety analysis, engineering, operations, asset management, emergency response, and business planning.

Strategy

The climate change risk profile includes drivers and impacts over the short (one to three years), medium (four to 10 years) and long term (>10 years).

Changing local, regional, and global environment conditions could have potential negative impacts to Bruce Power's operations, plant and infrastructure assets. These are described in more detail in the "Risk Management" section. Additionally, local and global climate change has potential negative impacts to regulatory and financial management factors. There are also a number of potential positive impacts and opportunities identified, including Net Zero strategy, financing and trading markets.

Potential threats and opportunities of climate change are included in the business planning cycle, and where significant, also reviewed with the Board at their annual Strategic Planning session.

Risk Management

Monitoring, Resilience and Adaptation

Bruce Power goes beyond regulatory compliance by driving innovation and strategic research in environmental protection. We have worked with multiple partners to better understand climate change impacts and vulnerabilities on Lake Huron with a focus on the area near the facility. We have extended this assessment to the Grey, Bruce, and Huron regions with a focus on municipal and agricultural sectors and we work with Indigenous communities to deliver on improved understanding and potential advanced solutions to build resiliency.

A large supply of cooling water is an inherent design requirement for the operation of CANDU reactors and the location of our business along the Lake Huron shoreline results in several unique interactions with the natural environment. Understanding that changing environmental conditions pose a risk to plant resiliency and reliability, Bruce Power has engaged in understanding these risks by tracking environmental trends, contributing to modelling efforts, participating in programs aimed at characterizing these risks, and disseminating learnings and insight across the company and with our Industry peers and stakeholders.

Bruce Power has contributed to modelling the future impacts of climate change to mid century through two efforts. The first effort by Golder Associates Ltd (now WSP) consisted of climate change modelling of the specific impacts to Lake Huron, including changes to air temperatures, water temperatures and water levels. The changes to water temperatures were modelled with and without the effect of Bruce Power operations. The second effort by the Climate Risk Institute took a broader approach to climate change and focused on the broader impacts of a changing climate and how these would affect Indigenous Communities and agricultural activity in Grey, Bruce, and Huron Counties. These efforts included consultations with Saugeen Ojibway Nation, the Métis Nation of Ontario and the Historic Saugeen Métis to ascertain the potential impact of predicted climate change effects on habitats and species prioritized by each community.

To better understand how climate change might impact plant resilience and reliability, Bruce Power is also participating in Electric Power Research Institute (EPRIs) Climate READi (Climate Resilience and Adaptation Initiative) and CHIP (Climate Hazard Information and Projection) programs, which

aim to develop a common framework to create an approach to physical climate risk assessment and facilitate analysis and application of appropriate climate data to enhance planning, design, operation and infrastructure investment to enable the operation of resilient energy systems. Representatives from Environment, Engineering, and Risk and Business Strategy serve as technical advisors on behalf of Bruce Power and aim to facilitate incorporation of EPRI learnings into operational and asset management decisions. Bruce Power is also part of the Board Working Group that will provide strategic guidance on Climate READi objectives and results.

Bruce Power monitors changing environmental conditions, focusing on long-term trends, current conditions, and climate forecasts. The physical climatic variables examined include air temperatures, wind, precipitation, extreme events, ice cover, lake water level and temperature, and risk of condenser cooling water (CCW) blockages due to changing ecological conditions (i.e., fish, mussels, algae). Changing environmental conditions, such as high water levels and increased water temperatures, are of particular interest and are compared to the design basis of equipment to verify resilience to extreme weather events.

Provided below is a summary of the short- and long-term changes in air temperature, ice cover, precipitation, wind, lake water levels, water temperature, and debris loading that Bruce Power currently reviews and assesses potential impacts, under the suite of Climate Change Metrics. Bruce Power uses this information as part of our evaluation of resilience measures in a forward-looking assessment and is provided here for general sharing of the information with the local community.

Key Environmental Trends

Air Temperature

Data collected from meteorological towers on the Bruce Power site over the past 10 years show a statistically significant trend and a faster rate of change over the past decade than previous decades, with mean annual air temperature increasing ~0.2°C/year. This meteorological tower data also suggests that spring, summer and fall temperatures are increasing, while winter temperatures have decreased slightly. Climate projections indicate that by 2060, July would be the warmest month with an average temperature of 24.1°C, however the largest increases would occur in the winter months. Given the impact of high ambient temperature on operations (e.g., equipment challenges, employee heat stress), consideration should be given to strategies to mitigate the potential impact of air temperature.

Wind, Precipitation, and Extreme Weather

In our region, the highest wind speeds occur in fall and winter. Unfortunately, high variability and high uncertainty prevent accurate forecasting of wind speeds. Regional annual precipitation has been increasing, particularly in the winter, spring and fall, while summers are becoming drier. Local precipitation around Bruce Power is highly variable with approximately 230 mm falling in summer 2021, and only approximately 15 mm falling in summer 2022. As extreme weather events are projected to increase, consideration should be given to intense preparation and contingency plans to mitigate damage and flooding caused by intense precipitation and strong winds.

Ice Cover, Water Level, and Water Temperature

Warming air and water temperatures are expected to decrease ice cover duration, although no trends in maximum ice cover extent or timing of maximum ice cover are evident over the past 50 years. Water levels are decreasing from the high levels experienced in 2019 and 2020 and are expected to continually decline. However, we should continue to prepare for water level variability. While lake water temperatures appear to be relatively stable over the past two decades, water temperatures are expected to increase over the next several decades with increasing air temperatures.

Fish, Algae, Mussels and Other Debris

Annual fish impingement has remained relatively stable over the past decade and remains lower than early days of operation. Currently more fish are impinged at Bruce A, than Bruce B and impingement rates are higher in the winter months. In contrast, algal and macrophyte biomass accumulation has increased in recent years, and the majority of the loading occurs at Bruce B, and is highest from July to December. Terrestrial debris has also been increasing in recent years and is highest in the fall. Mussel accumulation is highest in Units 2 and 5 and peaks during the summer and fall months. Mussel abundance has been decreasing in recent years. The risk of CCW blockages is mitigated through our debris collection systems including travelling screens and screenwash systems which are designed to handle the debris loads we currently see.


Air Facts
Our air monitoring stations are located on site and throughout the region, including the communities of Kincardine, Paisley, Port Elgin and Tiverton.
Wildlife Facts
Bruce Power shares the area with a variety of plants and animals. These are continuously monitored and assessed for ongoing environmental protection.
Painted Turtle
Monitor species at risk
Water Facts
Water quality protection is a priority of Bruce Power's Environmental Monitoring Program. Discover more facts by spinning the wheel.
Fish Facts
Bruce Power monitors the impact of cooling water usage on fish in Lake Huron through surveys, sampling and assessment. Turn to find out more fish facts and local species.
Studies show Lake Whitefish near our site are no different from those found elsewhere in Lake Huron
Sustainability Report 2021

Non-GHG Emissions, Effluents and Waste

Our efforts and initiatives outlined in the Waste Management report section help to support the following UN Sustainable Development Goals:

Waste Management

Bruce Power manages many different forms of waste it generates, including hazardous waste (oils, chemicals, lighting lamps and ballasts – some of these are recycled), recyclable waste (glass, plastic, metal, cardboard, paper, wood, batteries, and electronics), organic waste (compost), conventional waste and radioactive waste in partnership with Ontario Power Generation (OPG).

As part of our Waste Management program, Bruce Power complies with all waste regulations and requirements of the relevant federal, provincial, and municipal authorities. Further, Bruce Power continues to take an active role to reduce all forms of waste. From an environmental and financial standpoint waste reduction is good for our company and the community in which we reside. Our philosophy employs a whole life- cycle approach in that we reduce waste at the consumer level, generate less waste at the company level, find opportunities to reuse products (on site, off-site donations, or sell them at auction), and implement recycling programs that are available in the ever-changing recycling market. To minimize the amount of waste sent to landfill each day, Bruce Power has implemented several initiatives that apply the principles of reduce, reuse, recycle, and recover. Wherever its fate, each waste stream generated at Bruce Power is processed and disposed of in a safe and environmentally responsible manner and at a minimum, in compliance with all applicable regulations.

Conventional Waste

The primary objectives of the Conventional Waste Program are to process conventional wastes in a safe and environmentally responsible manner while achieving waste minimization through the application of reduce, reuse, recover, and recycle principles. Bruce Power's Conventional Waste Program ensures that safety is the paramount consideration guiding decisions and actions by complying with all regulatory requirements, including:

- The Ontario Environmental Protection Act
- Ontario Regulation 347, General Waste Management
- Ontario Regulation 103/94, Industrial, Commercial and

Institutional Source Separation Programs

- Ontario Regulation 102/94, Waste Audits and Waste Reduction Work Plans
- Ontario Regulation O. Reg. 153, Record of Site Condition
- Transport Canada's Transportation of Dangerous Goods (TDG) Act, when transferring waste to a landfill

Management of conventional waste includes all non-hazardous and non-radiological items: recyclables, compost, and waste destined for landfill, as defined in Ontario Reg. 103/94.

Under the Environment Protection Act, Bruce Power is a large manufacturing establishment and is mandated to have recycling programs in place for the following materials:

- Aluminum
- Cardboard (corrugated)
- Fine paper
- Glass
- Newsprint
- Polyethylene (high density) jugs, pails, crates, totes and drums
- Polyethylene (linear low density and low density) film
- Polystyrene (expanded) foam
- Polystyrene trays, reels, and spools
- Steel
- Wood (not including painted, treated, or laminated wood)

The Conventional Waste Program at Bruce Power demonstrates our values of uncompromising high standards by not only meeting regulatory requirements, but by going above and beyond by implementing 16 additional source separation programs on site, including:

- Compostable paper towels
- Boxboard/cardboard
- Food waste
- Yard waste composting
- Batteries
- Office supplies / stationery
- E-waste
- Hard hats
- Styrofoam
- Binders
- Confidential shredding
- Fine white paper
- Mixed paper
- Film plastic
- Wood
- Metal

As per Ontario Reg. 102/94, Bruce Power must also perform an annual conventional waste audit completed by a third-party vendor. The auditor's assessments consistently show that Bruce Power is performing well in comparison to other large industrial facilities. In 2022, Bruce Power achieved a 71 per cent diversion rate, with approximately 67 per cent of waste material recycled via several different recycling streams and four per cent of material diverted by composting. In 2023, we continue to look for opportunities to improve our waste reduction and diversion performance.

2022 Waste Reduction and Diversion Initiatives

- Revamp the on-site Styrofoam recycling program
- Reinitiate on-site binder recycling and reuse program
- Install touchless water bottle fountains across site to ensure water is provided in a more hygienic way and reduce bottled water waste on site
- E-waste recycling / reuse relationship with Habitat for Humanity
- Increase waste oil recycling volumes from 24 per cent in 2021 to 87 per cent in 2022

Bruce Power makes every effort to increase diversion whenever possible. In 2022 additional diversion initiatives on site included e-waste, Styrofoam, binder, and other stationary recycling. Bruce Power recycled over 13,000 kg of e-waste in 2022, including computers, printers, and paper shredders. Styrofoam recycling on site has a new process that saw 20 cubic meters of Styrofoam recycled in 2022. Finally, the binder recycling and reuse program saw 1,937 binders deconstructed for recycling and 514 binders donated to schools for reuse. For the deconstructed binders, 45 cases of cardboard were donated for reuse and 500 pounds of scrap metal was recycled. There were also five boxes of stationary sent to TerraCycle in 2022 for reuse or recycling.

In addition, Bruce Power worked on increasing waste diversion by improving signage and messaging about waste streams across site in accordance with the site's Waste

Reduction Work Plan prepared in compliance with Ontario Regulation 102/94, Waste Audits and Waste Reduction Work Plans. New waste diversion bins were acquired and set up at several locations across Centre of Site and updated signage was installed. This new signage included pictures of common waste types sold or used on site to help employees determine which waste stream is appropriate to use. In addition, signage, safety video segments as well as articles in the company newsletter were leveraged to communicate the need to reduce liquid contamination in the recycling stream. In 2022, we saw a reduction in the contamination of our recycling streams, with overall contamination rate down from three per cent in 2021 to one per cent in 2022.

Hazardous Waste

Bruce Power's Hazardous Waste Program is to comply with applicable federal, provincial, and municipal laws and regulations as well as corporate requirements affecting the generation, handling, storage, and disposal of hazardous waste while ensuring the health and safety of personnel, the public and the environment. These regulations include:

- The Ontario Environmental Protection Act
- Ontario Regulation 347, General-Waste Management
- Ontario Regulation 362, Waste Management-PCBs
- Canadian Environmental Protection Act, PCB Regulations (SOR/2008- 273)
- Environment Canada, Compliance Promotion Guide on PCB Regulations Requirements

Beyond compliance, we aim to minimize the generation of hazardous waste, and ensure effective and protective life cycle management. Hazardous wastes, such as chemicals, oils, batteries, and fluorescent tubes, generated on site are carefully tracked to ensure all hazardous waste is safely disposed of in accordance with all applicable regulatory requirements. Bruce Power has an excellent network of external waste vendors (certified to carry and/or receive hazardous wastes) who frequently work with us to dispose of all our hazardous waste streams in an industrially and environmentally safe manner.

The Hazardous Waste Program also includes the management and oversight of the Polychlorinated Biphenyls (PCB) phase out on site, aligning with federal requirements. Bruce Power is currently on track to meet these requirements for removal by 2025.

Waste Oil Recycling

In 2021 Bruce power committed to developing a recycling program for oils and lubricants. The goal of the program was to divert at least 10 per cent of the company's oil waste to a recycling stream.

In 2021, approximately 24 per cent (>105,000 L) of waste oil was recycled through this program instead of going to waste. In 2022, a significant amount of transformer replacement work was performed across the site, and overall, 87 per cent (>612,000 L) the waste oil generated was recycled.

Radioactive Waste

Bruce Power manages and fully funds the management of its radioactive waste in partnership with Ontario Power Generation (OPG). Since the 1970s, OPG has responsibly managed radioactive waste from the Bruce A and Bruce B generating stations. Waste is currently stored on site by OPG on an interim basis until long-term disposal facilities are established.

Radioactive Waste Management

- All energy-producing industries create waste. The nuclear industry is the only energy-producing technology that takes full responsibility for all its waste.
- Maintenance and projects (e.g., Major Component Replacement) are planned, to the extent practical, with a focus on minimizing waste generation.
- Initiatives are continually explored and implemented to reduce radioactive waste volumes to be stored and disposed of in the future, thereby working towards minimizing the overall environmental footprint and minimizing costs to Ontario electricity ratepayers.
- Radioactive waste management (e.g., handling, transport, storage) is highly controlled and regulated by the Canadian Nuclear Safety Commission, one of the world's most well regarded nuclear regulatory authorities.
- The nuclear industry is advancing long-term solutions for radioactive waste. In Canada, waste generators and waste owners are responsible for the funding, management, and operation of interim and long-term waste management facilities so that future generations of Canadians are not burdened with the cost. Early and ongoing input from Indigenous peoples and Canadians is essential to plan our radioactive waste projects in an open and transparent manner.

- The Nuclear Waste Management Organization (NWMO) is responsible for Canada's plan for the safe, long-term management of used nuclear fuel. Since 2010, the NWMO has been engaged in a multi-year, community-driven process to identify a site where Canada's used nuclear fuel can be safely contained and isolated in a deep geological repository (DGR) which will protect people and the environment for generations. The site selection process is designed to ensure that the site selected is safe, secure, and has informed and willing hosts. Bruce Power supports the NWMO in its activities to build an understanding of the proposed DGR, including the potential benefits and impacts to the host region.
- Deep geological repositories (DGRs) are the world's scientifically accepted method for long-term storage of used nuclear fuel. Many countries which have benefitted from nuclear power for decades are progressing plans for DGRs. Canada interfaces with other countries to share and advance best technologies.
- Until a DGR is constructed and placed into operational service, used nuclear fuel will continue to be safely stored on the sites of Canada's nuclear generating stations, under tight safeguard controls imposed by the Canadian Nuclear Safety Commission and the International Atomic Energy Agency.

For more information on Radioactive Waste Management, visit the NWMO website nwmo.ca.

Non-GHG Emissions and Effluents

Bruce Power performs extensive modelling of its emissions for conventional contaminants (i.e., hydrazine, morpholine, sulphur dioxide, manganese) to ensure that releases occur within acceptable limits set by the Ministry of the Environment, Conservation and Parks and to minimize environmental impact.

For more information on our Non-GHG emissions and effluents, please refer to Bruce Power's 2022 Environmental Protection Report[7].

Our efforts and initiatives outlined in the Water Resource report section help to support the following UN Sustainable Development Goals:

Water Resource

The Bruce Power site is located within the Saugeen Watershed along the shores of Lake Huron. Lake Huron is the eighth largest lake in the world by volume at 3,540 km³.

The cold, deep water of Lake Huron is Bruce Power's source for domestic needs, including drinking water. It is also used across the site in firewater systems, demineralization plants, and once-through-cooling systems that cool and condense low-pressure steam before it is returned to our boilers. More than 99.99 per cent of the water drawn by Bruce Power operations is returned to the lake. This process is highly regulated, including provincial permits for water taking and imposing protective limits on water quality for water returned to the lake.

As an operation that takes more than 50,000 liters of water per day from a lake, river, stream, or groundwater source, Bruce Power must obtain a Permit to Take Water (PTTW) from the Ministry of Environment Conservation and Parks (with a few exceptions). These permits help to ensure the conservation, protection, management, and sustainable use of Ontario's water. A permit will not be issued if the ministry determines that the proposed water taking will adversely impact existing users or the environment. Bruce Power has a separate PTTW for Bruce A, Bruce B, and Centre of Site (COS) .

Bruce Power continued to remain in compliance with all PTTW requirements in 2022. Further information on this can be found in Bruce Power's 2022 Environmental Protection Report.

In support of the conservation, protection, management and sustainable use of Ontario's freshwater resources, Bruce Power monitors our water usage and reports on daily amounts drawn. Beyond considerations of water quantity management, we are committed to monitoring and ensuring the protection of the quality of water, and our fish habitats in and around near site shores and the greater region.

In addition to the permitting process, our environmental monitoring program conducts extensive year-round sampling to verify the protection of the local environment. This includes water temperature and water quality sampling on site and in Lake Huron, and routine monitoring of soil, sediments groundwater, vegetation, and wildlife. Environmental monitoring (measurement, sampling, and analysis) ensures that the health of the environment and people are protected and verifies that emissions and effluents from operations results in negligible environmental risks.

In 2022, Bruce Power's net annual water consumption from Lake Huron was 2.04 million cubic meters, staying below our targeted threshold of 2.3 million cubic meters.

Domestic water is consumed by Bruce Power employees and visitors as drinking water, and it is used for washing and other sanitation needs. Bruce Power operates a provincially regulated sewage treatment plant on site, and all the domestic water consumed on site is returned to the lake after treatment.

Some of the water drawn for operational needs at Bruce Power is demineralized on site where it is used to generate electricity in steam- powered turbines. Some of this water is not directly returned to Lake Huron because it is held in each power reactor units' predominantly closed-loop feedwater system, and a fraction is discharged to the atmosphere as water vapour (steam).

Our efforts and initiatives outlined in the Land Use and Biodiversity report section help to support the following UN Sustainable Development Goals:

Land Use and Biodiversity

Bruce Power is home to a diverse natural environment that contains more than 235 species of plants and more than 270 species of wildlife. The protection of these species and the habitats that support them is a priority for our environmental protection program.

In 2020, we set an internal target to protect 887 hectares (ha) of high-quality habitat on site or ensure the protection of an equivalent amount off site if specific refurbishment support activities required further development on site. This target was established from an Ecological Land Classification study completed in 2017 that demonstrated 55 per cent of the Bruce Power site (equivalent to 887 ha) was composed of undisturbed forest, open, or wetland habitats.

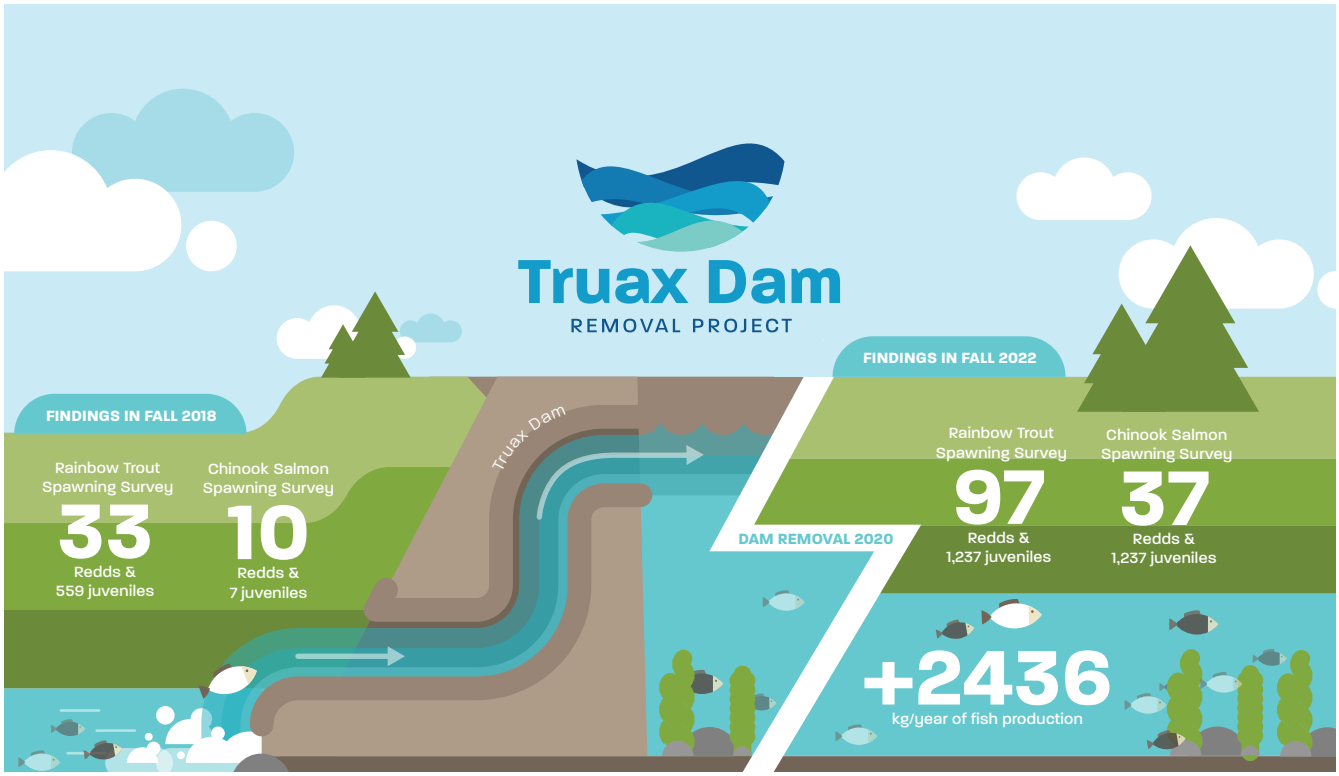
As we prepare for and conduct our Major Component

Replacement project, there are times when development is essential to support the continued generation of clean electricity through our Life Extension program. Seven hectares of land was cleared at Bruce Power over the past six years to construct a training simulator and create additional parking capacity. At the same time Bruce Power worked with organizations like the Nature Conservancy Canada, Ontario Nature and Bruce Trails Conservancy to acquire and permanently protect over 60 ha of high-quality habitat from future development to compensate for this land clearing, significantly surpassing our target.

Phragmites Removal

Bruce Power has spent significant effort over the years to protect Baie du Doré, an ecologically sensitive and provincially significant coastal wetland adjacent to the site. Beginning in 2018, Bruce Power partnered with the Invasive Phragmites Control Centre (IPCC) to remove Phragmites australis from Baie du Doré and the nearby Lake Huron shoreline. Invasive Phragmites is Canada's worst invasive plant because it aggressively spreads and degrades the habitat and biodiversity of endemic plants and animals. Vegetation surveys completed in 2014 found that high density invasive Phragmites was established in approximately 60 per cent of the 107-ha wetland. Between 2018 and 2022, Bruce Power and the IPCC have collaboratively removed Phragmites from approximately 60 ha of the coastal wetland making a significant reduction in its presence. Having successfully managed the high-density areas, we have moved into the next phase of management to target sparsely populated Phragmites areas and prevent high-density areas from re-emerging for the long-term.

In addition to Baie du Doré, Bruce Power has supported the IPCC and many other groups and Indigenous communities with Phragmites control along the Lake Huron shoreline from the Fishing Islands near Oliphant south to Lambton Shores, Ontario. Environmental monitoring is key component of our work and the health of fish and plant populations in Baie du Doré, the Fishing Islands and Lambton Shores has been ongoing since 2017.



Fisheries Improvement Initiatives

Bruce Power is a proud supporter of many fishery enhancement initiatives across Ontario. As part of its Fisheries Act Authorization, Bruce Power has funded and supported the removal of the Truax Dam in Walkerton, Ontario so that fish in the Saugeen River could freely pass upstream. This was the largest dam removal in Ontario in recent times and helps all fish and aquatic invertebrates from rainbow trout and salmon that are so sought after by anglers from around the world, to smaller fish like minnows, shiners, dace, and chub that inhabit important ecological niches within the Saugeen River.

Five years of fish biomass monitoring has been completed in the river and its upstream tributaries (two years before and three years after the dam was removed). Preliminary results from this monitoring show that by removing the Truax Dam, fish production upstream has increased by over 2,436 kg per year, including the first increase in an upstream tributary (Otter Creek). This is a minimum estimate, and additional fish production is expected in future years, especially in the upstream tributaries such as Otter Creek and the Beatty Saugeen River.

Bruce Power continues to work with many other community groups to improve fish habitat within Lake Huron and inland waterways. Since 2017, Bruce Power has supported a large effort to remove dense pockets of Phragmites from approximately 110 ha of the Fishing Islands, a culturally and environmentally rich coastal wetland habitat that is threatened by invasive Phragmites. Bruce Power provides funding and technical expertise to support the work of the Invasive Phragmites Control Centre and its partners. In 2021 the collaboration expanded to include the Historic Saugeen Métis, as the Fishing Islands are an important traditional harvest area for the community. The combination of western science and Indigenous knowledge has resulted in a well-rounded approach to removing the Phragmites, allowing for endemic vegetation to be restored and important fish-rearing habitat to be maintained. As of the end of the 2022 season, control measures have been applied to all high density Phragmites within the Fishing Islands. Work will continue in 2023 with a focus on confirming the eradication of high density stands and control of low to intermediate density stands of Phragmites.

Bruce Power and the Saugeen Ojibway Nation have met on several occasions over the last two years and a list of potential project ideas has been developed. Field walk-downs of streams in Saugeen 29 First Nations Reserve and in the Nawash Unceded First Nation are being planned

with the Saugeen Ojibway Nation, Bruce Power, and other community partners as these have been highlighted by the Saugeen Ojibway Nation community as watercourses that may be degraded and therefore could benefit from restoration plans. Provided that the Saugeen Ojibway Nation community feels that restoration of these streams is a valuable project after visiting the sites, a project plan will be developed by December 2023.

Finally, in consultation with the Métis Nation of Ontario, a project plan is being drafted around improving fish habitat and restoring connectivity in Bothwell's Creek. Near Leith, Ontario, Bothwell's Creek has traditionally been used by the Métis Nation of Ontario community for fishing and recreation but a decline in fish spawning has been noticed over the past decade. A decrease in ideal habitat due to erosion leading to high sedimentation, and large debris posing a barrier to fish migration is thought to be the leading causes of the observed decline in fish in the creek. Together with Bruce Power, the Métis Nation of Ontario propose to remove large debris from the stream to increase stream connectivity and flow and organize community events to plant riparian vegetation along more vulnerable stretches of the stream bank. A field walk-down of the creek was performed in early spring 2023 and a formal project proposal is on track to be complete by June 2023.

On Site Biodiversity Initiatives

Reduced Grass Mowing

In 2022, Bruce Power developed a reduced grass mowing strategy that balances site safety and aesthetics with enhanced environmental sustainability. While it is important that some grassed areas adjacent to roadways are maintained for traffic safety, Bruce Power identified 37,000 m^2 of grassed areas that will be left to grow naturally, representing a 34 per cent reduction in landscape areas that need to be mowed each season. Bruce Power plans to carry this initiative into the 2023 mowing season.

Key environmental benefits of the reduced grass mowing strategy include:

- Annual greenhouse gas reductions of approximately 10 tonnes of CO_2 equivalent due to decreased use of landscaping equipment and fuel consumption
- Enhanced wildlife habitat that provides new pollinator areas and habitat linkages/corridors
- Promotes increased diversity of wildlife, especially natural vegetation
- Increases available overwintering habitat for amphibian and reptiles

Bird-Strike Window Decals and Lights Out Program

Birds play an important role in various ecosystems, such as pest control, pollination, and seed dispersal. The protection of birds helps with population conservation and maintaining healthy, biodiverse ecosystems. In Canada, window collisions (bird-strikes) kill up to 42 million birds per year (Canada, 2020) and is one of the main sources of human-caused bird mortality. Bruce Power aims to effectively reduce the number of bird-strikes occurring on site each year, and particularly during the Spring and Fall migrations.

Bird collisions with buildings are a common phenomenon, however, Bruce Power recognizes that window collision bird-strikes are often preventable, and there are various companies and resources providing services, strategies, and technologies/products to mitigate this issue. Bruce Power initiated two pilot programs in 2022 to mitigate bird-strikes in which the results will be observed in the 2023 spring migration.

'Lights Out' Program

Many birds migrate at night and are attracted to lights from buildings, which can cause them to crash into windows. Turning building lights off at night can help reduce the number of bird-strikes from light-induced disorientation. Bruce Power aims to run a pilot prior to the 2023 spring migration by turning off five per cent of the lights at the B10 Support Centre building.

Bird-Strike Window Decals

Birds in flight are naturally attracted to the reflection of mirrored windows and can become disoriented, causing them to fly into the building. In 2022, bird-strike window decals were installed on the building identified as having the most significant number of bird strikes (B31 — Bruce Learning Centre) as a pilot program. These window decals display dots in a 2" x 2" spacing pattern to ensure the bird can see the window prior to and/or during flight.

Bird-strike monitoring data from pre- and post-implementation will be compared to identify the success of the program to inform further implementation plans.

Wildlife Habitat Council Certification

In 2022, Bruce Power attained a Conservation Certification by the Wildlife Habitat Council reflecting the company's environmental leadership, conservation, monitoring, and community engagement efforts in Baie du Doré and Lake Huron. The Bruce site was designated Certified Silver and associated projects included:

- Small fish monitoring program in partnership with the Invasive Phragmites Control Centre (IPCC) and the Saugeen Ojibway Nation Environment Office. The project monitors the impact of invasive Phragmites on fish habitat, the recovery of fish habitat via Phragmites removal efforts, and the impacts of lake level fluctuations on fish habitat in coastal wetlands
- The control and removal of invasive Phragmites in Baie du Doré and other areas of the Lake Huron Coastline, in partnership with the IPCC
- Smallmouth bass monitoring to gather data on nesting activity and environmental conditions in the Bruce A discharge channel, Bruce B discharge channel, and Baie du Doré
- An Education and Outreach Program related to the control and removal of invasive Phragmites, in partnership with IPCC. As part of the program, local community members and volunteers were trained in and provided opportunities to participate in ongoing Phragmites monitoring and removal efforts

In 2022, Bruce Power's site was designated Certified Silver by the Wildlife Habitat Council

Environment & Sustainability Fund Partnerships

Through Bruce Power's Environment & Sustainability (E&S) fund, we continue to support local environment and sustainability-related projects and initiatives. Established in 2015, the E&S fund seeks opportunities to partner with organizations on initiatives related to:

- Environmental conservation and restoration
- Energy efficiency and carbon emission reduction
- Climate change mitigation and resilience
- Environmental education, awareness, and research

In the selection process for E&S fund applicants, we look to align with Bruce Power's environmental KPIs and other key priority items, such as the location and the communities supported, with priority given to local initiatives. This process is intended to help inform decision making, and ensure funding is focused on local community initiatives while aligning to our environmental and sustainability efforts as a business.

In 2022, $400,000 was distributed amongst sponsorship, long term partnerships and events. Some of our partnerships supported by the Environment & Sustainability fund include:

Plug'n Drive

Through a five-year funding partnership, Bruce Power continues its commitment in supporting Plug'n Drive, a non-profit organization committed to accelerating electric vehicle adoption to maximize their environmental and economic benefits, and the development of Zero Emission Vehicle (ZEV) infrastructure.

Bruce County Museum

On an annual basis, Bruce Power partners with the Bruce County Museum & Cultural Centre to offer free webinars from local experts sharing their knowledge on environmental topics. These webinars are published during Earth Week for students and community members to access. Each webinar is followed with challenge activities and additional resources on the topic for participants.

The Sustainability Project

Bruce Power has partnered with The Sustainability Project on various sustainability programs in the Grey Bruce area since 2012, including binder recycling, film plastics recycling, a polystyrene (Styrofoam) densifier pilot program, a community composting pilot project, and education and awareness programs.

In 2022, Bruce Power's support helped the Sustainability Project fund local projects providing nature-based solutions to stormwater management, through the Lake Huron Forever initiative.

Lake Huron Centre for Coastal Conservation

Funding provided in 2022 supported the enhancement of a mobile application to help streamline field data collection for volunteers participating in the Coast Watchers Citizen Science Program. This program tracks environmental data that is shared with partnering organizations and government agencies, as well as serving as a valuable engagement and educational opportunity for program participants.

Sustainability and Stewardship Events

Pollinator Plant Pick Up

In June 2022, Bruce Power hosted a pollinator plant pick up event where employees could pick up free milkweed plants to plant in their gardens or yards to help support monarch butterfly habitat. This event had a great turnout with lots of interest, with 300 plants being taken home by employees. In 2023, we plan on expanding the number of pollinator plants available for pick up to 600.

Plug'n Drive Electric Vehicle Roadshow

In September 2022 and May 2023, Plug'n Drive held an electric vehicle (EV) test drive event at Bruce Power Visitors' Centre. The event featured test drive activities for employees and the public, and Plug'n Drive ambassadors were on hand to provide information on EVs and answer any questions.

Supporting Zero-Emission Vehicle (ZEV) infrastructure in Ontario and Canada plays an important role in reaching provincial and federal climate goals.

People and Safety

KPI	Standard guidance is taken from	2019 Baseline	2021 Target	2021 Actual	2022 Target	2022 Actual
% of Women Relative to the Workforce	GRI- 405-1	21.4%	21.8%	21.8%	22.2%	21.8%
% of Visible Minorities Relative to the Workforce	GRI- 405-1	7.8%	8.0%	9.0%	9.2%	9.5%
KPI	**Standard guidance is taken from**	**2020**	**2021 Target**	**2021 Actual**	**2022 Target**	**2022 Actual**
Women Hired into Non-Traditional Roles	GRI- 405-1	24%	≥ 20%	34%	≥ 30%	32%
Women Promoted into Non-Traditional Roles	GRI- 405-1	26%	≥ 20%	32%	≥ 30%	26%
Visible Minorities Hired	GRI- 405-1	12%	≥ 12%	20%	≥ 20%	20%
Industrial Safety Accident Rate (ISAR) Site	IF-EU-320a.1	0.02	≤ 0.00	0.03	≤ 0.00	0.07
Industrial Safety Accident Rate (ISAR) Contractors	IF-EU-320a.1	0.08	≤ 0.00	0	≤ 0.00	0
Fatality Rate — Employees	IF-EU-320a.1	0	0	0	0	0
Fatality Rate — Contractors	IF-EU-320a.1	0	0	0	0	0
Emergency Preparedness — Annual # of Drills/Response Exercises	IF-EU-540a.2	75	65	113	≥ 75	115

** Bruce Power does not claim to conform to any of the standards identified; rather guidance has been taken from those standards identified. ESG Metrics have been chosen that reflect items material to our business. As noted, we have a larger subset of internal metrics and as our program matures, we will continue to add to the metrics that we release into the public domain. Bruce Power remains committed to advocating for more standardized disclosure and remains committed to staying up to date on policy and frameworks that are attempting to bring more clarity to information that is crucial for disclosure from a financial, environmental, and social standpoint.*

Our efforts and initiatives outlined in the following report sections related to Diversity, Equity and Inclusion help to support the following UN Sustainable Development Goals:

Diversity, Equity, and Inclusion

In the ever-evolving nuclear industry, Diversity, Equity, and Inclusion (DE&I) are at the forefront of our organizational goals. We know that to maintain our commitment to performance excellence, to continue to innovate and seek new ways to expand medical isotope production and to actively support the global fight against climate change we need to leverage the diversity of talent, provide adequate resources, and cultivate a culture of belonging; where everyone feels invited to contribute and participate, so that we may benefit from the synergy of our people. Our people are our greatest resource, having a diverse and talented workforce will allow us to power the future.

Our Diversity, Equity, and Inclusion Strategy

In 2022, an Executive Steering Committee, sponsored and chaired by our Chief Nuclear Officer Chris Mudrick, was established to provide leadership and oversight of our DE&I programming. This was a pivotal shift for DE&I programming and initiatives to ensure our social responsibility is embedded into our governance framework to strengthen our DE&I Strategy that focuses on our three pillars: Talent, Culture and Community.

Talent

We are committed to attracting, developing, and retaining the best talent. We remain focused on shifting the composition of our workforce and fully leveraging the potential of our people.

As an organization, we recognize the importance of strengthening the diversity of our leadership. We remain committed to reviewing our talent programs, including promotions, succession planning and leadership development, to ensure we are creating equitable opportunities and experiences that are inclusive and lead to growth opportunities for our employees. Our highlights from 2022 include: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- Continued integration with Talent Acquisition & Communications to build our brand, attract the best talent and deliver a bias-free recruitment process.
- Execute the Diversity Recruitment Strategy which will meet the commitments to hire underrepresented groups and attract the best diverse talent in the market to allow us to shift the overall composition of our workforce.
- Remove bias from our recruitment processes and provide hiring managers the opportunity to reflect on unconscious bias and diversity commitments throughout the selection process.
- Focus on diversifying leadership at all levels and providing equitable growth opportunities to develop our future leaders.
- Integration with Talent Management to ensure we are strategically measuring diversity through the employee life cycle with a focus on retaining our talent and understanding themes in voluntary terminations of underrepresented groups.
- Measure and assess the health of our talent by reviewing the composition of our workforce, promotions, succession plans and leadership development to provide opportunities and address barriers to career advancement.
- Digging deeper into our organization to identify, assess, develop, and support diverse talent to support future leadership opportunities through our talent processes.
- Develop a sustainable process to rotate employees through different areas of the business to support cross-functional learning and build stronger capability across the organization.
- Ensuring underrepresented employees are fairly represented in our training and development programs.

Culture

Fostering an inclusive work environment where employees feel valued for their uniqueness and are recognized for their individual differences, talents, and skills. We are committed to a Healthy Nuclear Safety Culture where respect is evident, opinions are valued and hold a high level of trust. To achieve this, we provide educational and cultural awareness opportunities with a variety of resources continuously throughout the year. We are committed to integrating inclusive leadership traits into our development programs to build the capacity of our leaders and hold each other accountable to our behaviours. The result will strengthen our leaders, elevate performance, and ensure accountability for a respectful and inclusive work environment.

- Created a DE&I Governance framework that reaches all levels and broadness of our organization to ensure alignment and sustainability of DE&I programming.
- Provide a variety of educational opportunities on cultural awareness. Particular attention was given to Black History, Indigenous History and Women's History Month celebrations. Learning opportunities and engagement varied from virtual events, standing committees, lunch and learns and various avenues of communication across the business.
- Leadership Education – All leaders from First Line Manager (FLM) and above completed a course on Psychologically Safe & Inclusive Workplaces that focused on Mental Health and concepts of Diversity, Equity & Inclusion.
- Ongoing leadership assessments with over 100 employees completed in our business, to assist on development planning, to help identify actions to capitalize on strengths and improve areas of opportunity to further prepare them for their desired career paths.
- Continuously provide avenues for employees to provide feedback and guidance into our programming to ensure our programs are driving value and closing gaps.
- In addition to our Indigenous Network, we launched two Employee Resource Groups to help identify specific needs, realities and social conditions within these communities: the Women's Forum and the Gender & Sexuality Alliance that are open to all and new members are always welcome.
- Integrate concepts into Leadership Development programs to ensure we are fostering inclusive leaders and reinforcing people leadership skills. This will improve the relationships and ensure a psychologically safe work environment where performance is elevated when employees can bring their whole selves to work.
- Additional resources dedicated to offering monthly webinars, lunch and learns, education sessions, promoting company and community resources. We also launched a Micro Learning resource page to ensure awareness and clarity of expectations.
- In recognition of National Truth and Reconciliation

Day/Orange Shirt Day, a virtual tour of the Mohawk Residential School was offered to staff. In addition to individual viewing, private rooms were offered to staff who wanted to be surrounded by support. Orange shirts from local indigenous designers and suppliers were gifted to staff.

- Our Employee Wellness team is dedicated to support mental health, through bi-monthly webinars, resources, and access to professional support.
- Collaborated with communications to evolve our internal and external materials and messaging to be reflective of our workplace.
- Removal of all indicators of contractors, temporary workers on our employee identification badges. These markings had a negative impact, dividing Bruce Power employees from our partners who support our business. All workers on site are deemed a nuclear professional and will be recognized for their contributions to Bruce Power's organizational goals.
- Inclusive language embedded into IT software system language to remove systemic bias language.
- Created an organization-wide event calendar on the Intranet homepage highlighting community events and dates of importance related to our workforce.
- Enhanced benefits for management employees for fertility treatments and gender transition. We will be discussing these with our unions at upcoming bargaining.
- Updated food selection within our cafeterias and vending machines with feedback from staff to ensure we are meeting the demand for dietary requests. Vegan, vegetarian, gluten-free, Halal and Kosher options available and labelled accordingly. Feedback also identified the demand for a variety of ethnic selection of food.
- We supported our staff with ongoing educational opportunities to support their career development by providing access to courses online through our intranet. Employees can search through a course library supported by D2L or our training resources to upgrade their professional development in the nuclear sector, with courses like Nuclear Power School.

Employee Resource Groups

In addition to Bruce Power's initiatives to drive DE&I goals and strategies, we have a number of highly engaged employees leading and supporting Employee Resource Groups (ERGs). An ERG is a group of employees with a shared goal, that come together to network, develop personal and professional growth, provide council to the organization to overcome challenges and be advocates for a diverse and inclusive work environment.

Indigenous Network

The Indigenous Network has three decades of history and consists of approximately 60 Bruce Power employees that meet monthly to discuss and organize activities to raise Indigenous cultural awareness and engagement both on an internal and external front. These efforts and those of the Bruce Power Indigenous Relations team support the Progressive Aboriginal Relations (PAR) pillars of focus areas: Leadership Actions, Business Development, Community Relations, and Employment as well as activities/events that align with business initiatives to achieve and maintain Progressive Aboriginal Relations Gold Certification—the highest level of recognition offered by the Canadian Council for Aboriginal Business.

Each year, the Indigenous Network hosts and participates in numerous activities and events that build cultural awareness within the company, foster engagement with local Indigenous communities, increase Bruce Power Indigenous employee representation, and celebrate the unique heritage and diverse cultures of our Indigenous peoples.

Women's Forum

Bruce Power's Women's Forum was established in 2022 with 50 initial members and an overarching mission to work together to increase acceptance, diversity, inclusivity, equality and belonging for individuals who identify as women at Bruce Power. The Women's Forum is open to all members of the Bruce Power community, regardless of gender, position, or employment type. A key goal for the group has been to raise awareness and grow their membership through poster campaigns, their website, networking, and events.

They have established a leadership team, approved their Terms of Reference, and hosted a number of successful events, including the White Ribbon Campaign on December 6 to mark the National Day of Remembrance and Action on Violence Against Women, and International Women's Day on March 8, which featured a panel discussion on navigating career changes, professional development session and special guest speaker, Rumina Velshi, President and CEO, Canadian Nuclear Safety Commission (CNSC).

The team has also developed a strategic plan for 2023 using their top three focus areas:

1. Career development
2. Care and career integration
3. Community and allyship

Gender & Sexuality Alliance

The Gender & Sexuality Alliance (GSA) is an Employee Resource Group (ERG) formed in late 2022 and is comprised of Bruce Power and vendor partner employees striving to create an inclusive environment for 2SLGBTQ+ members and allies in the workplace and the surrounding communities.

As a committee, the GSA works together to increase diversity, acceptance, inclusivity and equality through education, events, and collaboration with organizations in our communities. Throughout Q1, the GSA leadership team created the 2023 strategic plan and are now moving onto implementing the actions.

Supporting Inclusivity Beyond Our Site

We are committed to supporting an inclusive culture in partnership with our communities and with our suppliers and trade unions. We recognize our role in being a leader to support this transformation and will utilize our relationships to drive Diversity, Equity programming and initiatives to support social developments that promote inclusion.

- Our Indigenous Employment Program includes local outreach activities, assistance navigating our application process and guidance on resume development. We continue to focus on growing Indigenous talent for employment opportunities directly with Bruce Power, as well as indirectly with our suppliers, contractors and unions. This program supports our organization's journey towards truth and reconciliation (TRC#92).
- Black History month virtual event with Rosemary Sadlier provided education on Canadian Black History. This event was open to the public allowing participation from local law enforcement, municipalities, communities services and school boards/classes to join to share insights to the historically oppressed black community.
- Books on Canadian Black history and the Orange Shirt Story were purchased and donated to our local libraries and school boards as part of our inclusion efforts to support our future generations.
- Implemented supplier scorecards. As we progress on our inclusion journey, it is important to elevate and support our partnerships along the way and ensure our suppliers and partners have a visible commitment to DE&I.

- Commitment to the Black North Initiative set out actionable goals outlined in this pledge, which move toward ending anti-black systemic racism and creating opportunities in economic developments for this demographic. To align with this pledge, we partner with other organizations in the nuclear sector to form the Nuclear Against Racism committee that throughout the year provides educational resources and programming to eradicate racism.
- Partner with Build A Dream, to host a career expo in partnership with our suppliers and trades unions to support local women students looking for career opportunities in skilled trades, STEM, emergency response, entrepreneurship, and overall advancing women in society.
- Continually refresh our sponsorship funds to diversify and recalibrate the communities and networks we serve and to ensure we support local underrepresented events.
- We partner with Ontario Tech University to provide an internship program aimed at attracting women into roles traditionally dominated by men. This partnership aligns with our global commitment to Equal by 30 and the Electricity Human Resource Canada Leadership Accord on Diversity, Equity, and Inclusion.
- Partner with Women in Nuclear (WiN) a non-profit resource group for individuals in the nuclear industry providing updates in the nuclear sector, driving programming and initiatives to support the industry, networking, and leadership development opportunities.

In 2022, Bruce Power was recognized by:

Forbes 2023 CANADA'S BEST EMPLOYERS POWERED BY STATISTA

Forbes as one of Canada's Best Employers for Diversity for the Indigenous Employment Program

CANADA'S TOP EMPLOYERS FOR YOUNG PEOPLE 2023

2022 CANADA'S BEST DIVERSITY EMPLOYERS

Canada's Top 100 as Top Employers for Young People and Best Diversity Employers

Ethics

Bruce Power has a separate and independent Code of Conduct Office that is dedicated to maintaining an ethical workplace culture through education, advice, and workplace investigations. The Code of Conduct, Supplier Code of Conduct ("the Codes of Conduct") and our Code of Conduct Principles set the expectations for acceptable behaviour both at Bruce Power and while performing work for or on behalf of Bruce Power at other locations. The Codes of Conduct help to maintain the ethical workplace culture that we have worked hard to establish. At Bruce Power, ethical values like integrity, respect, honesty and transparency

matter, and they are reflected in the daily actions of our workers, and our company policies and procedures. These documents are reviewed and updated on a regular basis to ensure that they are aligned with best practices.

As stated in the Joint Pledge with our supplier and union partners, Bruce Power pledges and demonstrates to our teams, colleagues and to the nuclear industry, our commitment to creating and maintaining a respectful, discrimination, harassment and violence -free workplace. Workers are expected to act with integrity and treat each other with respect, and deal with colleagues, customers, suppliers, partners, owners, shareholders and the community ethically and responsibly. We believe every employee has the right to a safe work environment, free from harassment, discrimination and retaliation. We expect all individuals to behave in a manner that meets or exceeds Bruce Power's values, which we adhere to through our Code of Conduct standards.

We always strive for excellence and do our job to the best of our ability to ensure the interests of Bruce Power, our local communities, our colleagues and the environment are safeguarded. We perform our duties in accordance with all applicable laws, regulations and other legal and business requirements, as well as observing company policies, procedures and rules.

Bruce Power ensures that all workers accessing site are properly trained by requiring the completion of Code of Conduct Training, and other ad hoc training including bystander intervention training and education and support on how to report concerns.

Bruce Power provides a variety of avenues for individuals both internal and external to Bruce Power to report ethical concerns. These reporting methods include internal contacts within the Bruce Power Code of Conduct Office and an externally managed hotline and website which includes the ability for individuals to make anonymous reports.

Political Donations, Government Lobbying and Political Activity

Lobbying-related activities are managed by the Corporate Affairs Division for federal, provincial and municipal governments, and the required reporting of these activities is overseen by the Bruce Power Code of Conduct Office. These activities and those registered as Lobbyists on behalf of Bruce Power are also reported annually to the Bruce Power Code of Conduct Oversight Committee.

Workers may participate in the political process as an individual, in accordance with their own political views and the laws and regulations governing this activity. In doing so, however, workers may not use Bruce Power's name, nor indicate that they represent Bruce Power, unless they have been authorized to do so.

Anti-Corruption

Bruce Power promotes integrity and ethics in all aspects of our business activities. We comply with all applicable laws and regulations on corruption, bribery, prohibited business practices and extortion. Bruce Power prohibits the offering or acceptance of bribes or kickbacks of any kind, whether in dealings with public officials or individuals in the private sector. A bribe is generally defined as a gift or promise of undue reward or payment, financial or otherwise, to influence the behaviour of government officials or business for the purpose of gaining a commercial advantage. A kickback is similar to a bribe, but usually occurs after the fact. We respect our relationship with government employees. As a representative of the company, workers are expected to be aware of and comply with relevant laws and regulations that govern relationships between government, customers, and suppliers.

In terms of mitigating against corruption, together with Finance, the Bruce Power Code of Conduct Office regularly conducts fraud risk scenario reviews to review or establish controls to mitigate against the risk of fraud occurring in the business. In addition, past actions have included a fraud risk assessment completed as part of a commercial internal audit, along with a survey of workers. As noted above, all interactions with Government Officials is required to be tracked and communicated to the Code of Conduct Office who regularly reports these activities to both the Federal and Provincial Governments in transparency, in accordance with the legal requirements to do so.

Openness

At Bruce Power, we are dedicated to connecting with the community in an open, transparent and meaningful way. We are committed to conducting business ethically, respectfully, safely and with professionalism at all times. Our company values guide Bruce Power's communications while respecting the bounds of commercial confidentiality and disclosure obligations of its listed partners. Bruce Power strives to maintain a positive working relationship with those who have an interest in our business. We are committed to

open communication with community members, Indigenous communities and other stakeholders, including local residents, government representatives, charities, service clubs, schools and students.

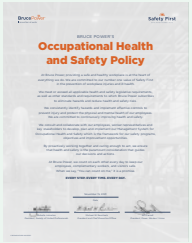
Occupational Health and Safety

Safety is our number one value. It means that safety is at the forefront of all we do at Bruce Power – it's a foundation we have built over the last two decades, and it's why we're always applying best practices, innovating, and learning from leading-edge research.

In 2022, we continued to focus on our Industrial Safety Accident Rate (ISAR) for utility and contract employees seeing a slight rise from 0.03 to 0.07 for the utility rate while seeing no change in the contractor rate which remained 0.0 in 2022.

Also in 2022, Bruce Power aligned with Industry to shift from basing safety performance on recordable injuries (ISAR), to focusing on a new safety classification model that focuses on serious injury and fatality prevention. This approach places emphasis on the risks faced by employees that could lead to serious, life-altering or life-ending events rather than lagging indicators of injury counts. In 2023, Bruce Power will adopt Severe Injury Rate (SIR) as the corporate metric for safety performance. Initiatives continue site wide to build on the foundation of a risk-based approach to hazard recognition and mitigation and serious injuries and fatalities (SIF) prevention.

Bruce Power's commitment to continually improve our safety culture is unwavering and is strategically learning from potentially serious events in an effort to build capacity into our systems. This is done through our Operating Experience (OPEX) process that looks at events on site and in the industry in general. By proactively working together, we ensure that health and safety is the paramount consideration that guides our decisions and actions. We look forward to learning from past experiences and consistently achieving the highest safety standards.


Occupational Health and Safety Policy

Our Health & Safety Policy is availble at brucepower.com[10]

Emergency Preparedness

Bruce Power is prepared for all types of possible emergency events, including the highly unlikely event of a nuclear emergency. This is known as an 'all hazards' approach to emergency planning. While emergency preparedness is part of Bruce Power's Operating License for its generating facilities, Bruce Power recognizes the importance of maintaining a robust and multi-faceted emergency response program as part of its number one value of Safety First as well as social responsibility.

Bruce Power's emergency response program includes complement staff on site (who are on site 24 hours a day, seven days a week), on-call (available 24/7 and can be operational within 90 minutes) and call-in staff who are available to support both the site and the province/ municipality during an emergency.

The effectiveness of Bruce Power's emergency response program is continuously evaluated through a series of drills and exercises. Every year, the company's Emergency Response Organization undertakes over 50 drills and at least one major exercise, which is also evaluated by the Canadian Nuclear Safety Commission (CNSC). In addition, the CNSC carry out routine inspections to ensure the emergency management program meets all regulatory requirements (REGDOC-2.10.1). The CNSC has consistently rated Bruce Power's emergency response capabilities as fully satisfactory.

Since 2012, every three years, Bruce Power organizes and runs a large- scale nuclear emergency exercise, which includes internal and external stakeholder participation (federal, provincial and municipal agencies) to test an integrated response to the Provincial Nuclear Emergency Response Plan[8]. The most recent provincial exercise was Exercise Huron Endeavour which was a 3-day exercise involving many internal and external stakeholders including Federal, Provincial and Municipal emergency responders. The exercise was designed to test the interoperability, co-ordination, command and control as well as communications between the various response organizations. All tier 1 objectives for the exercise were achieved. Bruce Power has established succession planning for on call Emergency Response Organization (ERO) that allows rotations of the Emergency Management Centre (EMC) positions as a development opportunity for high performers within Bruce Power. In 2022, there were 21 new on call ERO members trained and qualified.

Be Prepared Grey Bruce Huron

Bruce Power recognizes the importance of community members being prepared, and nearly a decade ago in collaboration with Bruce, Grey, and Huron County the education resource Be Prepared Grey Bruce Huron[9] was created. This resource serves as a central point for all community members to find out information on how to be prepared for all types of emergent events.

Products and Services

Our efforts and initiatives outlined in the sections related to Procurement, Supplier Engagement and Economic Development help to support the following UN Sustainable Development Goals:

Indigenous Procurement Policy

Bruce Power is proud to be recognized as a Procurement Champion and awarded Progressive Aboriginal Relations (PAR) Gold certification through the Canadian Council for Aboriginal Business (CCAB). We are committed to working with local Indigenous communities to define objectives and targets that will increase participation in contracting and procurement opportunities and developing concrete mechanisms in support of those objectives. Bruce Power's Indigenous Procurement Policy[11] supports the ability to ensure a meaningful, measurable impact on contracting and procurement opportunities for local Indigenous companies as well as greater opportunities for regional and national Indigenous companies.

In June 2017, Bruce Power created the Indigenous Relations Supplier Network (IRSN)[12] as part of our commitment to ensure local Indigenous communities are able to participate fully in the business development, procurement and economic activities taking place on the Bruce Power site. The IRSN is committed to expanding upon our goals to foster meaningful relationships with each community while increasing local First Nations and Métis employment through targeted education and training programs. The network, working in collaboration with Indigenous communities, will include a certification component that will be used to support future contracting opportunities to be implemented in 2022.

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
% of Services and Materials Sourced from Suppliers in the Indigenous Relations Supplier Network	See Methodology	61.5%	Disclosure	59%	≥ 65%	62%
% Services and Materials Spent in Ontario	GRI-203-2, GRI-201-1	85.9%	Disclosure	85.2%	≥ 88%	82.6%
% Services and Materials Spent in Canada	GRI-203-2	92%	Disclosure	92.1%	≥ 90%	90.6%

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Our Indigenous Procurement Policy outlines parameters for Indigenous-owned and percentage employed suppliers for our Strategic and Preferred Suppliers. Request for Proposal (RFP) scoring criteria to make Indigenous businesses more competitive and scoring guidelines gives points to businesses that are Indigenous owned and operated with a focus on the PAR pillars. In conjunction with this approach, Bruce Power uses the IRSN as a conduit to further develop relationships and business opportunities for Indigenous owned businesses and the supplier community. The end goal beyond business development is to find creative ways to get more Indigenous suppliers working for Bruce Power through the supplier base, as partners, sub-contractors etc.

Partnership with Makwa-Cahill

Leveraging procurement objectives and the IRSN mandate, Bruce Power signed a supplier agreement with Makwa-Cahill in 2021. This new partnership is focused on industry fabrication and other strategic opportunities in the energy sector.

Based in Owen Sound, the Indigenous-owned venture will undertake fabrication activities for Bruce Power, while creating employment, training and skill development opportunities for local Indigenous communities.

Makwa Development Corp., which is owned by Nawash residents, joined forces with Cahill Constructors Ltd., one of the largest multi-disciplinary construction and fabrication companies in Canada, to create Makwa-Cahill.

Bruce Power has committed to a development plan with Makwa-Cahill and eSupply Canada. This includes a right of first refusal on Centre of Site projects for Makwa-Cahill and priority procurement with eSupply Canada. This has resulted in Purchase Orders (POs) being issued to Makwa-Cahill for Construction services work, Radiation Protection Services and look ahead projects for Makwa-Cahill. Bruce Power will continue to work closely with Makwa on their development plans to move into more complex construction work on site with their partner Cahill, as well as their continued support on the NextGen organization and any further potential opportunities. Makwa's development is tracked closely by SVP Jennifer Edey and CEO Mike Rencheck.

Economic Development

In 2016, Bruce Power and the County of Bruce established a regional 'Nuclear Economic Development and Innovation Initiative' to ensure local communities share in the economic benefits generated by Bruce Power's multi-year Life Extension program. In 2020, this initiative evolved into the Clean Energy Frontier Program[13] funded by Bruce Power and Bruce County through the Nuclear Innovation Institute. Bruce, Grey and Huron counties have formally endorsed the program and a multi-stakeholder Advisory Committee has been established to bring together leaders and organizations from across the region to support investment opportunities and build on existing strengths towards a robust, net-zero economy.

The Clean Energy Frontier Program aims to advance economic development and innovation in the region and to build on the momentum underway by assisting clean energy companies in locating to the area.

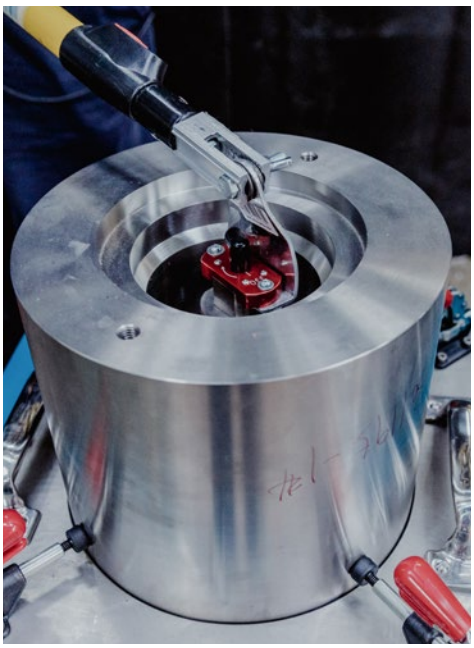
The number of major suppliers in Bruce, Grey and Huron counties has grown from 13 in 2016 to more than 60 in 2023 and the Clean Energy Frontier is now one of the more successful non-urban regions in Canada as measured by the size of its economy, average income levels and growth rates.

Bruce Power's annual operational spending boosts provincial gross domestic product (GDP) by an estimated $3.5 billion and adding in induced economic effects, the company contributes over $4 billion annually to provincial GDP with more than 90 per cent of the company's supply chain spending occurring in Ontario.

The nuclear energy sector and Bruce Power specifically, is a major contributor to the success of the regional economy and there are many large-scale initiatives underway and being considered for the region that will provide a solid economic foundation for the future while helping Ontario and Canada address its climate change objectives.

One of those initiatives is the Nuclear Sector Sustainability and Growth Study currently underway. This study is comparable to a business retention and expansion study (BR&E), focusing on the nuclear sector across Bruce, Grey and Huron counties. A report is being drafted and will compile common themes from one-on-one interviews as well as additional insight from a roundtable discussion of top suppliers. A detailed report is expected to be finalized by the end of March 2023 and it is anticipated the full report will contain data and opportunities for our local municipalities/economic development experts to consider while building strategic and community plans. Based on the high level and early findings, it is predicted the report will have a focus on workforce development, training opportunities and youth engagement.


BrucePower



Isotopes and Business Development

Bruce Power does more than supply 30 per cent of the electricity used by Ontario's families and businesses.

Medical isotopes supplied by Bruce Power are vital resources to the medical community, and the company continues to seek ways to expand the types of isotopes it produces. The sterilization of single-use medical devices using Cobalt-60 is one of the key factors that make the modern health system possible. These items touch on all aspects of health care. Early in 2022, a first of its kind Isotope Production System was installed with the ability to produce Lutetium-177. This innovative system will offer unprecedented capacity of radiopharmaceuticals and support Ontario in establishing it as a global hub for medical isotopes. Looking ahead to the future, Bruce Power has entered into a Memorandum of Understanding (MOU) with Boston Scientific to explore the feasibility of producing cancer-fighting Yttrium-90 (Y-90) in its reactors.

By joining forces with the health-care sector and research facilities, nuclear energy producers like Bruce Power can continue delivering life- saving medical isotopes to hospitals around the world — improving the quality of life of millions of people in the process.

Cobalt-60 and Lutetium-177

Four of Bruce Power's reactors produce Cobalt-60, an isotope which sterilizes one time use medical devices and treats complex forms of cancer – including brain tumors – through non-invasive procedures.

Lutetium-177, produced in nuclear reactors, is used in targeted radionuclide therapy to treat neuroendocrine tumors and prostate cancer. This innovative targeted therapy destroys cancer cells while leaving healthy cells unaffected.

How is Lutetium-177 produced?

Lutetium-177 is produced by irradiating Ytterbium-176. The process involves placing Ytterbium-176 source material in special sealed containers that are then conveyed into one of the Bruce Power reactors using the proprietary Isotope Production System (IPS). The IPS was designed and manufactured in Ontario by Bruce Power's partner IsoGen. The resulting Lutetium-177 is then sent for further processing into highly pure pharmaceutical grade Lutetium-177 for subsequent distribution to health-care facilities worldwide.

Why does Bruce Power want to produce isotopes?

Many research reactors are closing or have reached their end of life. With Bruce Power's life extension through to 2064, it provides long term, reliable supply potential for medical isotopes, leveraging the existing infrastructure at the Bruce Power site. The IPS is a versatile system that can be installed on other Bruce Power units and has the potential to produce other medical isotopes. This flexibility allows Bruce Power to adjust to support the medical community as it innovates in the future.

Bruce Power and Isogen issued an Expression of Interest (EOI)[14] in March of 2022 to solicit information and market opportunities from companies interested in producing medical isotopes at Bruce Power. The EOI is intended to be a first step in securing long-term isotope supply agreements. It is intended to help both Bruce Power and Isogen understand isotope demand and gather information that could be used in planning around future IPS functionality and investments in opportunities such as Y-90 production.

The Saugeen Ojibway Nation (SON) is also a partner with Bruce Power on the IPS initiative, and together they have created "Gamzook'aamin aakoziwin" which translates to "We are teaming up on the sickness."

SON and Bruce Power have been collaborating on this initiative sine 2019 including jointly marketing new isotopes in support of the global fight against cancer, while also working together to create new economic opportunities within the SON territory.

Bruce Power Net Zero Inc

Bruce Power Net Zero Inc. is focused on unlocking the potential of other complementary technologies to nuclear including storage, renewables, hydrogen, and electrified transportation to achieve a Net Zero future. Bruce Power Net Zero Inc. also operates Huron Wind, a 9-Megawatt wind farm located in Tiverton. Huron Wind was the first commercial wind farm in Ontario. Bruce Power Net Zero Inc. is owned jointly by TC Energy and OMERS.

Bruce Power Net Zero Inc. Initiatives

Hydrogen

Bruce Power, and the potential for future hydrogen production from nuclear power, was recognized in Ontario's Low-Carbon Hydrogen Strategy, which was released in April 2022. Non-emitting nuclear generation provides a significant competitive advantage for the Province of Ontario in developing a low-carbon hydrogen economy and Bruce Power's Project 2030 enables that opportunity.

Bruce Power signed a Memorandum of Understanding with companies within the Clean Energy Frontier region of Bruce, Grey and Huron counties – Bruce Power Net Zero Inc., Greenfield Global, Hydrogen Optimized and Hensall Co-op to undertake a feasibility study to determine opportunities for hydrogen production using this optimized output enabled by Project 2030.

As the demand for low-carbon hydrogen grows over the next decade, Bruce Power could be positioned to provide an increasing supply of both clean electricity and low-carbon hydrogen to meet the changing needs of Ontarians throughout the Clean Energy Transition. Bruce Power is unlocking the potential of using optimized output generated from Project 2030 and will be able to optimize its supply of both clean electricity and hydrogen based on the market conditions and demand for both products over the coming decades.

Clean Energy Credits for Purchase

As a leading producer of carbon-free electricity for the province, Bruce Power now offers clean energy credits (CECs) to help Ontario corporate electricity customers reach their environmental and sustainability goals.

Clean energy credits are electronic credits that businesses can purchase from Ontario clean energy generators, including nuclear operators, to offset carbon emissions from their operations in order to achieve voluntary environmental goals.

Clean Fuel Production in Bruce County

Bruce Power Net Zero Inc (BPNZ) has teamed with Canadian Nuclear Laboratories (CNL), Sunlit Strategic Inc., Expander Energy Inc., and Nuclear Promise X (NPX). The companies will collaborate to explore the feasibility of a project to produce clean hydrogen and low carbon intensity synthetic diesel and jet fuel from biomass using nuclear energy, utilizing Biomass Electrolysis to Liquids™ (BETL™) technology, which will be located in the Bruce County region.

Specifically, the team is proposing to deploy a Biomass Electrolysis to Liquids (BETL™) plant that will produce low carbon intensity synthetic diesel (Bio-SynDiesel™) from biomass using nuclear energy. With the proposal, opportunities for expansion around low carbon intensity synthetic diesel from the proposed BETL™ has several potential uses in the Clean Energy Frontier region, and beyond, including:

Clean Energy Credits (CECs)

Energy is generated from clean, emission-free sources such as nuclear, hydro, wind or solar

That power is supplied to the grid. Each MWh is eligible to be sold as a CEC.

Companies looking to offset their emissions can purchase the CEC and register it with the Ontario CEC Registry which facilitates the CEC transfer.

Proceeds from the sale of CECs will go into a Future Clean Energy Fund (FCEF) which will be used to keep electricity costs down and to fund the construction of clean electricity projects in Ontario.

- For standby diesel generators at Bruce Power
- In the local diesel market, which includes the Canadian Steamship Lines from regional ports.
- Expanding to provide Sustainable Aviation Fuel (SAF) to the Canadian airline industry.

Working with our Suppliers

At Bruce Power, we take great pride in the relationships and collaborative partnerships we have with our suppliers, who are an integral part of our business. We work very closely to make sure they understand and are aligned with our core values. Responsible sourcing including local sourcing is a key focus and incorporated into our agreements with new suppliers. More than 60 suppliers have established offices in Bruce, Grey and Huron counties (for more details, go to the Economic Development and Innovation Initiative[15], and the Working with Bruce Power[16] sections of our website). Based on the scoring of the supply chain process, suppliers with a local presence, score higher than those with a provincial, and then national presence. The scoring process also gives consideration to companies which have documented local Indigenous components of their business (which again scores higher than at the provincial and national levels). The current scorecard in use will be amended to include a Diversity, Equity & Inclusion component as a critical trait within the scoring criteria.

Supplier Engagement

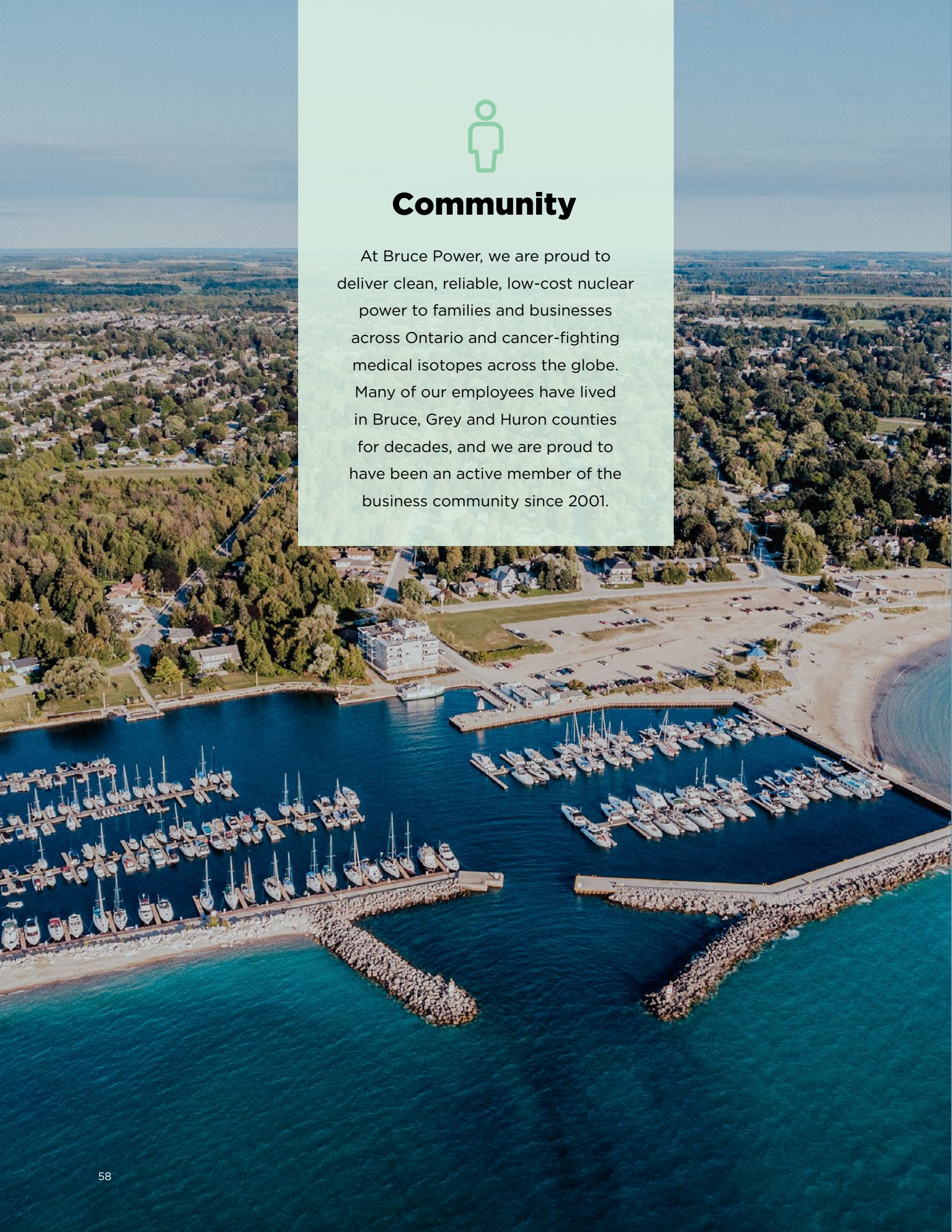
At the RFP evaluation phase, Supply Chain will take into consideration a variety of ESG factors, which are weighted according to the nature of the procurement at issue. Bruce Power expects its suppliers to support and respect human rights, Indigenous Relations, Diversity, Equity & Inclusion and provide equal opportunity within the workplace. Suppliers shall ensure all labour practices, wage payments and benefits comply with applicable laws and regulations. Most suppliers are required to register in ISNetworld and maintain the requested information. ISNetworld includes safety related metrics and grading and includes an environmental questionnaire (including questions such as ISO 14001 certification, waste, and spill management plans, etc.). The environmental questionnaire contributes to the supplier's overall rating in ISNetworld. Selected sub-contractors must in most cases secure local economic content and commitment to encourage local economic development and growth of the local communities. Every one of Bruce Power's selected suppliers is required to complete the Bruce Power Code of Conduct training once they have signed an agreement.

Uranium Fuel Sourcing

In 2021 Bruce Power worked to update their Uranium Contract. The uranium contract restricts origins to Canada, Australia, United States and Kazakhstan based on the known environmental, social, and regulatory standards in those countries. Bruce Power will only consider accepting material from other jurisdictions subject to confirming the environmental, social, and regulatory standards in such jurisdictions ensure the do no significant harm principle is met.

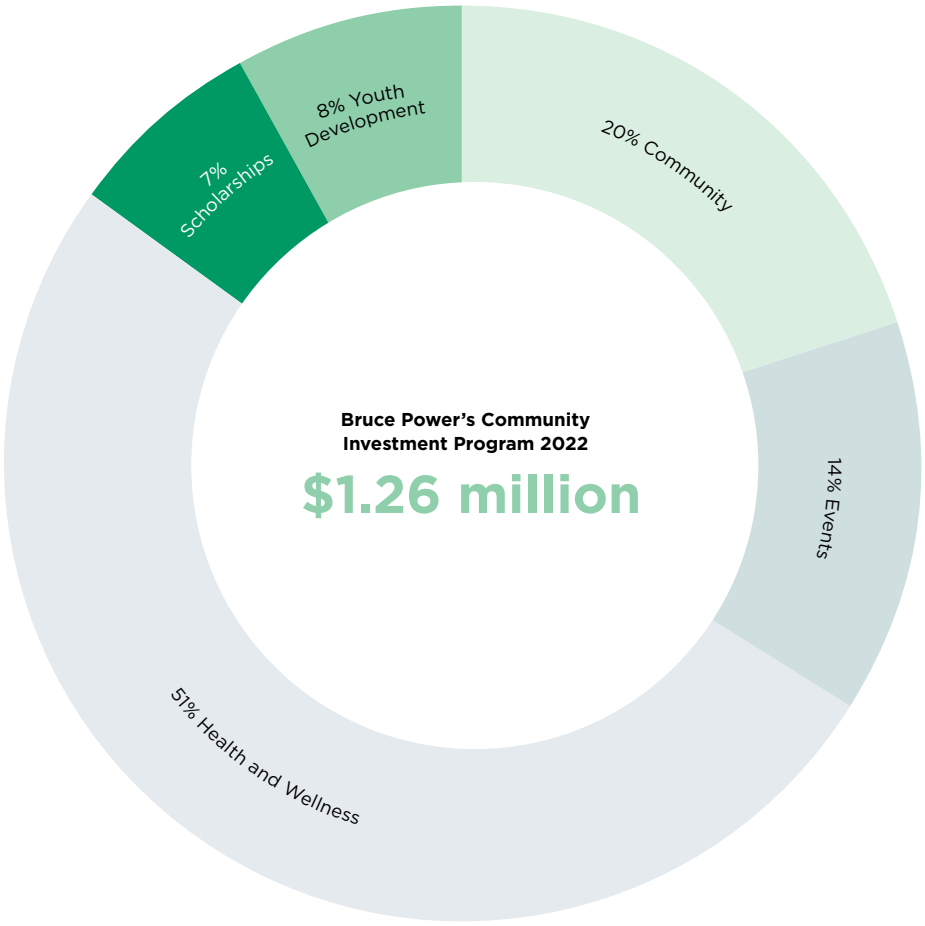
Bruce Power and Cameco recently extended their long-term exclusive nuclear fuel supply arrangement[17] for an additional 10 years through to 2040. This inter-provincial collaboration secures decades of Canadian-made nuclear energy that is essential to building a path to Net-Zero, while creating good jobs and benefitting ratepayers. With the continuously changing geopolitical landscape and the potential impacts this has on the global energy market ensuring a stable supply of uranium fuel is critical to our business.

You can learn more about Cameco's Sustainability and ESG program by visiting www.cameco.com[18].



Community

At Bruce Power, we are proud to deliver clean, reliable, low-cost nuclear power to families and businesses across Ontario and cancer-fighting medical isotopes across the globe. Many of our employees have lived in Bruce, Grey and Huron counties for decades, and we are proud to have been an active member of the business community since 2001.



We have the privilege to contribute to the community and encourage our partners to do the same.

Bruce Power invests more than $2 million annually to support initiatives that focus on health and wellness, youth development, minimizing environmental impacts, community engagement, and Indigenous youth development, cultural, recreational and educational programming.

KPI	Standard guidance is taken from	2020	2021 Target	2021 Acutal	2022 Target	2022 Actual
Total Value of Sponsorships & Donations	See Methodology	$4,000,000	≥ $2,500,000	$2,060,000	≥ $2,500,000	$2,060,000

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Our efforts and initiatives outlined in the Community section help to support the following UN Sustainable Development Goals:

Interested Parties

Our identification of interested parties is guided through our ISO 14001 system and is defined as someone who has an interest in the performance of the business and can influence objectives. Bruce Power interested parties include, but are not limited to workers, pensioners, residents of communities surrounding the Bruce Power site, Indigenous Peoples, local and regional governments, organized labour and provincial building trades, media, economic interest groups, provincial and federal government decision-makers, government representatives, charities, service clubs, schools, and students.

Bruce Power consistently commissions Ipsos to conduct independent polling to understand and track attitudes and opinions from residents in Bruce, Grey, and Huron counties. The polling looks at a number of topics and issues, including support for nuclear, familiarity and impressions of Bruce Power, communication with residents, community outreach, and awareness and interest in specific topics related to Bruce Power's operations.

Polling in February 2022 found nearly all respondents (94 per cent) continue to have confidence that the nuclear facility operates safely, feel that Bruce Power is involved with the community in a positive way (92 per cent), and agree Bruce Power is a good community citizen (92 per cent). Eight in 10 residents feel familiar with Bruce Power and 86 per cent of those residents have a favourable impression, saying they feel 'excellent,' 'very good' or 'good' about the company.

Community issues identified

Through our Materiality Assessment, we identified key areas important to the community that we continue to work collaboratively to address.

Economic and employment issues

The Clean Energy Frontier Region of Bruce, Grey and Huron counties, is home to Bruce Power, more than 60 nuclear companies, the Nuclear Innovation Institute (NII) and key electricity transmission lines that are connected to the fastest growing parts of the province, all bolstered by strong community support.

Given the company's multi-billion-dollar investment program, and a strong focus on establishing a local presence for its nuclear supply chain, Bruce Power has committed to bringing good jobs and economic development to the region, while establishing a local hub to lead Canada's next generation of nuclear technology.

Health care/medical professional shortage

Over the last 10 years, Bruce Power has invested approximately $1 million and partnered with the Municipalities of Saugeen Shores and Kincardine in efforts to attract physicians to our communities to ensure excellent health care for our residents and that local emergency departments remain open. We acknowledge and congratulate the communities for their commitment to health care and investments in local infrastructure including medical clinics.

Given the Municipality of Kincardine's decision in 2020 to move toward a different model for physician recruitment, we felt it is a natural time to draw our previous arrangement to a close and reassess the best way we can help attract physicians on a regional basis.

Physician and health-care worker recruitment is a continuous cycle in an ever-changing landscape, and we will continue supporting local municipalities in their search for medical professionals. We remain committed to continuing to offer spousal employment when possible to assist with attracting incoming doctors. We also recognize that physicians need access to state-of-the-art facilities. For this reason, and aside from the Physician Recruitment Program, Bruce Power remains committed to investing in health care infrastructure.

Between 2019-2023, Bruce Power contributed $1.65 million to local hospital foundations with $250,000 each being

allocated to the Bruce Peninsula Health Services Foundation, the Saugeen Memorial Hospital Foundation, and the Owen Sound Regional Hospital Foundation; and $100,000 each to the Clinton Public Hospital Foundation, the Wingham District Hospital Foundation, Alexandra Marine & General Hospital Foundation, Walkerton & District Hospital Foundation, Meaford Hospital Foundation, Chesley & District Health Services Foundation, Centre Grey Health Services Foundation, Durham Hospital Foundation and Hanover & District Hospital Foundation.

In 2022, Bruce Power committed an additional $1.5 million to the Kincardine and Community Health Care Foundation in support of its Hospital Redevelopment Campaign, with an additional $500,000 committed from Bruce Power suppliers.

These commitments continue to support the efforts of the foundations to provide the latest equipment and services while recognizing the important work and services provided by local hospitals to residents and visitors.

Increased cost of living and housing

In March 2022, Bruce Power wrote to The Honourable Ahmed Hussen Minister of Housing and Diversity and Inclusion to highlight concerns over the growing housing affordability problem in rural communities across Canada and, in particular, Grey, Bruce and Huron counties. The letter pointed out the federal government had previously referenced the establishment of an affordable housing fund for rural and Indigenous communities, and we affirmed our belief there is an opportunity to accelerate this program. The letter noted that as a private-sector organization Bruce Power is creating positive economic activity and tax revenues and the re-investment of some of these proceeds in critical areas such as this is important to rural and Indigenous communities.

Given the government's clear direction to increase funding to address this issue, we requested the government accelerate these policy and financial commitments to address rural housing affordability by partnering with our region to implement these investments beginning in Budget 2022 to our local communities in Bruce, Grey, and Huron counties in both the immediate and longer term.

In partnership with the Nuclear Innovation Institute's Clean Energy Frontier program, Bruce Power is working collaboratively with Bruce, Grey and Huron counties to better understand the housing challenges and how we can support access to housing. Representatives from Bruce Power and the Nuclear Innovation Institute met with staff for the Associate Minister of Housing in late 2022. After sharing background and noting the concern due to lack of housing, the Minister's office suggested that the Clean Energy Frontier program continue to engage with their office regarding housing needs across the region. They were particularly interested in any insights that could be produced as part of the program's ongoing Nuclear Sector Sustainability and Growth Study.

The annual Clean Energy Frontier Summit, hosted by Bruce Power, Bruce County, and the Nuclear Innovation Institute, brought together elected officials from Bruce, Grey, Huron and local Indigenous communities, nuclear sector supply chain representatives, education sector representatives, municipal staff, and economic development stakeholders to share strategies toward sustainable growth. During the Summit, roundtable discussions considered housing and the consensus is there is a need to advocate together for funding from all levels of government for housing; encourage municipalities to add infrastructure capacity to proactively support growth; review municipal processes and set best practices/higher standards of service and streamline approvals and reduce red tape.

Bruce Power Supplier Sponsorship

We are fortunate to have supplier partners who share our commitment to the communities in which we live, work and play. In 2022, 40 members of Bruce Power's supply chain donated over $620,000 to Bruce Power's supplier sponsorship package, in support of non-profit organizations that focus on Indigenous youth, health and wellness organizations, Canadian veterans and local Legions, food banks, and hospital foundations.

Nuclear Innovation Institute (NII)

Bruce Power continues to partner with NII Explore to support their inclusive, accessible programming and initiatives across multiple platforms in the areas of science, technology, engineering, and math as well as nuclear-related learning. NII Explore is target primarily at students living in or near the Grey, Bruce, Huron region and local Indigenous communities.

In 2022, Bruce Power was a major sponsor of the Nuclear Innovation Institute's inaugural SWERVE festival, which saw more than 3,500 visitors to the free public festival which featured STEM exhibits for all ages, including virtual reality experiences, electric vehicle demonstrations, robots, advanced 3D printing and more.

To learn more about Bruce Power's partnership with the Nuclear Innovation Institute (NII), visit www.nuclearinnovationinstitute.ca[19]

Methodology

The purpose of the methodology section is to provide open and transparent information on the boundaries of how each Key Performance Indicator (KPI) within the tables of this report are calculated. It is important to note that as the ESG reporting requirements and best practices continue to evolve and become more standardized; we anticipate that there may come a time when calculation adjustments may need to be made. Any adjustments will be communicated in future reporting.

At Bruce Power we have 12 main areas of materiality with corporate governance being our overarching structure and the 11 remaining items falling within each of our four focus areas. We have developed a subset of ESG KPIs, and targets based on guidance from the United Nations Sustainable Development Goals (UN SDGs), Sustainability Accounting Standards Board (SASB), Task Force on Climate Financial Disclosures (TCFD) and the Global Reporting Initiative (GRI). It is important to note that at this time Bruce Power is not claiming full conformance to any of the standards above rather has used each standard to guide disclosure based on materiality. Outlined below is how we are currently calculating performance and progress for each of our ESG KPIs.

Scope 1 and Scope 2 Greenhouse Gas Emissions (tCO_2e)

Approach and Boundary

Bruce Power's approach to GHG emissions quantification approach was developed to align with the principles and guidance provided in The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard (GHG Protocol) developed by The World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

Bruce Power utilizes the Operational Control Approach to set greenhouse gas (GHG) inventory organizational boundaries. These boundaries include facilities where Bruce Power has, at least, a controlling interest from an operational perspective or at best, the facility is owned entirely by Bruce Power. In cases where Bruce Power has operational control but does not wholly own facilities, these facilities will be included in the inventory.

Direct and indirect GHG emissions are included in the scope of the Bruce Power's GHG Inventory:

Scope 1: Direct GHG emissions – Direct GHG emissions occur from sources that are owned or controlled by Bruce Power including stationary combustion, mobile combustion, process emissions and fugitive emissions.

Scope 2: Indirect GHG emissions – Indirect GHG emissions occur from the generation of purchased electricity, steam and heating/cooling consumed by Bruce Power. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company.

The GHG inventory base year is used as a basis for setting and tracking progress towards GHG targets. Based on a review of Bruce Power's scope 1 and scope 2 GHG emissions between 2015 and 2020, a base year of 2019 was selected as the emissions during that year were considered to be normal following the removal of the steam plant.

The following cases shall trigger recalculation of base year emissions:

- Structural changes in the reporting organization (i.e. change in ownership or control of emissions generating activities, outsourcing and insourcing of emitting activities).
- Changes in calculation methodology or improvements in the accuracy of emissions factors or activity that would result in a significant (5 % or more) change in emissions.

The inventory base year is not recalculated for organic growth/decline, out/in-sourcing activities previously accounted for in different scope.

Emission Factor References

Scope 1 emissions: Canada's Greenhouse Gas Quantification Requirements, Intergovernmental Panel on Climate Change Assessment Report, US EPAs Mandatory Greenhouse Gas Reporting Rule 40 CFR.

Scope 2 emissions: National Inventory Report (NIR) for Canada, The Climate Registry's Default Emission Factors, Canada's Greenhouse Gas Quantification Requirements.

Net Greenhouse Gas Emissions Scope 1 and 2, Carbon Offsets Retired (tCO_2e)

Boundary

Net GHG Emissions refers to total Scope 1 and Scope 2 emissions minus any retired carbon offsets each year. Annual emission reduction targets are set against a 2019 baseline as part of Bruce Power's Net Zero Strategy. If an emission reduction target is not met by operational initiatives each year, a specific number of purchased carbon offsets are retired to make up the difference and ensure that the target is met.

Scope 3 Greenhouse Gas Emissions (tCO_2e)

Approach and Boundary

Scope 3 emissions are a consequence of the activities of Bruce Power, but occur from sources not owned or controlled by Bruce Power. Of the 15 categories of Scope 3 emissions defined by the GHG Protocol, Bruce Power tracks 12 that are relevant to operations:

- Purchased Good and Services
- Capital Goods
- Fuel and Energy related activities (not included in Scope 1 or 2)
- Upstream Transportation
- Waste Generated in Operations
- Business Travel
- Employee Commuting
- Downstream Transportation and Distribution (medical isotopes)
- Processing of Sold Products (medical isotopes)
- Use of Sold Products (medical isotopes)
- End of Life treatment of sold products (medical isotopes)
- Downstream leased assets (buildings)

Currently, Bruce Power is estimating a large proportion of Scope 3 emissions using the spend-based method, which takes economic value of goods/services and multiplies by an average emission factor. As Scope 3 emission categories are more difficult for organizations to quantify than Scope 1 or 2 emissions due to the wide range of sources, categories, vendors, etc., emissions estimates vary depending on the data source utilized.

Emission Factor References

Quantis Greenhouse Gas Protocol Scope 3 Screening Tool and Carbon Offset Emission Factors Handbook

Carbon Offset Emission Factors Handbook (alberta.ca)

Greenhouse gas reporting: conversion factors 2019 - GOV.UK (www.gov.uk)

GHG Emission Factors Hub | US EPA

National Inventory Report (NIR) for Canada, 2021

Carbon Removal via Tree Planting (tCO_2e)

Boundary

Bruce Power's Carbon Removal via Tree Planting Calculation is based on the guidelines outlined within the Tree Canada Foundation document entitled "What Trees can do to Reduce CO_2" (March 1999). Within this document, two calculations for Carbon Removal are offered as an estimate of how to calculate tree planting efforts: Lifetime Carbon Removal and Annual Carbon Removal.

Bruce Power uses the Lifetime Carbon Removal calculation for rural planting based on the Tree Canada Foundation Document.

Calculation

Number of trees planted = annual number of trees planted funded by Bruce Power * 95 per cent (this incorporates the assumption of a 95 per cent survival rate).

Lifetime carbon removal = Number of trees planted/4.4*1*44/12

Note that 44/12 is the ratio of the mass of a CO_2 molecule to the mass of carbon atom in each CO_2 molecule

Assumptions

Only the number of trees planted are considered in this calculation, not the type of tree.

We do not visually verify that trees have been planted, but rather trust the confirmation of the organizations that purchased trees with Bruce Power funding.

We assume a survival rate of 95 per cent.

Process in Creating the Boundary

We recognize that there are multiple ways to approach the calculation of CO_2 removal via tree planting and that there is not one specific guidance document that is accepted globally. In the absence of a definitive requirement or guidance we are using a simple calculation to share our efforts in this space. We are not using tree planting as a certified carbon offset, but rather want to demonstrate that our effort for carbon removal has been happening for many years. We also want to lend continued support to the importance of tree planting in addition to officially credited offsets in the carbon removal dialogue.

References Built into this Calculation

Government of Canada (2021). Tree mortality. https://www.nrcan.gc.ca/climate-change/impacts-adaptations/climate-change-impacts-forests/forest-change-indicators/tree-mortality/17785

United Sates Department of Agriculture (2016). Urban Tree Mortality: A Primer on Demographic Approaches. https://www.fs.usda.gov/nrs/pubs/gtr/gtr_nrs158.pdf

Tree Canada Foundation (1999). What trees can do to reduce atmospheric CO_2.

Keystone 10 Million Trees Partnership (n.d.). http://www.tenmilliontrees.org/trees/

Urban Forestry Network (n.d.). http://urbanforestrynetwork.org/benefits/air%20quality.htm

Emissions Avoidance via Operation (tCO_2e) based on TWh

Previous Methodology

This methodology is applied to 2020 and 2021 data for this KPI.

Bruce Power's Avoided Emissions are based on the guidelines outlined within the working paper by the World Resources Institute, Estimating and Reporting the Comparative Emissions Impacts of Products. Within the GHG Protocol, the working paper offers a neutral framework for estimating and disclosing both positive and negative impacts. This calculation uses the "attributional estimation approach" which takes the difference in total life cycle GHG emissions between our company's product and the emissions of combined natural gas, an alternative product for the province of Ontario. Based on our electricity grid make up, natural gas would be the most logical choice of replacement in a situation where nuclear was not available to the grid. Lifecycle emissions are used from the Intergovernmental Panel on Climate Change Life Cycle Assessment 2014, the life cycle emissions for nuclear power includes Uranium mining, enrichment, and fuel fabrication, plant construction, use, decommissioning and long-term waste storage.

It is assumed that annually the actual TWh output that Bruce Power generates would be replaced in totality by the combined natural gas. The equation looks at in a normal year what the emissions would be from a lifecycle standpoint from nuclear, and then what they would be alternatively from combined natural gas and subtracts the nuclear from the combined natural gas to create the avoided emissions value.

Bruce Power acknowledges that this approach ignores market mediated effects, and that this calculation is relatively simple estimation approach.

It is recognized that there are varying degrees in which a company can calculate the emissions avoidance. Results can vary based on the scope of each study. For example, one study could define lifecycle, and include waste management and treatment in scope while some exclude waste (World Nuclear Organization (July 2011). Comparison of Lifecycle Greenhouse Gas emissions of Various Electricity Generation Sources). To not over inflate the benefit of avoided emissions, the calculation created for Bruce Power uses combined natural gas which has lower lifecycle emissions than a traditional natural gas value by nearly 40 per cent.

Current Methodology

This methodology is applied to 2022 data for this KPI.

The quantification of GHG avoidance associated with Bruce Power's annual generation, associated with zero direct emissions, considers the annual TWh generated by the Bruce Power site, excluding deemed generation.

Since the current IESO forecast assumes any increase in electricity demand is met by natural gas electricity generation, this annual output associated with zero direct emissions, is compared with the amount of GHG emissions that would result from the same power output being provided from natural gas electricity generation in the Ontario grid, instead of nuclear.

Data is sourced annually from Government of Canada's National Inventory Report (NIR) to calculate the greenhouse gas intensity of electricity generated from natural gas in Ontario for this comparison. The annual output of Bruce Power (TWh) is then multiplied by the greenhouse gas intensity of natural gas electricity generation (g CO_2e/kWh) to determine the annual amount of greenhouse gas emissions avoided via electricity generated by Bruce Power.

It is of note that the NIR data represents direct emissions from the generation plant only and does not include wider lifecycle emissions such as extraction, processing, and fuel transport, which results in inherently higher generation intensity values

Total Value of Environment & Sustainability Fund Allocated

Boundary

The Environment & Sustainability (E&S) fund typically contains a $400,000 budget, distributed amongst long term partnership agreements, sponsorship, and general operating and maintenance of the external facing Environment & Sustainability Program initiatives. Depending on the year, the amount available to be distributed to E&S fund applicants can vary.

Applicants to Bruce Power's E&S fund submit funding applications via the Sponsorium platform, linked from the Bruce Power website. Submitted applications are ranked on the Sponsorium platform, as well as evaluated internally by the E&S fund program lead and peers from the Environment & Sustainability Division, on applicability and alignment to the fund objectives. Funding recommendations are then presented to Bruce Power's Environment and Sustainability Oversight Committee for ratification.

Total Value Assigned to Carbon Offset Accelerator Fund

Boundary

The Carbon Offset Coalition, introduced by Bruce Power in 2021 under partnership with the Nuclear Innovation Institute, aimed to support Net Zero initiatives, and nature-based solutions that will both remove and offset carbon emissions. A $1 million Carbon Offset Accelerator Fund was also introduced by Bruce Power, focusing on supporting the projects identified through the Carbon Offset Coalition.

Applicants submitted projects and initiatives via the Carbon Offset Coalition website (https://www.carbonoffsetcoalition.com). Applications were reviewed by members of the Nuclear Innovation Institute and members of the Environment & Sustainability Division and Bruce Power Net Zero Inc. and funding allocation recommendations were made.

Funding recommendations were then presented to and endorsed by Bruce Power's Environment and Sustainability Oversight Committee.

Volume of Conventional Waste Generated (MT) and Diversion Rate (%)

Boundary

A third-party vendor conducts a site review and conventional waste audit annually for Bruce Power. The annual Waste audit is conducted to achieve compliance with Ontario Regulation 102/94: Waste Audits and Waste Reduction Work Plans (Ontario Regulation 102/94) set by the Ministry of the Environment, Conservation and Parks (MECP).

During the conventional waste audit, the vendor weighs and analyzes a more than 24-hour sample of waste that consists of all the non-hazardous, solid waste generated from regular activities at the site, including waste destined for reuse, recycle, compost, and disposal. This is done to determine the amount, nature, and composition of the waste generated. The vendor also analyzes data on total conventional waste streams shipped off site by licensed waste haulers for the year. The results of the conventional waste audit are used to assess the site's waste diversion efforts as well as the capture rate (effectiveness) of the recycling and composting programs. The approved Waste Audit Report is posted on the Environment intranet homepage for all site employees to review and is filed annually into internal records.

Calculations

The diversion rate refers to the portion by weight of all material diverted from disposal to the total weight of all waste material generated, expressed as a percentage.

Net Water Consumption from Lake Huron (million cubic meters)

Boundary

Net consumption of Lake Water by Bruce Power is very small fraction of the total water taken (drawn) from the Lake Huron. Greater than 99.99% of Intake water is discharged back to the Lake (environment).

Drinking water is the only water that is consumed by Bruce Power. Demineralized water is also produced by Bruce Power using lake water, but majority is returned to the lake with the remainder returned to the atmosphere in the form of steam. The major opportunity/scope for Bruce Power is to minimize Domestic Water production via domestic water consumption enhancement/improvements.

Calculation

To calculate net water consumption, site-wide (Bruce A, Bruce B and Central site) sewage volumes are subtracted from site wide raw water usage volumes for domestic water and condensate make up (demineralized water). Although demineralized water is returned to the environment, it is included in this metric for conservatism.

Total water drawn from Lake Huron (million cubic meters)

Boundary and Calculation

Total water withdrawn from Lake Huron is calculated using the Permit to Take Water (PTTW) annual reports for Bruce A, Bruce B and Centre of Site. Each site has its own system to calculate / estimate daily intake volumes as approved by Ministry of Environment Conservation and Parks.

Total water discharged to Lake Huron (million cubic meters)

Boundary and Calculation

Total Bruce Power water discharge to Lake Huron is equal to total water intake minus net water consumption. The intake water is calculated using Permit to Take Water (PTTW) Annual Reports for Bruce A, Bruce B and Central Site. Each site has its own system to calculate / estimate daily intake volumes.

Bruce Power Environment Officers verify the PTTW data against PTTW limits and the reports submit to Ministry of Environment Conservation and Parks.

Dose to Public

The dose to public is calculated using guidance as per CSA N288.1. For full description of methodology please see the annual Bruce Power Environmental Protection report.

% of Women Relative to the Workforce

Boundary

This metric is the percentage of the workforce self-identified as women reported as part of Employment Equity annual reporting (WEIMS).

% of Visible Minorities Relative to the Workforce

Boundary

This metric is the percentage of the workforce self-identified as visible minorities reported as part of Employment Equity annual reporting (WEIMS).

Women Hired into Non-Traditional Roles

Boundary

This metric is reported and tracked confidentially through the Talent Management Team and comprised of data from Workday.

Women Promoted into Non-Traditional Roles

Boundary

This metric is reported and tracked confidentially through the Talent Management Team and comprised of data from Workday.

Visible Minorities Hired

Boundary

This metric is reported and tracked confidentially through the Talent Management Team and comprised of data from Workday based on self-identification of employees.

Industrial Safety Accident Rate (ISAR) Site

Boundary

A frequency rate based on the number of Lost Time Injuries for Bruce Power personnel per 200,000 hours worked. ISAR is sometimes referred to as the Lost Time Injury Rate.

Industrial Safety Accident Rate (ISAR) Contractors

Boundary

A frequency rate based on the number of Lost Time Injuries for Contractor personnel per 200,000 hours worked. ISAR is sometimes referred to as the Lost Time Injury Rate.

Fatality Rate — Employees

Boundary

A frequency rate based on the number of Fatalities for Bruce Power personnel per 200,000 hours worked

Fatality Rate — Contractors

Boundary

A frequency rate based on the number of Fatalities for Contractor personnel per 200,000 hours worked.

Emergency Preparedness — Annual Number of Drills/Response Exercises

Boundary

An annual drill/exercise schedule is prepared in the final quarter of the previous year. A draft drill/exercise schedule goes through various approvals before the final approval from the Senior Vice President Operational Services and Business Development. The annual drill and exercise program covers all required regulatory, qualification and proficiency improvement opportunities to ensure emergency response is maintained to a high standard at the Bruce Power site. This is typically in excess of 100 scheduled events. The drill and exercise program is fully funded by Bruce Power which on occasion also pays for the involvement of external subject matter experts to assist (e.g. Kinectrics).

The drills/exercises are tracked on a weekly basis and the drill/exercise program is managed by a dedicated resource in the Department (Drill/Exercise Developer).

% of Services and Materials Sourced from Suppliers in the Indigenous Relations Supplier Network

Boundary

This metric is derived from a summation of the amounts paid to suppliers. This data is collected from reporting tools managed by the Supply Chain Analytics Team. The supplier payment data is compiled from Bruce Power's Enterprise Asset Management System. Identifying markers for suppliers that are part of Bruce Power's IRSN are entered into Bruce Power's Enterprise Asset Management System and then reviewed and updated regularly by the responsible Supply Chain procurement personnel to capture changes in IRSN participation.

Calculation

% of services and materials sourced from suppliers in the IRSN = sum of the $ value of services and materials sourced from suppliers in the IRSN / sum of the $ value of services and materials sourced from all suppliers.

% Services and Materials Spent in Ontario

Boundary

This metric is derived from a summation of the amounts paid to suppliers. This data is collected from reporting tools managed by the Supply Chain Analytics Team. The supplier payment data is compiled from Bruce Power's Enterprise Asset Management System. Identifying markers for geography are input by the responsible Supply Chain procurement personnel.

Calculation

% of services and materials spent in Ontario = sum of the $ value of services and materials paid to suppliers in Ontario / sum of the $ value of services and materials paid to all suppliers.

% Services and Materials Spent in Canada

Boundary

This metric is derived from a summation of the amounts paid to suppliers. This data is collected from reporting tools managed by the Supply Chain Analytics Team. The supplier payment data is compiled from Bruce Power's Enterprise Asset Management System. Identifying markers for geography are input by the responsible Supply Chain procurement personnel.

Calculation

% of services and materials spent in Canada = sum of the $ value of services and materials paid to suppliers in Canada / sum of the $ value of services and materials paid to all suppliers.

Total Value of Sponsorships and Donations

Boundary

A guiding document BPET-09-16 spells out our philosophy and budget and social responsibility is one of our four core values. Bruce Power's Corporate Social Responsibility Program consists of five components, each with assigned budgets within Corporate Affairs in the approved Business Plan. Funds allocated for these may be adjusted depending on broader business needs.

Appendix

Environment

KPI	Standard guidance is taken from	2019 Baseline	2021 Target	2021 Actual	2022 Target	2022 Actual
Scope 1 GHG Emissions (tCO_2e)	IF-EU110a.1, GRI-305-1, TCFD	6,946	See Net GHG Emissions	7,813	See Net GHG Emissions	8,087
Scope 2 GHG Emissions (tCO_2e)	IF-EU110a.2, GRI-305-2, TCFDa	15,381	See Net GHG Emissions	14,201	See Net GHG Emissions	15,808
Carbon Offsets Retired (tCO_2e)	See Methodology	N/A	N/A	804	N/A	4,360
Net GHG Emissions (tCO_2e) — Scope 1, 2, RECs, Carbon Offsets		22,327	↓ 5% from 2019 baseline 21,211	21,210	↓ 12.5% from 2019 baseline 19,536	19,535
Scope 3 GHG Emissions ($MtCO_2e$)	See Methodology	0.88	N/A	N/A	N/A	0.83

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
Carbon Removal via Tree Planting (tCO_2e)	See Methodology	17,148	≥ 10,000	28,983	20,000	17,733
Emissions Avoidance via Operation (tCO_2e) based on TWh	See Methodology	20,726,400	19,200,000	20,310,220	17,173,875	17,997,309
Total Value of Environment & Sustainability Fund Allocated	See Methodology	$375,200	N/A	$320,000	$400,000	$400,000
Total Value Assigned to Carbon Offset Accelerator Fund in 2022	See Methodology	N/A	N/A	N/A	$ 1M	$ 1M
Volume of Conventional Waste Generated (MT)	GRI-306-2	1,827.5	Disclosure	2,051.4	Disclosure	2,604.1
Conventional Waste Diversion rate (%)	GRI-306-2	69.8%	70.0%	69.0%	71.0%	71.2%
Net Water Consumption from Lake Huron (million cubic meters)	GRI-303-3	2.2	≤ 2.3	2.1	≤ 2.3	2.0
Total Water Drawn from Lake Huron (million cubic meters)	GRI-303-3	9,409	Disclosure	8,637	Disclosure	8,940
Total Water Discharged to Lake Huron (million cubic meters)	GRI-303-3	9,406	Disclosure	8,634	Disclosure	8,937
Total Dose to Public	CSA N288.1	1.8 µSv/yr	<10 µSv/yr	1.6 µSv/yr	<10 µSv/yr	2.4 µSv/yr

** Bruce Power does not claim to conform to any of the standards identified; rather guidance has been taken from those standards identified. ESG Metrics have been chosen that reflect items material to our business. As noted, we have a larger subset of internal metrics and as our program mature, we will continue to add to the metrics that we*

People and Safety

KPI	Standard guidance is taken from	2019 Baseline	2021 Target	2021 Actual	2022 Target	2022 Actual
% of Women Relative to the Workforce	GRI- 405-1	21.4%	21.8%	21.8%	22.2%	21.8%
% of Visible Minorities Relative to the Workforce	GRI- 405-1	7.8%	8.0%	9.0%	9.2%	9.5%

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
Women Hired into Non-Traditional Roles	GRI- 405-1	24%	≥ 20%	34%	≥30%	32%
Women Promoted into Non-Traditional Roles	GRI- 405-1	26%	≥ 20%	32%	≥30%	26%
Visible Minorities Hired	GRI- 405-1	12%	≥ 12%	20%	≥ 20%	20%
Industrial Safety Accident Rate (ISAR) Site	IF-EU-320a.1	0.02	≤ 0.00	0.03	≤ 0.00	0.07
Industrial Safety Accident Rate (ISAR) Contractors	IF-EU-320a.1	0.08	≤ 0.00	0	≤ 0.00	0
Fatality Rate — Employees	IF-EU-320a.1	0	0	0	0	0
Fatality Rate — Contractors	IF-EU-320a.1	0	0	0	0	0
Emergency Preparedness — Annual # of Drills/Response Exercises	IF-EU-540a.2	75	65	113	≥ 75	115

Products and Services

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
% of Services and Materials Sourced from Suppliers in the IRSN	See Methodology	61.5%	Disclosure	59%	≥ 65%	62%
% Services and Materials Spent in Ontario	GRI-203-2, GRI-201-1	85.9%	Disclosure	85.2%	≥ 88%	82.6%
% Services and Materials Spent in Canada	GRI-203-2	92%	Disclosure	92.1%	≥ 90%	90.6%

Community

KPI	Standard guidance is taken from	2020	2021 Target	2021 Actual	2022 Target	2022 Actual
Total Value of Sponsorships & Donations	See Methodology	$4,000,000	≥ $2,500,000	$2,060,000	≥ $2,500,000	$2,060,000

release into the public domain. Bruce Power remains committed to advocating for more standardized disclosure and remains committed to staying up to date on policy and frameworks that are attempting to bring more clarity to information that is crucial for disclosure from a financial, environmental, and social standpoint.

Endnotes

1 https://www.sustainalytics.com/corporate-solutions/esg-solutions/top-rated-companies
2 https://www.brucepower.com/green-financing-framework/
3 https://www.brucepower.com/wp-content/uploads/2022/06/GreenBondReport.pdf
4 https://www.brucepower.com/wp-content/uploads/2022/07/R12_Our_2027_Net_Zero_Strategy_05.12.22_FINAL-AX.pdf
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