2023 ESG Report

A CNL Sustainability Performance Update

Canadian Nuclear Laboratories

Laboratoires Nucléaires Canadiens

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ABOUT THIS REPORT

Territory acknowledgement

Canadian Nuclear Laboratories (CNL) acknowledges that its operations across Canada occur on the unceded, traditional territories of Indigenous Peoples, and we recognize the unique history, spiritual beliefs, cultural practices and languages of these communities. We are also firmly committed to being an active participant in Canada's journey on the road towards healing and reconciliation.

Scope

The scope of this Environmental, Social and Governance (ESG) Report applies to CNL's operations throughout Canada. This Report was published in November 2023, and summarizes our ESG activities and the progress we have made in addressing our strategic priorities for the fiscal year ending March 31, 2023, unless noted otherwise. CNL issues an ESG report on an annual basis. Our previous reports and links to related reporting can be found on www.cnl.ca.

Reporting standards

To guide our ESG reporting, we align to guidance from the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), and the World Economic Forum (WEF). We intend to align with the International Financial Reporting Standards (IFRS) in future disclosures, and are exploring the Task Force on Nature-related Financial Disclosures (TNFD). Please see Appendix A for the accompanying data table with relevant ESG metrics aligned with these frameworks. These industry-recognized frameworks, along with engagement with our stakeholders, informed the topics and priorities most important to our organization.

Statement on forward-looking information

This ESG Report includes "forward-looking information" and "forward-looking statements" and assumptions about, among other things, our environmental, social and economic performance in Canada. This forward-looking information includes, but is not limited to, statements about our objectives and strategies to achieve those objectives, and about our beliefs, plans, expectations, aspirations, estimates, or intentions.

The forward-looking information within this ESG Report describes our expectations as of the date this ESG Report was published and is subject to change going forward. The forward-looking information in this ESG Report is qualified by cautionary statements throughout this report.

MESSAGE FROM THE PRESIDENT

A Year of Growth for our Sustainability Strategy

As the lead executive at CNL for more than three years now, it is always interesting to look back at each year to evaluate how your annual ambitions stack up against the realities of the business world. While every year is marked by both setbacks and accomplishments, I do believe that 2022-2023 represented a strong year of meaningful progress and growth for CNL's Sustainability Strategy.

That progress begins with the launch of our new corporate strategy, known as Vision 2030, which charts a fresh direction for Canada's national nuclear laboratory, and seeks to build a more sustainable CNL. The new strategy organizes CNL's activities into three strategic priorities – restoring and protecting the environment, advancing clean energy for today and tomorrow, and contributing to the health of Canadians – which directly support national sustainability goals in public health, national security, environmental stewardship and clean energy.

Complementing this new vision is the delivery of our first Environment, Social and Governance (ESG) Materiality Assessment. This is an incredibly important process that allows CNL to look inward at its own operations through the eyes of our many stakeholders, both internal and external, and identify the sustainability topics, issues and opportunities that we must prioritize as an organization. With this information now in hand, CNL is better prepared to implement more effective ESG policies, align and conform to international reporting standards, and identify and manage risks and opportunities related to our sustainability goals.

Last year CNL delivered its very first climate change report to our client, Atomic Energy of Canada Limited (AECL), which incorporates the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). This year, we are reporting publicly against the TCFD recommendations, which is integrated throughout this report. This is a major accomplishment, which involved training and awareness on environmental, social and governance and climate change action, to hundreds of staff at CNL, including our executive team and Board of Directors. The report and its key findings, and will help us to understand and address climate-related risks and opportunities to our business.

While these deliverables will guide our decision-making in the pursuit of more sustainable operations in the years ahead, the day-to-day work that was completed these past few years – through the hard work, persistence and creativity of our staff – have given us a strong foundation to build upon. That work is captured within the pages of this report, and I would encourage you to take the time to read about the extensive efforts we have taken to operate in harmony with the environment, nurture a healthier work environment for our staff, and deliver economic opportunity to our local and Indigenous communities.

It has been a strong year, as I have said, and I am proud of the growth that we have realized in both the development and implementation of our Sustainability Strategy. But there is still much to be done – new ambitions to set and work towards in the years ahead. As we do, I am confident that we have the right plans and people in place to navigate the complex future ahead of us, while delivering the nuclear science and technology products and services that our nation needs from Canada's national nuclear laboratories.

Joe McBrearty
CNL President and CEO

MESSAGE FROM THE VICE-PRESIDENT, HSSE

When it comes to Sustainability, Details Make the Difference

I suspect it must come as a surprise to new CNL employees at just how much attention we give our wild turtle population on a campus otherwise focused on nuclear science and technology. But with five species of turtle on the Chalk River site now classified as species at risk, our staff understand that these beloved animals require protection. More importantly, they understand that even the smallest incidents, such as the early death of a single adult female, can have a profound impact on the future of these at-risk species.

In preparing this report, I was proud to see the attention to detail reflected throughout, as well as a commitment to understand and appreciate how small actions and decisions can have significant consequences. When it comes to sustainability, getting the details right makes all the difference, and this hard work led to significant accomplishments that reduced our environmental footprint, better protected and supported our staff, and nurtured trust with our local communities and Indigenous partners.

But don't take my word for it – this year, CNL received multiple nominations and awards from the Wildlife Habitat Council, which recognize our commitment to the preservation of vulnerable species and habitats on the lands where we operate. This is in addition to receiving the Canadian Forest Service Recognition Award for our Forest Management Plan, which ensures that we have fostered and developed quality habitat for the species on site for decades to come, and serving as part of the Canadian delegation at the 15th meeting of the Conference of the Parties to the United Nations Convention (COP15) on Biological Diversity.

Beyond environmental performance, we also successfully completed an ISO 45001 pre-assessment that positions CNL to secure certification for its Health and Safety Management System, and conducted a psychological safety review as part of our efforts to implement the National Standard for Psychological Health and Safety in the Workplace. CNL also continues to explore and adopt new services and opportunities to support employee health and wellness, including reopening our employee wellness centre at the Chalk River site, hosting a wellness fair, offering counseling services on our sites, and introducing wellness rooms.

Finally, this was an incredibly successful year for our public and Indigenous engagement programs. In addition to the launch of our popular summer science camp for local youth, CNL also welcomed a record turnout at the 2022 Chalk River Laboratories Open House. But it was our work to establish long-term relationships with Indigenous communities where CNL may have experienced its most meaningful accomplishment this year. This work culminated in the signing of a historic long-term relationship agreement with the Algonquins of Pikwakanagan First Nation (AOPFN) that formalizes relations between CNL, AECL and a local Algonquin First Nation who we will work closely with into the future.

From protecting the smallest of turtles to the construction of what will become one of the largest nuclear research facilities ever constructed in Canada, CNL is committed to getting the details right. You will find those details in this report, and I hope it showcases just how hard our employees work to make sure that every action, big and small, is the right one as we work to build a sustainable future for Canada's national nuclear laboratories.

Jeff Willman
Vice-President, HSSE

WHO WE ARE

CNL is Canada's national nuclear laboratory and a world leader in developing nuclear technology for peaceful and innovative applications. Using our over 70 years of expertise as Canada's premier nuclear science and technology organization, we work to advance innovative solutions on behalf of Canadians, including carbon-free energy, cancer treatments and other therapies, non-proliferation technologies and waste management solutions.

Through the Federal Nuclear Science and Technology (FNST) Work Plan, CNL serves the collective interests of 14 federal departments and agencies in the areas of health, nuclear safety and security, energy and the environment. While Atomic Energy of Canada Limited (AECL) administers the FNST Work Plan, much of the delivery of the plan leverages CNL's vast expertise and the many advanced nuclear research facilities, technologies and equipment located at the Chalk River Laboratories, Canada's largest science and technology complex, which is operated by CNL. To support continued innovation, Chalk River Laboratories is currently undergoing an extensive revitalization to modernize its essential site infrastructure and invest in new, world-class science facilities. This capital program is part of a 10-year transformation of the campus, funded through a $1.3 billion investment from AECL, the owner of the site, on behalf of the Government of Canada.

In addition to supporting the nuclear sector and the federal government with our nuclear expertise, CNL also has the resources and ambition to advance technologies across all sectors. In doing so, CNL acts as the link between industry, academia and government, working alongside like-minded organizations to discover and commercialize solutions that address critical national needs.

CNL manages nuclear research and clean-up sites across Canada, including our main campus, the Chalk River Laboratories. CNL also manages the clean-up and decommissioning of the Whiteshell Laboratories site near Winnipeg, Manitoba, a former research campus that operated from 1961 to 1997, as well as the execution of the Port Hope Area Initiative, where we are fulfilling the Government of Canada's commitment to safely clean-up historic low-level radioactive waste in two Ontario municipalities. In addition to these sites, CNL maintains a small complement of staff in a number of locations across the country, managing commercial projects, leading academic work, implementing environmental improvements, and decommissioning redundant and prototype facilities.

Throughout all of our operations, we understand and acknowledge the United Nations Declaration on the Rights of Indigenous Peoples to recognize the basic human rights and self-determination of Indigenous Peoples. We are committed to engagement in the spirit of Free, Prior and Informed Consent, the long-term provision of sustainable benefits from economic development, and education and training for staff and management about the history of Indigenous Peoples. More broadly, we leverage the United Nations Sustainable Development Goals (SDGs) as a framework to guide our ESG efforts in areas where we are most impactful. We are also actively developing our commitment to the Equal by 30 Campaign, which works to accelerate gender equality and diversity in clean energy transitions, with a goal to finalize our commitment by the end of 2023-24.

CNL MANAGED SITES

ESG STRATEGY AND IMPACT

Vision 2030 is our strategic direction towards a long-term, sustainable future at CNL. Over the next decade, Vision 2030 charts a path establishing CNL as a leader in nuclear innovation in three critical areas of national importance: restoring and protecting our environment; advancing clean energy solutions to combat climate change; and using nuclear science to save lives. In turn, our Vision 2030 focus areas inform our ESG priorities, direction, and approach.

In 2021, we developed the CNL Sustainability Plan to demonstrate our holistic and comprehensive approach to the management of sustainability-related objectives in support of AECL's ESG Strategy. Building from the Sustainability Plan, our ESG Implementation Framework and Program Plan guides our approach to the management of environmental and social risks and opportunities to support the long-term objectives of CNL, as well as AECL and Government of Canada goals. Currently in its early stages, the implementation framework defines important sustainability objectives related to governance, accountabilities, strategies, actions, key performance indicators and targets (including short, medium and long-term). Over the next year, we will continue to refine and finalize this plan and framework, as well as facilitate important business, strategic, and financial processes to support its implementation.

As part of establishing a strategic direction for ESG at CNL, in the spring of 2023, we conducted an ESG materiality assessment to refine our ESG priorities and identify key areas of impact. This assessment builds upon and further refines our previous material topics which were informed by AECL's ESG strategy. Our updated materiality assessment leveraged AECL's recent materiality assessment as well as a comprehensive stakeholder engagement exercise, which included an extensive survey of over 700 stakeholders and in-depth interviews with over 20 individuals to gather feedback and refine our ESG priorities and areas of impact. The impact assessment leveraged CNL's enterprise risk universe to assess risks and opportunities of the material topics to understand levels of impact, in terms of low, medium and high. As a result of the assessment, areas of high impact included: relationships with Indigenous Peoples, waste management, climate resilience and effective leadership.

The results of the assessment helped define CNL's core ESG strategic priorities by identifying foundational program elements, overarching ESG pillars, focus areas, and alignment to the UN's SDGs, shown below in Figure 1. Having completed the ESG materiality assessment, our material topics are now further aligned with AECL's ESG strategy.

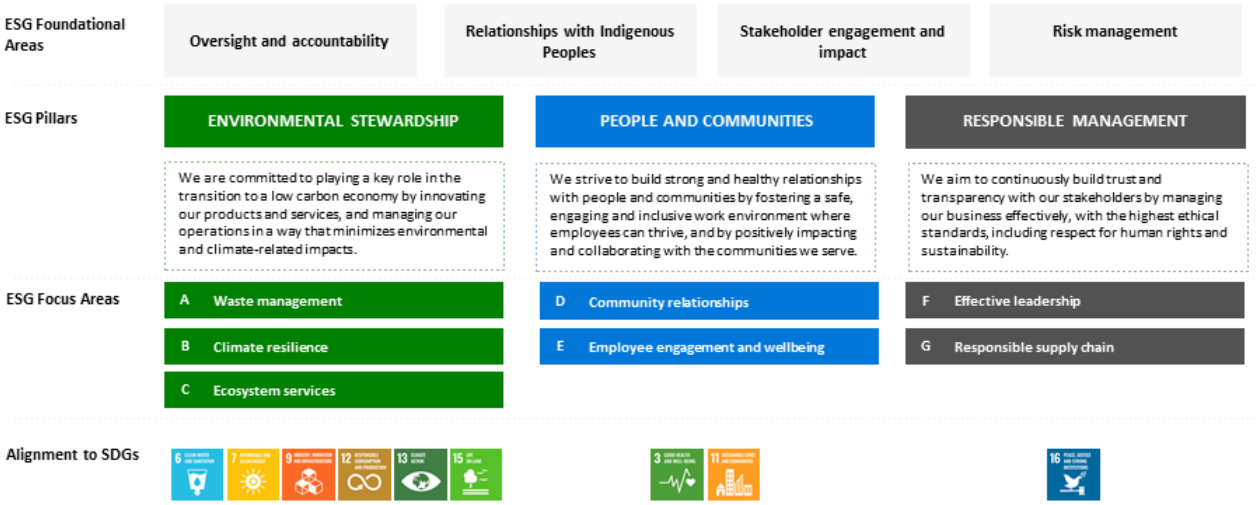


Figure 1. ESG priorities for CNL

In the fall of 2022, we completed a qualitative climate scenario analysis to identify top climate risks and opportunities relevant to CNL and understand their impacts on our business and value chain. This information is summarized below.

Table 1. CNL's climate risks and opportunities

Risk / Opportunity	Impact Rating	Impact Narrative
Physical climate-related risks		
1. Flooding (fluvial and pluvial)	Moderate	Projected increases in flooding events may damage CNL's facilities, above ground infrastructure, equipment and power infrastructure. This may lead to power outages, blocked access roads, supply chain disruptions, erosion, and/or increased maintenance of retention ponds.
2. Increasing wildfires	Moderate	Projected increases in fire frequency and intensity may damage facilities, above ground infrastructure, equipment, power infrastructure leading to power outages, block access roads causing safety concerns and supply chain disruptions, and/or may pose human health impacts to workers on site.
3. Extreme temperatures - heat	Moderate	Projected increases in extreme temperatures (heat) may increase the demand on HVAC systems and/or other mechanical and electrical systems, as well as impacts to worker health and safety, and disruptions to laboratory work.
4. Extreme wind speeds	Moderate	Projected increases in extreme wind events (i.e., microbursts, cyclones) may damage infrastructure and/or may cause power outages that can cause delays or disruptions in operations.
5. Freeze-thaw	Moderate	More wide-ranging temperature ranges and rapid fluctuations in temperatures may lead to increased maintenance of infrastructure.

Risk / Opportunity	Impact Rating	Impact Narrative
Transition climate-related risks		
1. Reputational risk	Moderate	Increased public scrutiny on accountability and management of climate-related issues may cause reputational damage. As the climate continues to change, the frequency and severity of extreme weather events increases, which in turn, increases the risk of incidents that can be highly visible to the public. This may negatively impact the public's perception of CNL.

Risk / Opportunity	Impact Rating	Impact Narrative
Transition climate-related opportunities		
1. Introduction of new technology	High	Introduction of advancements in nuclear technology including small modular reactors (SMRs) and other types of reactors will play a critical role for Canada to meet its greenhouse gas emission reduction goals.
2. Increasing demand for nuclear energy sources	High	Funding opportunities for low emission energy technologies are projected to increase. Coupled with additional government regulation (i.e., pricing on carbon), this will increase the demand for CNL's nuclear products and services. As existing infrastructure continues to age, the demand for additional energy supply, particularly in highly populated locations will drive growth, especially as grids look for low emitting energy sources going forward.
3. Land management planning & improvement	High	The management and remediation of CNL's land will enhance biodiversity through the protection and rehabilitation of habitats and migration, the sequestration of carbon by including standing forest, and land conversion avoidance. CNL will continue to implement their Forest Management Plan, which builds land management and planning into their development plans. The plan supports CNL's ambition to achieve carbon neutrality in the future by leveraging their carbon sequestration activities.

Altogether, we have leveraged both the broader ESG materiality and climate scenario analysis to identify and understand top areas of impact for CNL and to work towards enabling a more comprehensive understanding of value creation in support of CNL's Vision 2030 objectives.

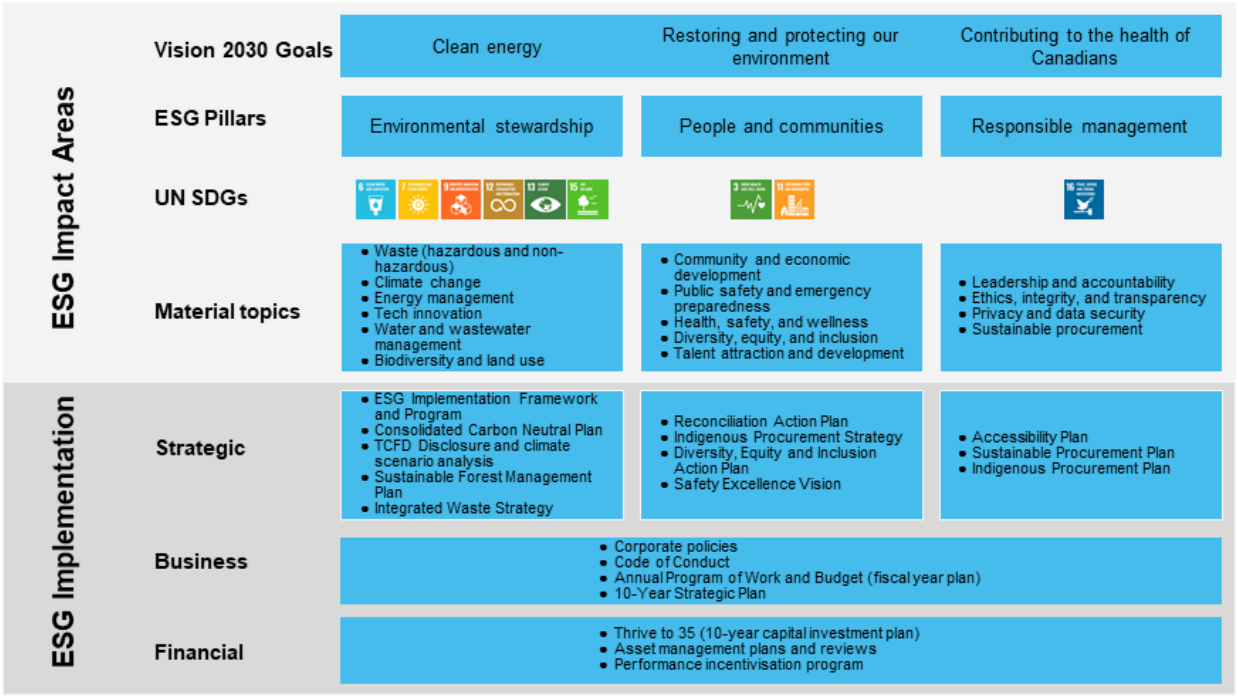


Table 2: ESG strategy implementation

RELATIONSHIPS WITH INDIGENOUS PEOPLES

CNL acknowledges that its operations across Canada occur on the unceded, traditional territories of Indigenous Peoples, and we recognize the unique history, spiritual beliefs, cultural practices and languages of these communities. Additionally, CNL recognizes the constitutionally protected rights of Indigenous Peoples in Canada, and the importance of the relationship between Indigenous Peoples and their traditional lands. As such, CNL is firmly committed to being an active participant in Canada's journey towards healing and reconciliation, including the implementation of the Call to Action #92 in the Truth and Reconciliation (TRC) Report to actively promote and enable economic opportunity for Indigenous businesses. We acknowledge the expectations among many Indigenous businesses and communities that they be participants in economic development opportunities in their traditional and treaty territories.

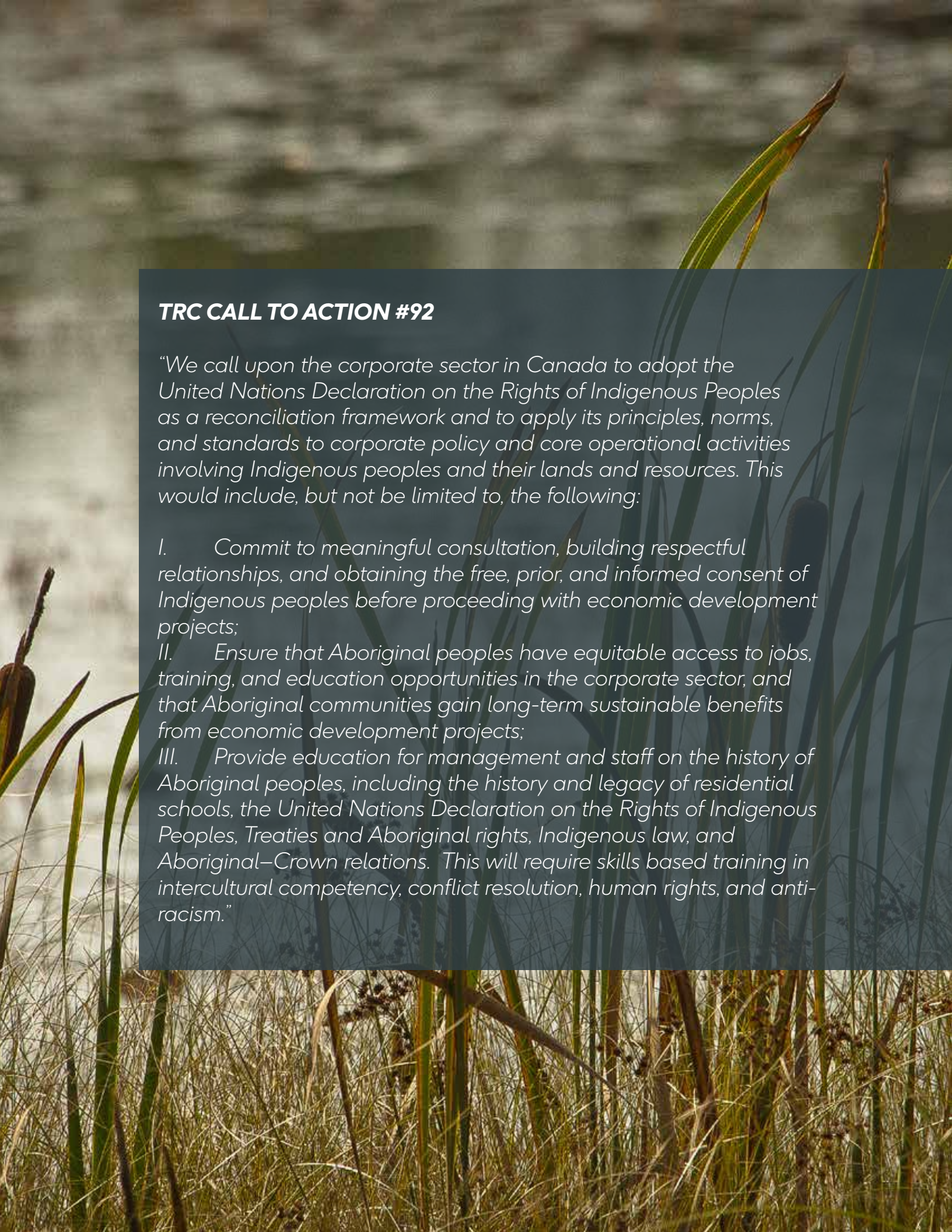
Business and Reconciliation Goals

Our goals and actions, in following the recommendations of the TRC Call to Action #92, are to:

- Build respectful relationships with Indigenous Nations, peoples and organizations through meaningful engagement by establishing Long-Term Relationship Agreements (LTRAs). To date, CNL has 23 signed agreements with Indigenous communities.
- Capacity building for Indigenous businesses to prosper as contractors and sub-contractors for CNL. CNL developed an Indigenous Procurement Strategy that aims to create economic opportunities through our supply chain
- Provide opportunities for CNL staff and management to gain a deeper understanding about Indigenous history in Canada, including Indigenous worldviews and relationship to the land, precolonial treaties and Indigenous law, and the history and impact of residential schools. We view this as part of our long-term commitment to Indigenous Nations and an integral part of our ongoing relationship. This year, approximately 120 staff participated in three independent sessions on trauma informed training; and,
- CNL is committed to environmental stewardship and the inclusion of Indigenous Knowledge and participation into our project work. Our community-led environmental programs at Whiteshell Laboratories and our collaborative research project with the Clearwater River Dënë First Nation are two examples of how we have woven traditional knowledge into our work.

CNL's commitment towards healing and reconciliation was reflected in our recent materiality assessment, which formalized Relationships with Indigenous Peoples as a foundational ESG program element to ensure that reconciliation is embedded throughout all of our ESG strategies, processes, and approach. We are looking forward to fostering meaningful connection and dialogue with Indigenous communities regarding each of our ESG focus areas.

For CNL, reconciliation is an ongoing learning process. Through Reconciliation action, we will continue to build on existing relationships between CNL and Indigenous Nations and communities, while adapting our approaches to improve and enrich our Indigenous engagement efforts. To gain further details on CNL's activities this past year, please refer to the Communities and Economic Development section to understand our approach to building meaningful relationships with Indigenous communities.



TRC CALL TO ACTION #92

"We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

I. Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects;
II. Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects;
III. Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills based training in intercultural competency, conflict resolution, human rights, and anti-racism."

Stakeholder Engagement and Impact

Our Public Information Program works to build proactive awareness, trust and transparency with all of our stakeholders through regular dissemination of web-based content, print and electronic communications and reports, press releases, webinars, sponsorships, community meetings, community advisory panels, surveys, and in-person events (for additional details please see the Community Relationships section). We have ongoing engagements with the community through our public councils and committees such as Chalk River's Environmental Stewardship Council, the Community Advisory Committee, the Public Liaison Committee at Whiteshell Laboratories, and Port Hope Project Citizens Liaison Group. We actively participate in industry groups and associations including the Canadian Nuclear Association, CANDU Owners Group and its Nuclear Safety Steering Committee, the Nuclear Environmental Affairs Peer Group and the Environmental Impact Task Team.

We engage with our stakeholders regularly throughout the year to ensure we meet both CNL's and our stakeholders' communication and business needs. The table below outlines how CNL creates value - from skills building, to awareness, to participatory planning - through our stakeholder engagement, and how this work supports the achievement of several of our strategic priorities.

As distinct rights holders whose rights are protected under the Constitution of Canada, our value creation approach for Indigenous Communities is discussed in the Relationships with Indigenous Peoples section and the Community Relationships section.

Table 2. CNL stakeholders

Stakeholder group	CNL value creation focus areas	Link to strategic priorities
Employees	Capacity building through employee training and upskilling to increase skills, enable growth, maintain motivation, and invest in the development of our workforce. Focus on health and safety to enable a strong sense of security and belonging while at work as well as foster a holistic approach to mental, physical, and emotional health outside of work.	An engaged, healthy, and well-trained workforce enables us to attract and retain top talent while continuing to innovate towards our strategic goals.
Community members and groups	Socio-economic investment through employment, procurement practices, and projects such as the North Forge East project that stimulates local entrepreneurship Protection and restoration of local ecosystems through a variety of biodiversity projects and strategies to leverage nature-based solutions. Informed communities through extensive engagement and communication to ensure members of the community are aware, informed, and consulted in matters of our operations.	Enabling thriving communities surrounding our sites ensures we are able to leverage local talent and resources while mitigating reputational risk, ensuring we are able to operate and innovate effectively.

Stakeholder group	CNL value creation focus areas	Link to strategic priorities
Industry stakeholders	Capacity building through collaboration within the industry to gain perspective, experience, and feedback. Driving innovation through competition, expanding products and services, and continuous improvements.	Research and innovation, driven in part by competition and demand within the market, is critical to achieving our goals established in Vision 2030.
Government	Research and innovation for federal priorities including health, nuclear safety and security, energy and the environment.	Our Vision 2030 goals directly support matters of federal interest through our delivery of the FNST Work Plan.
Academic partners	Research and innovation advancement for energy, environmental remediation, health, and security Resource sharing to share project costs, pool limited financial resource, reduce risk and expedite research through collaborative projects. Knowledge sharing and transfer to develop future nuclear researchers and engineers and meet labour gaps.	Collaboration and partnership to research and capacity building will enable us to reach our innovation goals more efficiently
Supply chain	Socio-economic investment through investing in local goods and services. Reducing human rights risks by working directly with our suppliers to maintain stringent standards and expectations.	Working with responsible suppliers who share our ESG commitments will enable us to achieve our ambitious ESG targets and objectives.

ESG OVERSIGHT AND ACCOUNTABILITY

CNL is a private corporation that operates under a Government-owned, Contractor-operated (GoCo) management model. CNL was incorporated in 2014 and assumed full responsibility for all day-to-day operations of AECL sites. In 2015, the Government of Canada selected the Canadian National Energy Alliance (CNEA), a private sector consortium that represents some of the world's most experienced nuclear engineering and management firms, to act as the sole shareholder of CNL, after an international competition.

Over the past year, we have been working to formalize our governance structure for ESG. Among the core initiatives that we are working to finalize within our governance structure are the establishment of a new Sustainability Function, as well as updates to our Sustainability Leadership Committee (SLC) role and responsibilities.

Board Oversight of ESG

Our Board of Directors is composed of independent directors, CNEA-appointed Board representatives, and senior executives from CNL. The CNEA also appoints the directors, officers, and specific management positions of CNL. The CNL President & CEO and Chief Financial Officer (CFO) attend the CNEA Board meetings and report matters of interest to the Board. The CNL Board of Directors is supported by its three committees: the Audit Committee, Safety Committee, and Strategy Committee.

Management of ESG and climate change is integrated into our overall governance framework and approach. CNL's Board oversees and approves strategic direction for ESG and climate, based on guidance from AECL's ESG Strategy, and annually reviews and endorses our corporate policies. The Board receives ESG updates on a quarterly basis, including updates regarding climate change and TCFD alignment.

Executive Leadership of ESG

The ultimate accountability for ESG at CNL falls to the Chief Executive Officer (CEO), who oversees, and is responsible for, driving the corporate-wide effort to achieve progress toward targets as well as the planning, coordination, tracking and reporting on ESG. The CEO is supported by executives across CNL, such as the Vice-President of Health, Safety, Security and Environment and the Vice-President of Business Management, who are responsible for driving implementation of and embedding ESG across the organization. The Enterprise Risk Committee (ERC), which is made up of key members of CNL's executive team, meets quarterly and is responsible for carrying out our enterprise risk management processes and reviewing the top enterprise risks, including those related to ESG. Furthermore, an executive review team is responsible for incorporating ESG and climate considerations in the project gating and sanctioning process (e.g. CNL's project planning and approval phases within each project lifecycle).

Management of ESG

This past year, we have been planning and building the foundations to establish our Sustainability Department, which will be directly accountable to the CEO and responsible for administering CNLs ESG Implementation Plan. This includes identifying strategies, actions, metrics, and targets; developing and implementing processes for tracking status and results towards stated targets; coordinating input from subject matter experts via the cross-CNL ESG Technical Working Group; providing support for the revised SLC and serving as an ex-officio member where required; and developing public, stakeholder and internal reports to communicate progress on ESG initiatives.

Meeting on a quarterly basis, the SLC is primarily composed of management that advise on and operationalize CNL's sustainability goals across the organization. The SLC is supported by additional teams including our TCFD Task Force, departmental sub-committees to the SLC, and considers input from the Environmental Stewardship Council, which includes key external stakeholders, such as community members and interested parties. Management positions throughout our business units are responsible for executing, integrating, and reporting on ESG goals and objectives, risks and opportunities.

Remuneration

Each year, targets and objectives related to our annual program of work and budget are established, including objectives related to ESG. Both management and executive remuneration is linked to the achievement of sustainability objectives through our formal annual performance incentivization program.

ESG Risk Management

ESG and climate risk management is integrated throughout our processes for identifying, assessing, and managing risks at all levels of the organization. Our process for enterprise risk management is shown in Figure 3.

At the broadest level, our Enterprise Risk Management (ERM) control procedure identifies, assesses, monitors, and manages our core enterprise risks through the maintenance of our CNL Risk Universe. This procedure is operationalized by the Enterprise Risk Committee (ERC), whose mandate is to maintain CNL's Risk Universe, evaluate and approve additions and retirements to the Risk Universe, ensure alignment between CNL's strategic objectives and risk tolerance, and review and endorse any changes to the ERM process. Once the enterprise risks and opportunities are identified, the ERC and the CNL Board factor them into the decision making process when developing corporate plans and strategies and negotiating future business endeavors. For example, this past year, the ERC identified climate change within CNL's upcoming 10-Year Plan; this formalized the integration of climate and ESG-related risks into the overall ERM process and initiated a suite of strategic planning processes to manage associated risks and opportunities. Following the recent completion of CNL's materiality assessment climate scenario analysis, the ERC will be reviewing the ESG risks and opportunities identified in order to integrate them into the ERM control procedures.

At the site and project-level, business controls and procedures are implemented throughout our routine (i.e., activities that are part of normal operations) and non-routine (i.e., activities in the life cycle of a project such as construction, operation, expansion, decommissioning, and abandonment) operations. These processes are integrated at all of our sites and throughout our projects, and are designed to ensure that risks, including those related to ESG and climate, are identified and managed on an ongoing basis. Key processes include:

- Management and operational control procedures, such as Integrated Work Control (IWC).
- Risk identification and assessment processes, such as Hazard Identification and Risk Assessment (HIRA), Environmental Reviews and Environmental Risk Assessments;
- Internal and external quality audits, including ISO 14001 and 9001 auditing;
- Annual compliance monitoring and reporting (including effluent and greenhouse gas (GHG) monitoring); and,
- Project Gating and Sanctioning and associated project standards.

In particular, strengthening our processes for identifying and managing climate-related risks have been a recent focus for CNL as we work to increase alignment to the TCFD's recommendations. In 2022, we completed a qualitative climate scenario analysis to support our efforts in identifying our top climate risks and opportunities, in addition to completing an ESG materiality assessment in 2023 to refine our material topics, as discussed in the ESG Strategy and Impact section above. We plan to leverage these results as key inputs to business, strategic, and financial planning and work towards understanding the financial implications of our material risks and opportunities.

In the meantime, we have a number of climate-specific risk management processes already in place. All major infrastructure projects must consider carbon emissions in material choices, establish a climate resilience plan in the decision-making process, describe the environmental impact of the activities, and identify applicable mitigation measures used to manage the impact. These requirements have been implemented through our recent roll-out of CNL's Climate Resilience building standard as well as the Life-Cycle Carbon Analysis standard. The development of both of these standards supports key objectives to increase climate resilience and prioritize low carbon in our infrastructure and projects.

Figure 3. Enterprise risk management process

ISO CERTIFICATIONS AT CNL SITES

CNL has maintained ISO 14001 Environmental Management certification at Chalk River Laboratories since 2004, and at Whiteshell since 2010. Both Chalk River Laboratories and Port Hope Area Initiative sites have ISO 9001 certification for quality management systems. Each year, our sites undergo a systematic, independent, and objective audit to ensure best practices are in place for both environment and quality management.

ESG PERFORMANCE

HIGHLIGHTS

Environmental Stewardship

- Disclosed against TCFD recommendations for the first time
- Completed a Forest Carbon Analysis to support Forest Management Plan and nature based solutions for carbon storage and reduction
- Achieved 100% electric vehicles (EVs) at our Minwamon building
- Established new, ambitious waste management targets
- Recipient of the Wildlife Habitat Council Award
- Decommissioning of four buildings at the Chalk River campus, reducing hazards and supporting environmental stewardship

People & Communities

- Hosted over 3,000 community members at the Chalk River Laboratories Open House to educate and engage with community members
- Launched science summer camp to introduce kids to STEM
- Reached long-term relationship agreement with Algonquins of Pikwakanagan First Nation
- Established Niigan Aki,a Community-Led Environmental Monitoring Program for Sakgeeng First Nations at the Whiteshell Laboratories site
- Launched the Pay Equity Act Project to eliminate gender-based discrimination in pay
- Employee Crowdfunding campaign raised $150,000 for local community causes
- Rolled out our new Learning Management System (LMS), called LearnCNL which bundles training courses into certificates

Responsible Management

- Advanced diversity, equity and inclusion (DE&I) through core strategies, including the development of DE&I Strategic Plan and Accessibility Plan
- Established an Indigenous Procurement Strategy and Implementation Plan, in support of the Reconciliation Action Plan (in development)
- ESG and Climate Change a standing agenda item for the CNL Board of Directors

ESG PERFORMANCE			
Objective	**Target**	**Indicator**	**2022-23 Status**
Achieve carbon neutrality at Chalk River Laboratories	By 2025, reduce our Scope 1 and 2 GHG emissions by 40%. By 2040, achieve carbon neutral operations at Chalk River Laboratories	% reduction in Scope 1 and 2 GHG emissions at Chalk River Laboratories.	30% reduction in scope 1 emissions below 2005 baseline (2022 CY). Scope 2 GHG emission baseline data currently being verified for future reporting.
	Disclose Scope 3 GHG Emissions.	tCO2e	CNL has calculated some Scope 3 emissions categories based on upstream and downstream leased assets, employee commuting and business travel. Scope 3 emissions for these categories were 8,300 tCO2e (2022 CY). CNL is currently reviewing the GHG Protocol: Corporate Value Chain Standard, and plans to disclose additional Scope 3 emissions in future
Net-zero, climate resilient lease facilities.	Starting in 2023, all new domestic office leases and lease renewals for space over 500 m2 must report building energy and water usage, GHG emissions and waste generated using ENERGY STAR Portfolio Manager or equivalent tool and disclose at the building level.	Energy and water usage, tonnes of CO2, and waste generated.	To begin in 2023
	By 2025, GHG emissions from the majority of office floor space leased will be reported.	tCO2e	Target met ahead of schedule. Total Scope 1 and Scope 2 GHG emissions from CNL Leased Facilities were 214.03 tCO2e (2022 CY).
	Starting in 2030 and fully achieved by 2040, 75% of domestic office new lease and lease renewal floor space must be in net-zero carbon, climate resilient buildings.	% of office space in net-zero, climate resilient buildings	CNL has implemented standards such as the Climate Resilience Planning standard to support this target. To begin in 2030.

Objective	Target	Indicator	2022-23 Status
Zero-emission vehicles in the light-duty fleet.	By 2030, 75% of new light-duty unmodified fleet vehicle purchases will be zero-emission vehicles or hybrids. The objective that by 2030, our light-duty fleet is comprises of at least 80% zero-emission vehicles.	% EV/hybrid Fleet	5% of CNLs current light duty fleet is EV/hybrid, consisting of 6 EVs onsite, with another 3 purchased and awaiting delivery. We have 7 EV chargers for fleet use, and 6 for personal vehicle use.
Reduce environmental impact of structural construction materials.	By 2022, disclose the amount of embodied carbon in the structural materials of major construction projects, based on material carbon intensity or a life-cycle analysis.	tCO2e	In three new buildings, mass timber has allowed us to sequester nearly 2,500 tonnes of CO2 and avoid nearly 1,000 tonnes of CO2.
	Beginning in 2025, reduce the embodied carbon of the structural materials of major construction projects by 30% using recycled and lower-carbon materials, material efficiency, and performance-based design standards.	tCO2e	To begin in 2025.
Pursue energy efficiency improvements across all CNL operations, with a focus on Chalk River Laboratories.	By 2035, achieve 30% reduction in energy intensity at Chalk River Laboratories below a 2015 baseline.	MJ/m3	3,334 MJ/m3, representing a 16% decrease in energy use intensity below our baseline year of 2015 in 2022 (compensating for NRU process load to represent real property).

Objective	Target	Indicator	2022-23 Status
Responsibly manage sites and activities to ensure the protection of local wildlife and the environments that surround them.	Annually achieve a mortality rate of 0 for Species at Risk (SAR)	Mortality rate of SAR	Annual target of 0 SAR losses not met. 7 SAR losses occurred in 2022-23.
	Annually achieve 0% loss of critical habitat	% loss of critical habitat	Annual target of 0% loss of critical habitat met in 2022-23.
	Annually ensure that 95% of site applications do not result in land conversion.	% of land conversation avoidance	Annual target of 95% land conversion avoidance was met in 2022-23.
Prevent and minimize the production of conventional waste, wherever possible, while reusing and recycling waste when it's generated.	By 2030, divert at least 75% by weight of non-hazardous operational waste from landfills.	% diversion	66% diverted from landfill in 2022-23.
	By 2030, divert at least 75% by weight of plastic waste.	% diversion	This is a new target for 2023-24. CNL plans to undergo a feasibility study to establish a baseline and future annual targets.
	By 2030, divert at least 90% by weight of all construction and demolition waste from landfills, striving to achieve 100%	% diversion	This is a new target for 2023-24. Diversion will be disclosed next year.

ENVIRONMENTAL STEWARDSHIP

INTRODUCTION

We are focused on minimizing nuclear legacy obligations and climate risks, leveraging nature-based solutions, and advancing a transition to a net-zero economy so that future generations can enjoy a clean, low-carbon environment for generations to come. Our corporate Environment Policy establishes the protection of the environment, sustainable development, and corporate social responsibility as an integral component of our decision-making in all phases of our business activities, including product development, project planning, project implementation, operations and decommissioning. We have also developed a number of strategic plans and documents, including our Integrated Waste Management Strategy, Consolidated Carbon Neutral Strategy, and Sustainable Forest Management Plan, to guide our approach to environmental stewardship across the organization.

Figure 4. Waste heirarchy

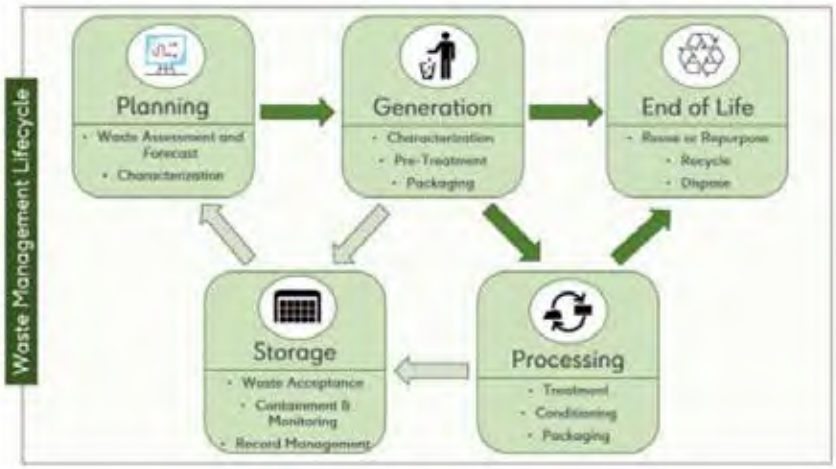


Figure 5. Waste process

WASTE MANAGEMENT

CNL's Waste Management Program provides oversight and compliance over waste management activities and ensures alignment with applicable regulatory and license requirements. Our Integrated Waste Management Strategy is a living, guiding document that describes our strategic approach to waste management across CNL using a lifecycle approach to ensure alignment with our goals, obligations, and commitments to our core stakeholders. We use tools such as the waste hierarchy (shown in Figure 4) to focus our efforts on minimizing waste generated, segregating waste, and appropriate routing of clean waste to recycle and/or reuse wherever practical. To implement this program, our Waste Management functional support area (FSA) continues to refine our waste management process (as shown in Figure 5) with a focus on upfront waste planning, characterization and certification processes. This has enabled us to adapt to the changing requirements of CNL sites as our company shifts from waste storage to planning for waste disposal.

To safely manage our operational waste, our Waste Surveillance Program ensures sufficient oversight and adherence to facilities' requirements and proper documentation of waste processes. Several areas for improvement were identified due to CNL's waste data being audited as part of the Office of the Auditor General of Canada's review of AECL in 2022, in addition to a gap analysis completed for our Cleanup Function for all CNL sites. CNL addressed several of these areas of improvement, resulting with our Waste Management Program attaining an error rate as low as 0.045% (sorting accuracy) by the end of 2022.

We have developed new sustainable waste targets to realign with AECL's ESG strategy, and by extension, Canada's Plan to transition to net-zero carbon and climate resilient operations while reducing environmental impacts. By 2030, we aim to divert at least 75% of non-hazardous operational waste from landfill, at least 75% of plastic waste, and at least 90% of all construction and demolition waste from landfills. In order to meet these targets, we have initiated three sustainability projects which are scheduled to kick off throughout 2023:

- A Recycling Awareness Campaign, which will include the development of a volunteer recycling network and a targeted recycling communication campaign to educate staff about our waste diversion targets and methods to divert waste;
- Review of our current cafeteria waste contract to incorporate changes such as incorporating organics, moving to compostable food packaging, eliminating single-use plastics and paper cups, and incorporating dishwashing; and,
- Investigating alternative recycling pathways through benchmarking and data gathering, including engaging with municipal vendors, cities, and other nuclear organizations to identify and develop a list of recommendations to further our recycling efforts.

Our Waste Surveillance Program was further strengthened due to the development of a multi-year schedule of planned waste surveillances of CNL sites that: 1) optimize coverage of waste generating areas, and 2) ensure future surveillances are completed per schedule.

A vital component of our waste management initiatives is CNL's Cleanup Function which ensures effective land use planning, decommissioning, demolition, environmental remediation and end-state reporting of radioactive waste, all of which is consistently applied across all CNL sites.

Our Cleanup Function continues to grow through a cross-site collaboration of monthly multi-site and multi-function forums, and by conducting self-assessments. An internal quality audit conducted this past year reinforced that our Cleanup FSA is highly effective, especially in relation to high-quality self-assessments and integration across other FSAs and internal groups. In order to further support our Cleanup FSA's maturity, CNL developed and implemented three new training courses (environmental remediation program awareness training, decommissioning and demolition program awareness training, and preliminary and detailed decommissioning plans: accountability and writer training).

Since 2021, we have been drafting the Chalk River Laboratories Overview Decommissioning and Cleanup Plan (ODCP) to replace our previous decommissioning plan. The ODCP represents an improved strategic approach to the development of decommissioning and remediation plans for the site's buildings, infrastructure and contaminated lands, while coordinating these plans with other site priorities and projects. After two years of development, internal and external stakeholder engagement, and extensive reviews with government and regulatory bodies, CNL received confirmation that the ODCP was accepted by the Canadian Nuclear Safety Commission in June of 2023. Over the coming fiscal year, the plan will be made available for use and implementation at the Chalk River campus.

DECOMMISSIONING MILESTONES AND PROJECT UPDATES

This past year, CNL achieved several major decommissioning milestones and progressed important projects, including:

- *The Port Granby site was brought to a safe and successful closure this past year, involving the safe excavation and transfer of 1.3 million tonnes of low-level radioactive waste to a newly constructed waste management facility; and,*
- *Submission of the updated WR-1 Environmental Impact Statement (EIS) to the CNSC in December 22, 2022. The EIS was accepted and it proceeded into full technical evaluation, including First Nations and Manitoba Metis Federation participation.*
- *The Near Surface Disposal Facility is currently awaiting a licensing decision by the CNSC following public hearings on submissions related to a Procedural Direction for the project.*
- *Decommissioning of B412 and B457 to enable construction of the ANMRC at the CRL campus.*

To date, CNL has decommissioned 117 structures since 2015 and it is our aim to continue decommissioning aging facilities in a safe manner to support more sustainable operations in the future.

CLIMATE CHANGE

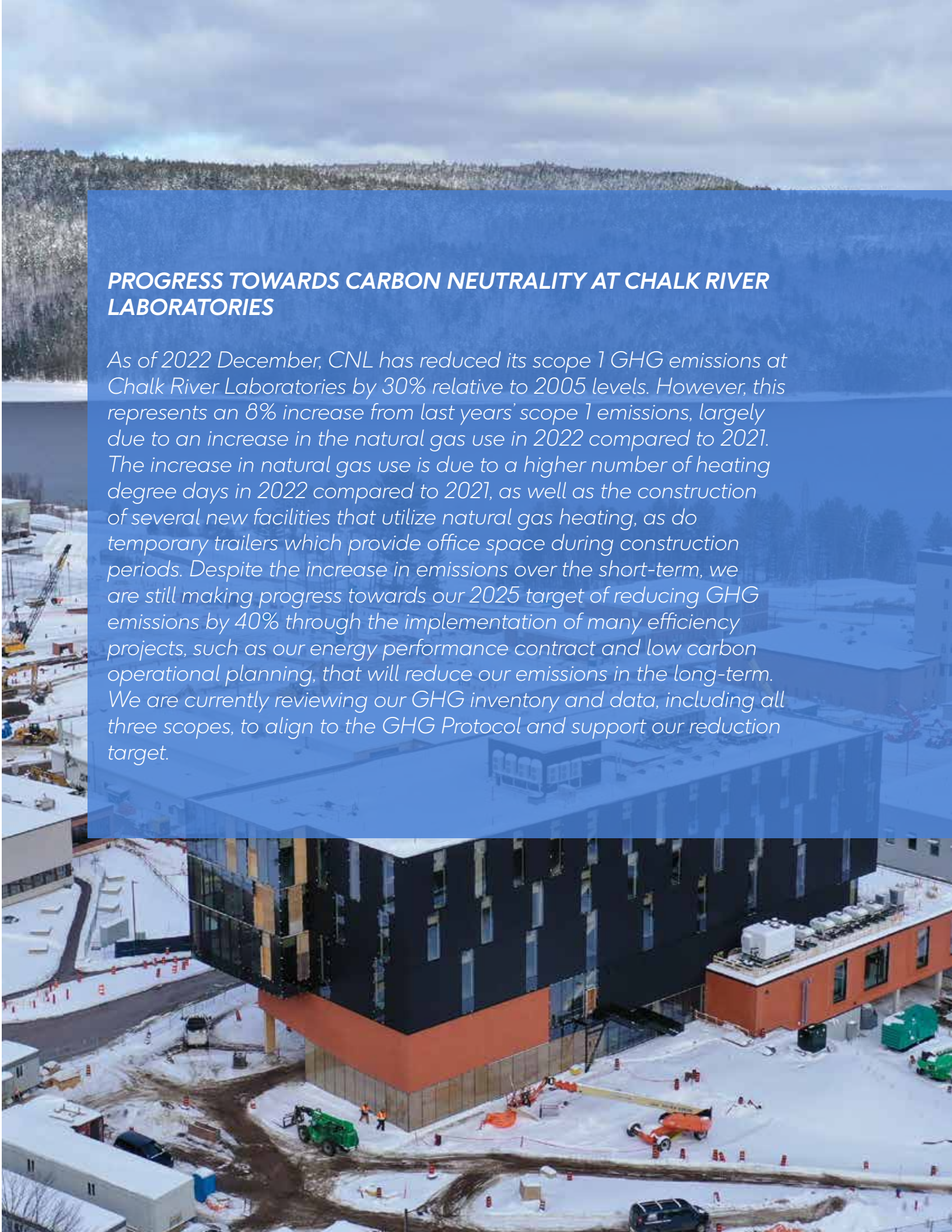
Over the past year, we have been working to advance our climate reporting through alignment to the TCFD recommendations to provide our stakeholders with a transparent and comprehensive account of our approach to managing climate-related impacts. Organized by the core pillars (Governance, Strategy, Risk Management, and Metrics and Targets) from the TCFD recommendations, our report showcases key alignment efforts achieved in 2022 and what is planned for the coming years. Information regarding our management of climate-related risks and opportunities has been embedded throughout this report; for further details regarding our TCFD disclosures, please refer to Appendix A. A list of our top climate risks and opportunities is presented in the ESG Strategy and Impact section.

To fight climate change, the Government of Canada has established an interim target of a 40-45% reduction in GHG emissions by 2030, with a long-term target of net-zero by 2050. In June 2023, the Canada Energy Regulator released its Canada's Energy Future 2023 report exploring how possible energy futures might unfold over the long term as the nation works towards achieving net-zero GHG emissions. The report projected that the electricity system will become the most important end-use energy source for Canada in Canada's net-zero future, and that considerable growth in nuclear technologies, alongside other clean and renewable technologies, will play a pivotal role in supporting the electricity system. Through our role in developing and deploying low carbon nuclear technologies, CNL plays a critical role in enabling a clean energy system with greater electricity demands that will meet Canada's decarbonization and net-zero emission goals.

Carbon neutral strategy

As part of playing a critical role in Canada's net-zero transition, CNL is aligning with the Government of Canada by working towards an aggressive strategy to reduce our Scope 1 and 2 GHG emissions by 40% by 2025 and achieve carbon neutral operations at Chalk River Laboratories by 2040. Over the past year, we have been developing a Consolidated Carbon Neutral Strategy. Once finalized, this strategy will guide our approach to achieving carbon neutrality at the Chalk River campus. Core aspects of the strategy for reducing emissions include:

- Requiring life cycle carbon analysis, net-zero/net zero-ready design, updated engineering standards, and climate resilience planning for all new construction and major retrofits;
- Implementing an energy performance contract to enable decarbonization through electrifying heating, conducting deep building and laboratory retrofits, and implementing significant conservation measures;
- Designing, constructing, and implementing SMRs on site, which will act as a source of clean energy and heating that can provide a baseload power source and be connected to a district heating system;
- Decommissioning several dated and inefficient facilities; and
- Electrifying our fleet through the implementation of a Green Fleet Strategy.



PROGRESS TOWARDS CARBON NEUTRALITY AT CHALK RIVER LABORATORIES

As of 2022 December, CNL has reduced its scope 1 GHG emissions at Chalk River Laboratories by 30% relative to 2005 levels. However, this represents an 8% increase from last years' scope 1 emissions, largely due to an increase in the natural gas use in 2022 compared to 2021. The increase in natural gas use is due to a higher number of heating degree days in 2022 compared to 2021, as well as the construction of several new facilities that utilize natural gas heating, as do temporary trailers which provide office space during construction periods. Despite the increase in emissions over the short-term, we are still making progress towards our 2025 target of reducing GHG emissions by 40% through the implementation of many efficiency projects, such as our energy performance contract and low carbon operational planning, that will reduce our emissions in the long-term. We are currently reviewing our GHG inventory and data, including all three scopes, to align to the GHG Protocol and support our reduction target.

Many of these initiatives and processes are already underway. Over the past year, we have made important updates to our capital project standards, such as the Life Cycle Carbon Accounting Standard and the Climate Resilience Planning Standard, to support in identifying, assessing, and managing climate-related risks for major infrastructure construction projects. The Life Cycle Carbon Accounting Standard requires that staff develop life cycle carbon accounting reports that include a life cycle assessment, life cycle cost analysis, embodied carbon in concrete construction calculation, and post-occupancy energy monitoring for all or new construction and major retrofits. By 2025, we aim to conduct whole building (or asset) life cycle assessments for all major buildings, retrofits, and infrastructure projects, with a focus on our keeper facilities. Similarly, the Climate Resilience Planning Standard supports staff in assessing climate risks for their infrastructure projects and identifying appropriate mitigation measures, such as green or grey infrastructure, design and engineering changes, and adjustments to location.

We have made improvements to our keeper buildings by installing smart building technologies, converting or replacing existing inefficient equipment (including both experiment and HVAC equipment), and providing additional training and upskilling to our staff regarding climate resilience, green design and building, and climate change mitigation and adaptation strategies. Additionally, we have decommissioned a number of old and inefficient buildings and infrastructure, and will continue to do so as we revitalize Chalk River Laboratories and other sites operated by CNL. Starting in 2023, by leveraging smart metering technology and tools such as ENERGY STAR Portfolio Manager, GHG emissions from the majority of office floor space will be reported, which will enable enhanced reporting and tracking of our emissions from our buildings. Starting in 2030 and fully achieved by 2040, we aim to have 75% of our office floor space at the Chalk River Laboratories located in net-zero carbon, climate-resilient buildings.

Fleet improvements

We are in the process of shifting our fleet to zero-emission vehicles or hybrid vehicles, with the goal of having our light duty fleet made up of 80% zero emission vehicles by 2030. To meet this target from a procurement perspective, we've established a supporting objective that 75% of new light-duty fleet vehicle purchases we make will be zero-emission vehicles or hybrids (with priority given to zero emission vehicles) by 2030. An in-depth analysis of the fleet at the Chalk River campus informed our Green Fleet strategy for increasing the efficiency in our vehicle fleet through initiatives such as centralizing our operations, consolidating technology types, and focusing on hybrid technology and biofuels in the interim in order to ultimately transition to fully electric vehicles when and where feasible. Currently, our fleet is made up of 5% electric and hybrid vehicles.

Over the past year, we have increased the number of EVs onsite to six, with another fully electric truck on the way in the summer of 2023 and an additional two more EVs coming at the end of 2023. We have 7 EV chargers on-site for fleet use, and 6 for personal vehicle use, and intend to add another 3-4 chargers. We have also transitioned a number of vehicles to smaller sized vehicles, thereby reducing both their environmental impact as well as their purchase and maintenance costs. We continue to make improvements to our fleet program through rightsizing our vehicles, implementing vehicle monitoring and recording technology, and continuing our CarShare program.

100% EVs AT THE MINWAMON BUILDING

As of this year (2023 October), we have achieved 100% electric vehicles at our Minwamon Building. The Minwamon Building is the official site entry point to Chalk River Laboratories which houses CNL's visitor and security check-in and serves as the hub for supply chain and logistics. Built as part of our Chalk River campus revitalization, the Minwamon Building consolidated operations from multiple old Chalk River buildings and helped to reduce vehicular traffic on Plant Road by creating a centralized location for logistics/shipping and receiving.

Carbon storage and sequestration

We are actively investigating and implementing opportunities to leverage our natural assets to support carbon storage and sequestration. In early 2023, we worked with a third party to model the carbon storage potential of the forest at Chalk River campus if managed according to our Sustainable Forest Management Plan. This preliminary analysis found that there is an estimated 2.4 million tCO2e currently stored within the forested ecosystems at the Chalk River site, and if managed according to our Sustainable Forest Management Plan, the forest becomes a carbon sink after 100 years, meaning it sequesters more carbon than it emits. Still in its preliminary stages, we are continuing to develop this analysis to investigate methods for optimizing the carbon sink potential of the forest.

In the spring of 2022, we commemorated the completion of the Port Granby clean-up project by working with the community to plant over 20,000 native trees at the site. Through collaborations with AECL, community members, local municipalities, and Indigenous leaders, we hope to establish the 82 acres of land surrounding the site as a nature reserve to provide important ecosystem services to the surrounding communities.

We are also working to reduce the embodied carbon of structural materials for major construction projects by 30% by 2025, through using recycled and lower-carbon materials, material efficiency, and performance-based design standards. We use Canadian mass timber as the main construction material to lower the embodied carbon footprint of our new construction compared to a typical concrete building design. We have been recognized as a leader in the use of mass timber and have recently presented our approach to stakeholders across Canada, including the University of Alberta's Sustainable Construction Group and NRCan's Greening Government Community of Practice. Overall, in three new buildings, mass timber has allowed us to sequester nearly 2,500 tCO2e and avoid nearly 1,000 tCO2e since 2015.

Emissions methodology

At present, we calculate emissions in accordance with the Federal Government's Greenhouse Gas Reporting Program (GHGRP). Using an operational control approach, we calculate Scope 1 and 2 emissions generated on all sites operated by CNL, with the exception of the Cyber Security Research Centre in New Brunswick and AECL's office in Ottawa. We are currently reviewing and enhancing the alignment of our current methodology with the GHG Protocol, and will integrate these methodology updates in future disclosures. Additionally, we are working to develop and disclose some Scope 3 emissions and have done so for some sources for 2022 CY. We are exploring additional scope 3 reporting for future.

Energy Management

We continue to pursue energy efficiency improvements across all CNL operations, and are working towards our target of a 30% reduction in energy intensity at Chalk River Laboratories, the most material site we manage, by 2035. In 2022, the energy use intensity at Chalk River Laboratories was 3,334 MJ/m3, representing a 16% decrease in energy use intensity below our baseline year of 2015. Chalk River Laboratories accounts for 86% of our total building energy use across all sites. We implemented several conservation and efficiency initiatives in 2022, including retrofitting interior lighting to LEDs in various site buildings, replacing a water pump with a smaller, more energy efficient model, decommissioning of two site buildings and converting another two site buildings to a cold and dark state in advance of decommissioning and demolition. Altogether, energy savings projects at the Chalk River Laboratories site achieved electricity savings of 1,970 MWh/year (equivalent to 60.03 tCO2e), and natural gas savings of 237,893 m3/year (469.67 tCO2e). Looking ahead, by 2024 energy use will be metered for the Chalk River Laboratories site keeper* buildings over 1,000 square meters with significant energy consumption. By 2025, energy use at all keeper buildings on the site will be monitored and managed using RETScreen Clean Energy Management Software, or an equivalent software.

Outside of Chalk River, energy improvements have been implemented at additional sites. With the Port Granby site completed, the amount of water being treated at the site continues to significantly decrease, allowing us to decommission one electric evaporator and put another on stand-by. At the Nuclear Power Demonstration site, we upgraded the outdoor perimeter lights from high pressure sodium to LED, and at the Douglas Point site, we removed electrical heat and lighting as well as routed New Class IV power to the facility. Altogether, these types of energy retrofits and reduction initiatives are key to supporting energy efficiency objectives across all CNL operations.

In addition to improving the existing infrastructure on our sites, we support energy efficiency and carbon reduction through our requirements for ongoing capital projects. For example:

- The Advanced Nuclear Materials Research Centre (ANMRC) is designed to be 30% more energy efficient than a typical building due to features such as energy efficient HVAC design, a building automation system, LED lighting, solar technologies, and the use of passive building strategies;
- The Science Collaboration Centre will use approximately 15% less energy than a comparable building thanks to features such as triple pane windows, efficient LED lighting systems with occupant sensors, and passive energy design and building orientation;
- Our new Cask Facility, which is one of several new waste management facilities to be constructed at the Chalk River site, has been designed to be 40% more energy efficient than a comparable building.

** Keeper buildings have been deemed part of the revitalized Chalk River Laboratory campus and have a defined mission greater than 15 years.*

TECH INNOVATION

We support AECL's Federal Nuclear Science and Technology (FNST) Work Plan by undertaking important nuclear research activities to maintain and improve viability, competitiveness, safety and security of nuclear technologies. With over 70 years of innovation behind us, our Vision 2030 positions CNL to continue to be a leader in nuclear science and technology in Canada for many more years to come.

Vision 2030 places a greater strategic priority in formalizing alliances with academic institutions to develop future nuclear researchers and engineers to meet labour gaps, share knowledge, accelerate early-stage research, and pool limited resources to advance common interests. Over the past year we have established collaborative research agreements with The University of New Brunswick, Western University, The University of Waterloo, McMaster University, the University of Ottawa, Trent University, and the Ontario Tech University and Memorial University of Newfoundland.

Restore and protect the environment

As a leader in decommissioning and waste management, CNL has accelerated some of the most complex and large-scale environmental remediation projects in Canada to ensure the effective, efficient, and safe elimination of nuclear liabilities at sites across the country. Major decommissioning projects include the Near Surface Disposal Facility project, the Nuclear Power Demonstration Closure Project, and the Whiteshell Laboratories Closure Project.

To advance our decommissioning and clean up processes, CNL leverages the latest technologies on the market. For example, when it came time to decommission the historic B426 water tower at the Chalk River Laboratories site this year, our Decommissioning & Environmental Remediation team leveraged digital twin technology to create a 3D virtual replica of the water tower to optimize the work planning process. Leveraging the 3D replica, the field execution team was able to visualize the sequence of decommissioning steps, identify gaps, mitigate potential risks, and make improvements to their plan, which led to time and resource optimization. Furthermore, in October 2022, CNL staff conducted a major unmanned aerial vehicle (UAV, also referred to as a drone) testing campaign to explore the use of UAVs to identify and measure the radiation being emitted from a plume source. The execution of these field trials was a major achievement in the Safety & Security area of the FNST Work Plan, as information gathered from UAVs can provide important information for response and recovery teams in the event of an emergency.

Clean energy

The scientists at Chalk River Laboratories invented the CANDU reactor, a clean energy nuclear innovation which now provides six out of ten homes in Ontario - and one in ten homes across Canada - with carbon free energy.

With increasing interest from the Federal government and industry stakeholders in the use of hydrogen as a low-carbon fuel, our research into hydrogen production, storage, safety, and utilization is a critical component of CNL's contribution to Canada's net-zero transition. In the spring of 2023, we introduced the concept of a Canadian Hydrogen Safety Centre that would deliver hydrogen safety solutions across multiple industrial sectors and regions. For more information on the Canadian Hydrogen Safety Centre, visit www.ch2sc.ca.

We support utilities, their suppliers, and industry research organizations by providing extensive research in reactor sustainability, safety, and next-generation fuels and materials. We are uniquely positioned to investigate and test next-generation nuclear fuel concepts that have the potential of improved performance, failure tolerance, safety, proliferation resistance, and accident tolerance. For example,

CNL has been investigating synthetic fuel, a new form of energy with the potential to be produced on a national scale using existing infrastructure, as opposed to requiring the construction of new and expensive infrastructure. In 2022, we initiated collaboration agreements with two companies – General Fusion and First Light Fusion – to advance fusion-based technologies and capabilities, which hold significant potential as a clean and reliable form of energy for electricity grids.

In line with the Government of Canada's SMR Action Plan, we are working to advance the development of small modular reactor (SMR) technologies as a source of safe, clean, and affordable energy. SMRs can be part of a diverse energy system which includes district heating, co-generation, energy storage, desalination, and hydrogen production, making them particularly attractive to remote off-grid applications in northern communities or industrial sites where consistent, reliable, and low carbon energy and heat is needed.

We're also advancing the science behind how nuclear technologies, such as SMRs, can work together alongside other renewable energy sources to create a hybrid energy system. The Clean Energy Demonstration, Innovation and Research (CEDIR) Park is a concept demonstration platform with the aim of showcasing clean energy research to support policy and regulation development, feasibility studies, engagement with stakeholders, and technology readiness of a hybrid energy system through demonstration. One example of an innovation to arise from the CEDIR Park initiative is our recent development of a proprietary techno-economic assessment tool – the Hybrid Energy System Optimization (HESO) model – which can support government and industry with determining the best energy mix for a community, geographical area or industry by minimizing cost, while also achieving performance requirements and GHG emissions reduction targets.

Health care innovation

CNL scientists continue to advance life-saving treatments that harness the power of nuclear science, with research focused on advancing knowledge in low-dose radiation health effects, mitigating health risks, providing isotopes, and enabling pre-clinical research and development services. A major focus for CNL has been the production of Actinium-225, a promising but very rare medical isotope that can be used for cancer treatment. Actinium-225 emits high-energy particles that have been shown to effectively kill cancer cells, while leaving nearby healthy cells virtually unharmed, through a treatment known as targeted alpha therapy (TAT). The end of 2022 marked five years since CNL's first successful shipment of Actinium-225; in that time, we have completed over 100 shipments of the isotope and have remained one of the few companies in the world with a successful and reliable supply. CNL recently secured facility-only Good Laboratory Practice recognition for the Biological Research Facility, a designation which paves the way to conduct high quality pre-clinical studies for the radiopharmaceuticals industry. In addition, we recently launched a new 'health stream' within our Canadian Nuclear Research Initiative to accelerate the development of targeted radiopharmaceuticals in Canada through collaborative research projects that aim to increase TAT safety and efficacy. Both of these accomplishments position CNL to advance research related to TAT and Actinium-225 at the Chalk River Laboratories campus and using its own materials.

Through this important work, we are positioned as an international hub for TAT and the production of the Actinium-225 isotope. As the next step in this journey, we are working towards producing significantly larger quantities of Actinium-225 supplies in order to strengthen the supply chain for the much needed isotope. Beyond supporting important cancer treatment, CNL's research contributes to radiation safety and worker protection in the nuclear industry and beyond, and is unlocking advancements in health sciences that may contribute to breakthroughs in how we treat a wide range of medical conditions.

PROGRESS TOWARDS SITING CANADA'S FIRST SMR

We are working towards having Canada's first SMR demonstration unit built on a CNL site by 2030. In 2018, we issued an invitation to SMR developers interested in participating in the evaluation process for the construction and operation of an SMR demonstration project. At present, there are four project proponents engaged in various stages of the invitation process, with Global First Power having progressed the furthest through the stages. In the spring of 2023, alongside AECL and Global First Power, we announced the selected location at the Chalk River Laboratories to site the proposed Micro-Modular™ Reactor (MMR®) project. Once operational, this SMR will be the first off-grid SMR to operate in Canada and would serve as a model for future SMR deployments to support remote and industrial applications.

CHALK RIVER REVITALIZATION TO ADVANCE INNOVATION

CNL has undertaken large-scale capital projects in the revitalization of the Chalk River Laboratories campus to support and enable research and innovation. In December 2022, AECL and CNL officially broke ground on the new, state-of-the-art ANMRC; the greatest single capital investment in the Chalk River Campus revitalization. Scheduled for completion in spring of 2028, the ANMRC will be the largest nuclear research facility in Canada, featuring 23 laboratories and consolidating key capabilities from aging facilities scheduled for decommissioning.

Additionally, construction was recently completed at the Science Collaboration Centre. The Centre will serve as a central planning and collaboration space for CNL's research programs, relocating aging research infrastructure and including features such as a library, a new auditorium and a wide range of meeting facilities and office spaces to facilitate collaboration.

WATER AND WASTEWATER MANAGEMENT

We recognize that our withdrawal, consumption and release of water can have a major impact on the health and wellbeing of the local ecosystems and on the quality of life in areas surrounding our sites. To this end, we strive to optimize our use of water and wastewater management practices and are working towards establishing a quantitative reduction target in the future. Work is also currently underway to install water meters at buildings across CNL on-going operations, which will support our monitoring and conservation efforts.

Leveraging the GRI: 303 Water and Effluent standard to guide our approach to measuring water withdrawal, discharge, and consumption, we annually monitor and report on water use from a total of seven facilities across Ontario, Manitoba, and Quebec, none of which are located in an area of water stress. Total water intake across all CNL sites in 2022 was 16,217.7 ML, an increase of over 5,000 ML, or 46%, compared to 2021. This significant increase in water intake is due in large part to a water main break on a fire water line at Whiteshell Laboratories in the winter months of 2022. The break could not be isolated and repaired until late that summer and as a result, a large quantity of water was released to the ground. Overall, the Whiteshell Laboratories recorded an increase of over 4,400 ML of water intake compared to 2021. Chalk River Laboratories also saw an increase in water intake compared to last year, due to staff returning to work following the lifting of COVID-19 restrictions, resulting in increases in work execution. Total water intake across all sites is shown in the table below

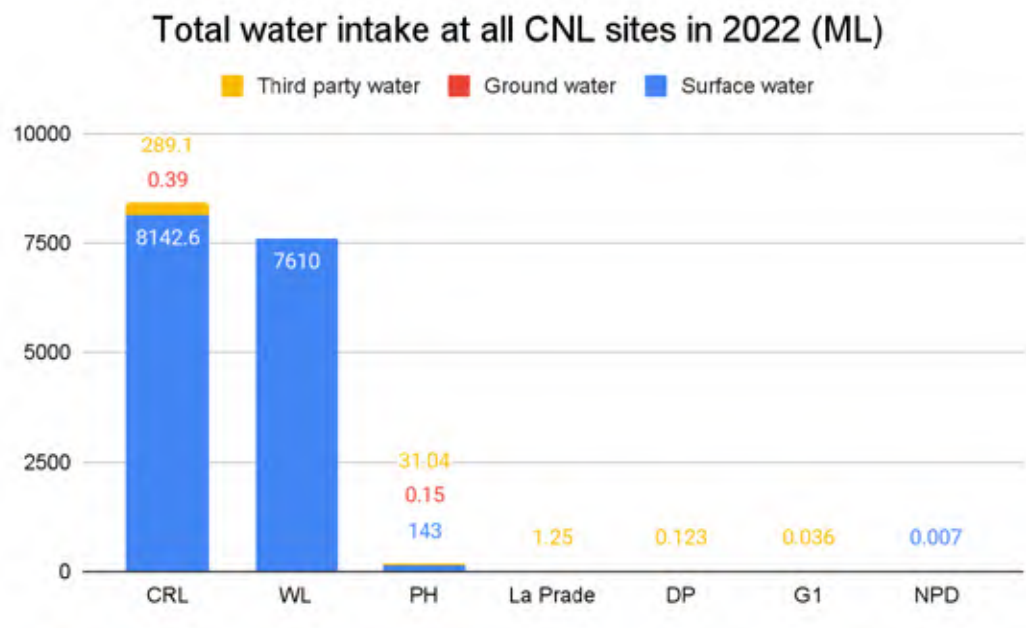


Figure 6. Total Water Intake at all CNL sites in 2022 (ML)

As shown in the table above, Chalk River Laboratories and Whiteshell Laboratories are by far the two most material sites for water use, and are therefore the focus of our conservation efforts as well as external reporting.

Water Use at Chalk River Laboratories

Chalk River Laboratories is located in the Ottawa River catchment area in Ontario, which is part of the St. Lawrence River watershed. Water is drawn from three sources, including the Ottawa River, Corry Lake and groundwater, which is then spread out across various buildings and facilities, and used as service water, process water and fire water.

Chalk River's service water intake is largely supplied by the nearby Town of Deep River, and is metered on a daily basis and then pumped into a reservoir for use in sinks, toilets, showers, as well as some laboratory/experimental use across the Chalk River campus. On average in 2022, approximately 39% of the incoming service water was directed through CNL's Sanitary Sewage Treatment Facility and safely discharged to the Ottawa River as effluent.

The remaining 61% of the service water was used for non-domestic purposes and was directed to the process water drains on site and safely discharged through the process outfall to the Ottawa River. Chalk River Laboratories' process water and fire water is drawn directly from the Ottawa River through pumps in our powerhouse. Fire water is stored in a holding tank and is not used unless in emergency situations.

Water Use at Whiteshell Laboratories

At Whiteshell, CNL draws water directly from the Winnipeg River. The water is utilized for various fire suppression systems, for site cooling in the summer, for a variety of cleaning and sanitary purposes throughout the year, and for misting to suppress dust during decommissioning operations. The water main break that occurred was a significant draw on water resources at the Whiteshell Laboratories in 2022 and resulted in our water intake increasing by over double since last year.

The site returns the water it uses through a discharge outlet that releases effluent back to the Winnipeg River. The site also operates a small lagoon that releases approximately 40,000 m3 (40 ML) of effluent on an annual basis. The lagoon effluent is released into a ditch system that delivers water back to the Winnipeg River. The site also has a Water Management System consisting of storm drains, which funnels water to our site discharge outlet, and a network of ditches that direct surface water runoff from our site back to the Winnipeg River.

Monitoring and Managing Environmental and Effluent Impacts

We maintain an extensive environmental monitoring program to track contaminants, understand the impact of our operations, and determine opportunities to reduce our environmental impact. Monitoring and evaluation is carried out using a wide range of effluent, groundwater, and environmental monitoring activities that enable the measurement of potential contaminants in every significant environmental compartment. More than 60,000 analyses are performed annually for radionuclides, major ions, trace elements, and a broad range of organic compounds.

We maintain a centralized, GIS-based Environmental Data Management System, which holds over 800 million historical environmental data records. This central repository maintains company-wide environmental data, including data related to air emissions, liquid effluents, soil, surface water, groundwater, vegetation, ambient air, game and wild animals, biodiversity and cultural heritage information. It also serves as a focus point for environmental risk assessments, allowing for efficient data sharing and a multidimensional viewpoint and analysis capability, as well as a resource for collective decision-making and actions concerning the management of CNL sites.

Specific to water, CNL conducts various assessments to evaluate whether radiological or non-radiological contamination has occurred. At Chalk River Laboratories, where the majority of our water use occurs in a typical year, we leverage the following processes:

- For radiological parameters in liquid effluents, Derived Release Limits (DRL) are used across all of the sites we manage to represent release rates that correspond to critical group exposures at the public dose limit. CNL operates with releases at a small fraction of the DRL to ensure that public doses are kept as low as reasonably achievable;
- A site-wide Environmental Risk Assessment is completed every five years. This includes the comparison of measured liquid effluent results for radiological and non-radiological parameters to ecological screening and risk-based benchmark values to assess the potential for ecological effects. This process is currently underway and is expected to be completed by January 2024;
- Liquid effluent monitoring results are obtained through the Effluent Verification Monitoring Program, which are summarized and reported in an Annual Compliance Monitoring Report. This report is then submitted to CNL's regulator, the Canadian Nuclear Safety Commission, for approval.

In addition to the above, we undergo several internal and external audits annually. For example, in 2022, internal and external audits of Chalk River Laboratories' drinking water were conducted, as well as external ISO 14001 audits at both Whiteshell and Chalk River Laboratories for their environmental management system.

Biodiversity and Land Use

We are committed to responsibly managing AECL sites to ensure the protection of local wildlife and ecosystems through the implementation of land management strategies and the incorporation of Indigenous Traditional Knowledge into our biodiversity work.

Sustainable Forest Management Plan at Chalk River

Our commitment to environmental stewardship reached a pivotal juncture this year when we completed our first draft of a Sustainable Forest Management Plan (FMP) for Chalk River Laboratories in early 2023. The FMP supports our efforts to manage and remediate the land at Chalk River, where we aim to restore the forest to its pre-industrial conditions. The benefits of this state-of-the-art plan include conservation of biodiversity and species at risk (SAR) as well as habitat conservation by mimicking the natural disturbance cycle of the Great Lakes St. Lawrence Forest. The FMP also supports our broader climate goals as it aims to facilitate an increase in carbon sequestration capacity as well as mitigate climate risks such as forest fires and flooding to support the resilience of the Chalk River campus. Our preliminary Forest Carbon Analysis, which was completed in the spring of 2023, was an important first step towards leveraging our FMP to highlight the potential for nature-based solutions in carbon reduction and storage within the forested ecosystems at Chalk River.

With the FMP now finalized, implementation will begin over the coming year. Leveraging the support of the Canadian Forestry Service, we will develop prescriptions to achieve the desired outcomes listed above. Prescriptions include defining the trees to cut, developing a cutting schedule, defining how to treat the remaining ground and what to replant. The FMP would also include the development of an Annual Operational Plan with field validation mechanisms, compliance and supervision schedules as well as reporting, mapping, and data management efforts.

Knowledge sharing

A crucial aspect of our biodiversity journey has been knowledge-sharing with Indigenous communities and collaborating in Indigenous-led, Traditional Land and Knowledge Studies. For example, in the summer of 2022, CNL collaborated with the Clearwater River Dënë First Nation to sample and test naturally occurring radioactive isotopes located within their traditional territory. CNL's collaboration with the Clearwater River Dënë First Nation was facilitated by Dënë Cheecham-Uhrich, a climate action researcher and community representative who supported the research team in engaging the community in the work. This opportunity allowed CNL to learn about and incorporate Traditional Knowledge in their research, obtain important community feedback to inform the sampling plan, and work with teachers from the local Clearwater River Dënë School and four students (aged 13-15) to assist in the week-long sampling campaign. At the end of the week, the group hosted a 'community demonstration' session, where sampling equipment was set up on Lac La Loche to demonstrate sampling techniques, addressing questions and also allowing the community to participate in the sampling collection process. The data generated from the analyses was provided to the Clearwater River Dënë community and final reports and publications were translated into Dënë so that elders and community members could understand the science behind the work.

Our knowledge-sharing efforts have also been demonstrated through our collaboration with the Kebaowek First Nation at the Chalk River Laboratories site. As part of this initiative, CNL shared information with the Kebaowek First Nation outlining CNL's environmental protection efforts for the site, including technical documents, biodiversity surveys and shapefiles. Highlights of our collaboration with the Kebaowek First Nation this past year includes CNL supporting over 1,000 person hours of field activities (since September, 2022) to support Kebaowek First Nation's interests and environmental research (as part of their engagement on the NSDF project). Activities included conducting forest songbird surveys, wolf tracking through the use of game cameras, a forest composition assessment, the collection of valued components in the field and large mammals movement.

We demonstrate our commitment to cross-industry collaboration and knowledge exchange through our partnership with the Petawawa Research Forest, a national living laboratory that is adjacent to our Chalk River site that provides scientific data to inform researchers, scientists and industry about long-term trends to help address current and future forestry issues. We also were active participants in the UN Biodiversity Conference: COP15 in Montreal in December of 2022, with one CNL employee selected as part of the Canadian delegation.

Biodiversity Projects

To support biodiversity on our sites, we have a number of exciting research projects and initiatives underway:

- Blanding's Turtle Project: In 2022 and 2023, CNL was awarded $50,000 for the Critical Habitat Interdepartmental Program to support research on the Blanding's Turtle, an endangered species under the Federal Species at Risk Act;
- 3D Printing of the Blanding's Turtle: Precision-printing 3D turtle models to support education, research, and SAR identification of the endangered Blanding's Turtle;
- Eastern Wolf Monitoring Project: Since 2012, CNL has been documenting the presence of Eastern Wolves on the Chalk River site when pups were captured on a trail camera at a wetland on site. The Eastern wolf is currently federally listed as a species of Special Concern under the Species at Risk Act;
- Ontario Breeding Bird Atlas Project: Mapping the distribution and relative abundance of Ontario's breeding birds throughout the province to provide essential information for environmental policies and conservation strategies;
- Bird-Friendly Buildings: Pioneering research into architectural design that harmonizes urban development with avian habitats;
- Reptile and Amphibian Eco-Passages: Constructing vital pathways to ensure safe migration for our diverse herpetofauna;
- Chimney Swift Habitat Monitoring and Maintenance: Retaining the ventilation stack of CNL's now decommissioned Nuclear Power Demonstration (NDP) site in order to provide a habitat will ensure minimal disruption for the Chimney Swift population that migrates to this stack. Starting in 2016 and occurring each year since, we count the number of Chimney Swifts that come to roost in the stack in order to monitor the population of this species at risk. Per our annual survey, a total of over 2,400 birds were observed at the NDP site and approximately 200 at the Chalk River site.
- Community Turtle Signs: Three species at risk hotspots located in the Chalk River local areas received some turtle crossing signs featuring designs by local kids, erected in time for the 2023 turtle season; and,
- Bat Population Studies: Investigating the secrets of our local bat populations to ensure their continued survival.

Overall, the success of our FMP and other biodiversity initiatives at the Chalk River Site has contributed to several awards and recognitions throughout 2022 and 2023, including:

- *Gold certification from the Wildlife Habitat Council for our commitment to environmental stewardship in the management of the Chalk River Laboratories campus, a designation that we also received in 2019;*
- *Recipient of the Reptiles and Amphibians Project Award, also from the Wildlife Habitat Council, for the installation of turtle eco-passages at the Chalk River campus;*
- *Named as a finalist in the Wildlife Habitat Council's 2022 Bats Project Award for our bat telemetry study and bat box monitoring project; and*
- *The Canadian Forest Service Merit Award for our collaboration with Garrison Petawawa and the Petawawa Research Forest.*

INTRODUCTION

CNL is committed to developing and maintaining meaningful relationships with all of our stakeholders, including the staff that we employ, the local communities where we work, the companies we do business with, as well as the public at large. Our Public Information and Disclosure Program (PIDP) ensures we maintain these relationships and communicate in a timely and effective manner.

We recognize our significant responsibility to provide a safe and healthy working environment for all our employees, contractors and other persons who access our sites, as well as to ensure the safety of the communities that surround us. Corporate policies such as our Health and Safety Policy, Nuclear Safety Policy, Security Policy, and People Policy are critical to ensuring that all our stakeholders are taken care of in this regard. Our Safety Excellence Vision and strategy offers a complete health, safety, security, and environment management system framework, and our Diversity, Equity and Inclusion (DE&I) and Accessibility Strategic plans ensure staff can complete their jobs with dignity and respect.

Communities and Economic Development

CNL is committed to keeping our communities and the broader public apprised of our activities. We share several updates through various communication channels, in addition to a consolidated list of reportable events at all CNL locations. CNL's Public Information Program outlines our public disclosure protocols regarding events and developments at our facilities, including the publication of documents describing the potential radiological and environmental impacts at CNL sites; interactions with community stakeholders; and publication of CNL's monitoring programs' results.

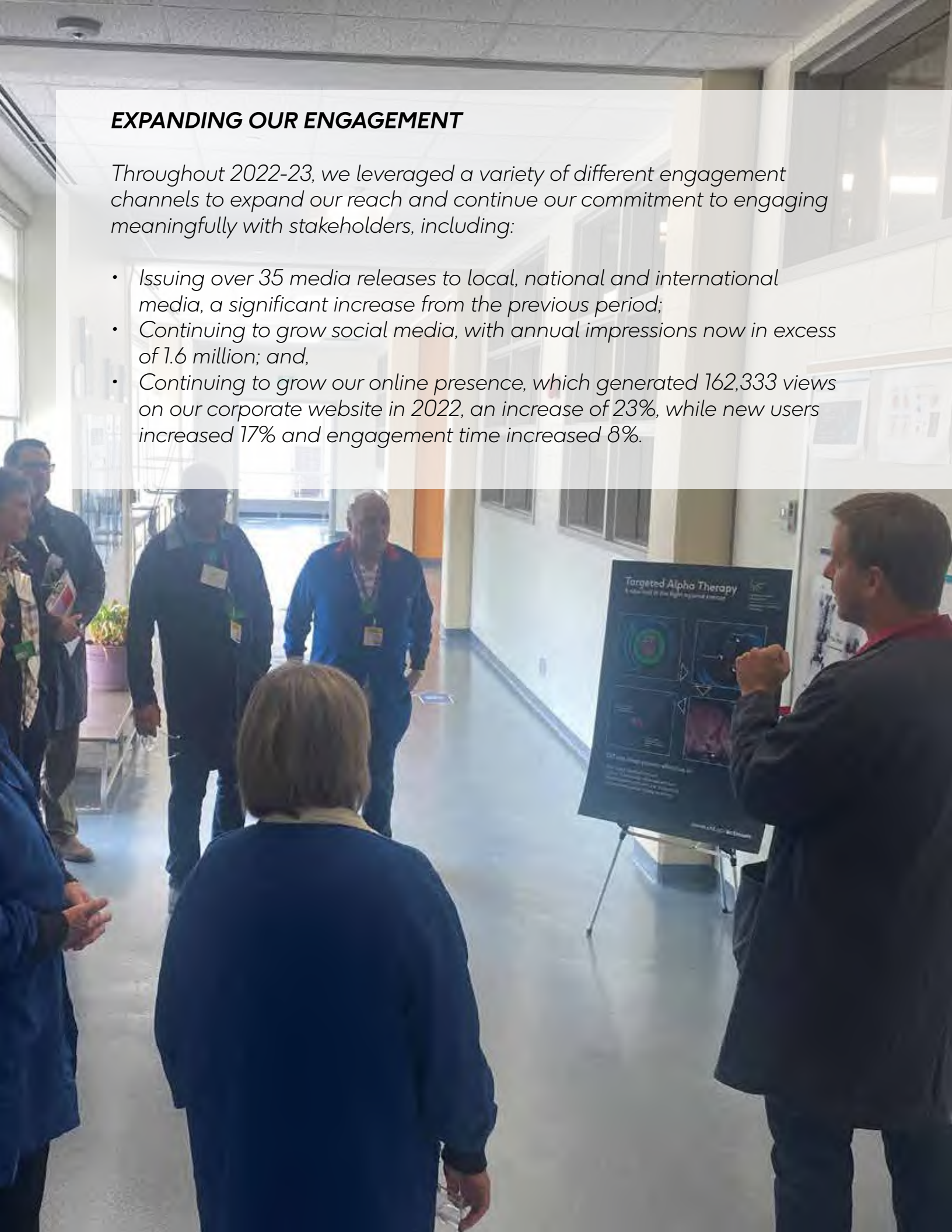
We leverage various platforms and channels to disseminate updates to the public, including:

- CNL's corporate website: www.CNL.ca;
- CNL's internal Intranet for staff: myCNL;
- Press releases;
- CONTACT newsletters (Chalk River and Whiteshell editions);
- Kids CONTACT newsletter (all sites);
- Community meetings;
- Community events;
- Site visits;
- Public engagement activities;
- Community inquiries/media line to provide direct line of communication with our Corporate Communications team and Stakeholder Engagement Team;
- Social media (including Facebook, Twitter, YouTube, LinkedIn and Instagram);
- Webinars & presentations; and
- An annual community webinar hosted by Presidents from both CNL and AECL

EXPANDING OUR ENGAGEMENT

Throughout 2022-23, we leveraged a variety of different engagement channels to expand our reach and continue our commitment to engaging meaningfully with stakeholders, including:

- *Issuing over 35 media releases to local, national and international media, a significant increase from the previous period;*
- *Continuing to grow social media, with annual impressions now in excess of 1.6 million; and,*
- *Continuing to grow our online presence, which generated 162,333 views on our corporate website in 2022, an increase of 23%, while new users increased 17% and engagement time increased 8%.*



One of the most impactful methods of engaging with our stakeholders is through open houses. In August 2022, both CNL and AECL hosted an Open House at the Chalk River Laboratories site for the first time in five years. We were delighted to host and receive a record turnout, with over 3,000 people attending the event, which also celebrated the revitalization of the Chalk River campus and AECL's 70th anniversary. The Open House came at a particularly exciting period of renewal for Chalk River Laboratories which included new buildings and laboratories that were constructed as part of the site's revitalization program. In addition to tours of the new facilities, the Open House featured family-friendly entertainment, including over 50 informative booths and displays, hands-on experiments, demonstrations and tours, mega-machines, a nerf gun challenge, decommissioning robots, food vendors, and a whole lot more. CNL also delivered a series of presentations outlining new research projects and programs, with topics such as SMRs, a rare new medical isotope known as Actinium-225, hydrogen energy, and work to establish a new clean energy research park.

A public attitude survey was conducted by a third party this past year, resulting in more than 500 randomly selected residents responding within Renfrew and Pontiac counties. We were pleased with the finding that majority of respondents:

- Are aware of CNL within the community;
- Are increasingly aware of the work being conducted at the Chalk River Laboratories site (including site revitalization, the Near Surface Disposal project, and CNL's small modular reactor program); and
- Are confident that the regulatory process for the Near Surface Disposal Facility had been followed by CNL staff.

The survey results serve as a validation that our information-sharing channels and overall stakeholder engagement initiatives are keeping communities well informed of CNL and our projects.

In order to facilitate direct feedback and engagement on our operations, we operate public-facing committees to engage with our surrounding communities. For Chalk River, an independently-facilitated Environmental Stewardship Council meets three times a year to discuss and provide input for solutions to a broad range of ESG-related issues. Chalk River Laboratories also hosts the Community Advisory Panel with discussions focused on activities that are subject to licensing and environmental regulation, as well as activities that may affect the social and economic life of the community. Similarly, the Whiteshell Public Liaison Committee and the Port Hope Community Liaison Committee engage with community stakeholders to discuss environmental and ESG matters as well as key projects on site. Finally, CNL has been and continues to be in compliance with *CNSC Regulatory Document EG-DOC-3.2.1: Public Information and Disclosure for 2022-23.*

CROWDFUNDING FOR LOCAL COMMUNITIES

In 2022-23, CNL supported surrounding communities through our employee crowdfunding initiative for the second year in a row. Through CNL's Community Crowdfunding campaign, a total of $150,000 was donated to a total of 29 causes, many of which directly benefit our local communities. These causes include funding to upgrade key facilities and services in the community, such as parks and outdoor trails, supports for mental health and homelessness, and the protection of animals. Some money will even be used to support the preservation of Canada's nuclear heritage, a cause which is near and dear to the hearts of many of our staff.

Economic empowerment for Indigenous communities

In support of true and lasting reconciliation with Indigenous Peoples, including economic reconciliation, CNL aims to build partnerships and collaboration with Indigenous communities and businesses in order to reduce barriers to procurement opportunities and to enhance economic outcomes for Indigenous Peoples.

We are an active employer of Indigenous Peoples within our community, and in 2022 CNL initiated a pilot program known as the Indigenous Millwright Apprentice program offered at no cost to our participants. We are also pleased to report that approximately 6.4% of CNL's current workforce self-identified as Indigenous this past year. For additional information, please refer to the Building meaningful relationships with Indigenous communities section of this report.

This year, we released CNL's Indigenous Relations Procurement Strategy which drives economic opportunities by prioritizing purchases from Indigenous businesses during our annual acquisition of goods and services. The strategy outlines how CNL intends to deliver on these commitments, as well as provides a vehicle for engagement and consultation on CNL's Supply Chain approach to Reconciliation.

For instance, a few of the strategy's key components include:

- Establishing targets aimed at progressive values or percentages of contracts awarded to Indigenous businesses, starting with a target of $10M for CNL's 2023-24 financial year;
- Working collaboratively with local Indigenous communities to help define objectives, targets and mechanisms to support various objectives;
- Preparing a vendor portal tailored to providing Indigenous businesses with advanced notice of upcoming procurements. The portal will also encourage suppliers to become part of CNL's Indigenous Business Network, creating opportunities for Indigenous communities and organizations to participate in a larger supply network;
- Our evaluation process encompasses a graded approach to encourage the use of regional Indigenous suppliers, ensuring the greatest benefit to those Indigenous communities closest to CNL project activities;
- Contractually incorporating the same expectations of this strategy within each of its Strategic Delivery Partnership Agreements with CNL's strategic Supply Chain Partners (as identified on our Vendor Portal), to collaboratively work with CNL and Indigenous businesses towards the same objectives, targets and reporting of Indigenous engagement and participation;
- Host workshops with Indigenous communities to engage and consult in the development of current capability and capacity of Indigenous businesses to meet CNL's contracting and procurement requirements;
- Providing a single point of contact to respond to inquiries by Indigenous vendors, and where possible, facilitate teaming opportunities with experienced Indigenous and non-Indigenous vendors;
- Conduct periodic activities and events, which may be annual or as needed, to promote and enable Indigenous businesses to become potential Vendors, including: webinars, notifications, workshops, etc.;
- Establish an Indigenous Business Network (IBN) to provide a platform of knowledge for interested Indigenous-owned businesses to build and cultivate new opportunities and business relationships. CNL will look to leverage existing relationships with Indigenous communities to enhance effective communications and engagement methods that will help to inform Indigenous businesses developing their strategies and plans; and,
- Participate in or with nationally recognized organizations, institutions, associations or forums to help gain or share education and knowledge transfer, learnings and information specifically pertaining to Supply Chain, Indigenous engagement and other related procurement activities or opportunities.

Overall, CNL's procurement strategy is a living document and will be refined through ongoing engagement with Indigenous communities, businesses and the overall supplier network to ensure that our policies are having the most impact while continuing to drive value for taxpayers.

Building meaningful relationships with Indigenous communities

CNL's reconciliation journey includes an approach to Indigenous engagement that has been evolving. In 2015, when CNL made public its plans to cleanup and revitalize its main campus –the Chalk River Laboratories – feedback from Indigenous communities and organizations sent a strong message that a significant increase in the level and scope of engagement was necessary to meet their needs and to reflect the outcomes of the TRC Report.

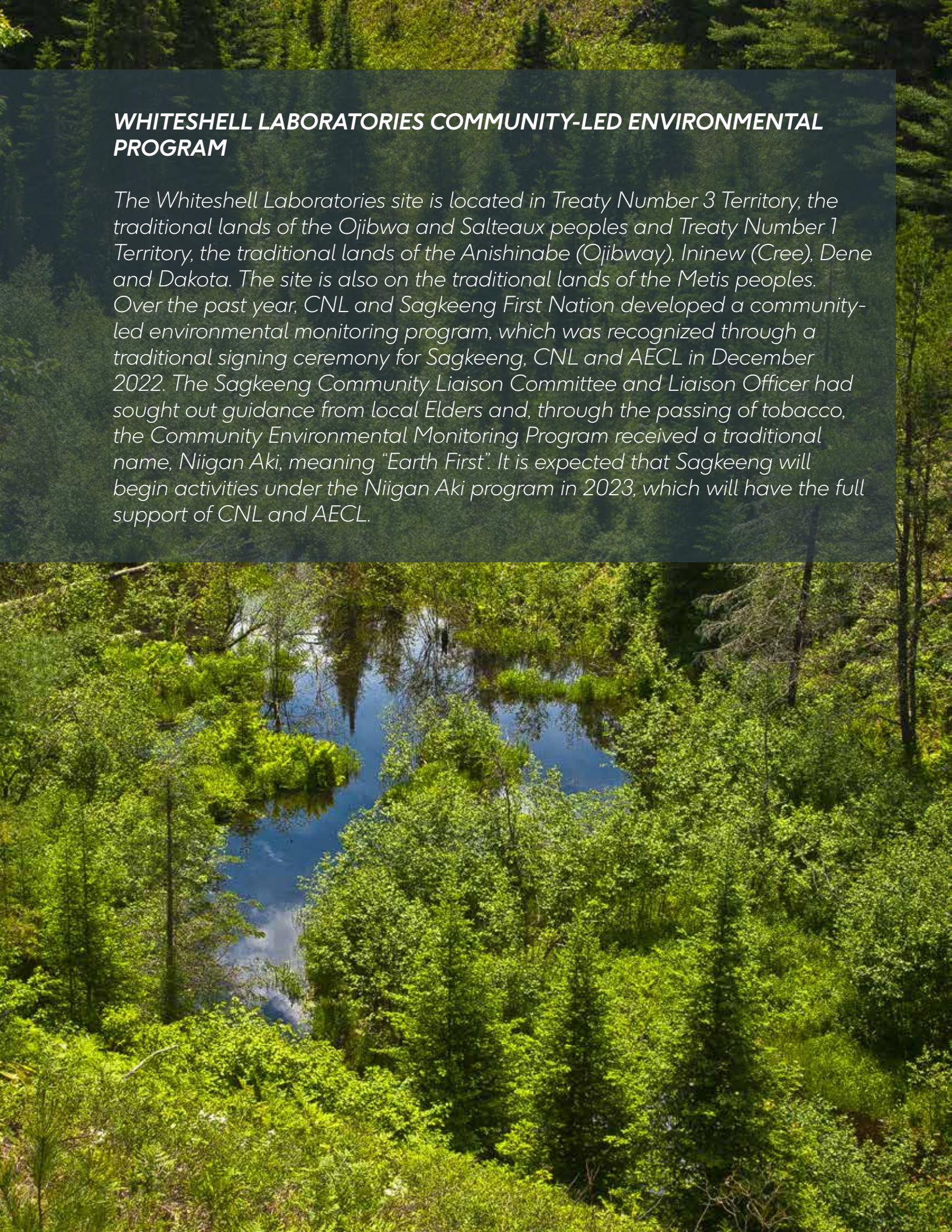
Between 2015 and 2022, CNL, together with AECL, established regular forums of two-way communication to better understand how Indigenous communities wish to be engaged and to provide opportunities for communities to raise questions and concerns about CNL operations and projects. We worked with communities to build their capacity so they can better participate in meetings, business ventures and regulatory proceedings. Commitments made by CNL and AECL have been incorporated into various agreements with Indigenous Nations to ensure agreement to individual and mutual responsibilities.

CNL's key initiatives in Indigenous engagement between 2015 and 2023 include:

- Engagement with numerous Indigenous Nations and organizations in Quebec, Ontario, Manitoba, Northwest Territories, and Alberta;
- Development of Long-Term Relationship Agreements (LTRAs), Memorandums of Understanding, Letters of Intent, and Framework Agreements;
- Signing of Contribution Agreements to formalize mutual commitments;
- Recognition of traditional languages, and the Indigenous nations who occupy the lands on which we all work, through an Algonquin Naming naming initiative on our Chalk River Laboratories site entrance building, now named Minwamon;
- Inclusion of Indigenous knowledge keepers in CNL's archaeological activities;
- Collaboration with Indigenous communities on environmental monitoring and biodiversity management;
- Participation in trauma-informed training to better inform our work with Indigenous peoples; and,
- Participation in on-site traditional ceremonies with local Indigenous communities.

We continue to increase our dedicated staff complement to support Indigenous Relations across CNL sites and operations and increase staff training to upskill and inform our workforce. Established dedicated staff have been focused on Indigenous relationship-building by improving our engagement practices, building capacity through long-term relationship agreements, fostering collaboration throughout our business units, and acting as Indigenous advisors for our project sites.

Key aspects of our commitment to the UN Declaration of the Rights of Indigenous Peoples and to reconciliation include ensuring free, prior, and informed consent as well as supporting the long-term provision of sustainable economic benefits. Across all of our sites, we maintain ongoing communication through monthly meetings, on-site visits, presentations, project updates, and Indigenous participation on committees such as our Environmental Stewardship Council, Citizens Advisory Panel, and the Sagkeeng Community Liaison Committee. We collaborate on ongoing Traditional Land and Knowledge Studies, community-led environmental monitoring programs, and harvesting and sampling collection programs across our sites to support our environmental protection and biodiversity efforts, gain a deeper understanding of the history of our sites, and incorporate contemporary interests of Indigenous communities.



WHITESHELL LABORATORIES COMMUNITY-LED ENVIRONMENTAL PROGRAM

The Whiteshell Laboratories site is located in Treaty Number 3 Territory, the traditional lands of the Ojibwa and Salteaux peoples and Treaty Number 1 Territory, the traditional lands of the Anishinabe (Ojibway), Ininew (Cree), Dene and Dakota. The site is also on the traditional lands of the Metis peoples. Over the past year, CNL and Sagkeeng First Nation developed a community-led environmental monitoring program, which was recognized through a traditional signing ceremony for Sagkeeng, CNL and AECL in December 2022. The Sagkeeng Community Liaison Committee and Liaison Officer had sought out guidance from local Elders and, through the passing of tobacco, the Community Environmental Monitoring Program received a traditional name, Niigan Aki, meaning "Earth First". It is expected that Sagkeeng will begin activities under the Niigan Aki program in 2023, which will have the full support of CNL and AECL.

Long-Term Relationship Agreement

We are proud to share the significant progress we have made in establishing a Long-Term Relationship Agreement (LTRA) to formalize relations between CNL, AECL and the Algonquins of Pikwàkanagàn First Nation (AOPFN). This agreement establishes a working group to serve as the basis for ongoing collaborations, and create a Neya Wabun (Guardian) Program that will institute a regular Indigenous-led monitoring presence at designated AECL sites, among other environmental, cultural and economic protection and promotion activities and programs. Specifically, the Neya Wabun program will provide AOPFN with the opportunity to monitor, and enable corresponding reporting back to the AOPFN. Through these ongoing engagements AECL and CNL hope to continue to maintain trust with AOPFN. Another key focus of the LTRA is one of CNL's major environmental remediation projects, the Near Surface Disposal Facility (NSDF) project, which would establish a modern engineered disposal facility for low-level radioactive waste at the Chalk River Laboratories campus.

The LTRA is the culmination of intensive efforts, negotiations and engagement to establish a productive relationship between the owner and operator of Canada's national nuclear laboratories and the AOPFN, built on mutual respect and understanding, and cultivated through ongoing opportunities for dialogue and participation. It also resolves and addresses key areas of concern identified by the AOPFN, including environmental protection, radioactive waste management, cultural protection and promotion, and the pursuit of collaborative economic and business opportunities. Having successfully addressed these concerns in addition to other AOPFN conditions and commitments being met by CNL, the organizations have reached agreement on the NSDF project, and the AOPFN has provided its consent to CNL and the CNSC to move forward with the construction of the proposed facility.

This past year, the license for the Port Hope Project was renewed by the CNSC for a 10-year period, which will involve continuous engagement with various Indigenous communities, including the Mississaugas of the Williams Treaties First Nations, the Anishinabek Nation, the Métis Nation of Ontario Mohawks of the Bay of Quinte, and local Métis Councils. As part of our new responsibility to provide training at these sites, CNL ensures that employees are sufficiently trained to strengthen our relationships with Indigenous communities through ongoing engagements, including special events such as Industry Day, career fairs and information sessions.

Finally, in addition to CNL's communication channels which were previously outlined, we engage directly with Indigenous communities through:

- Direct outreach (letters, calls and email), initiation of long-term relationship discussions, notifications and project updates;
- Delivering presentations and technical meetings to Indigenous communities upon request in addition to distributing copies of technical studies/reports;
- Conducting site visits and participating in National Indigenous Day; and,
- Hosting public industry days, including presentations on upcoming projects and processes for involvement; media notifications/releases.

To ensure the success of our outreach methods, CNL is currently formalizing an engagement process, as well as providing employees with cultural awareness training.

ALGONQUINS OF PIKWAKANAGAN FIRST NATION, AECL AND CNL SIGN HISTORIC LONG-TERM RELATIONSHIP AGREEMENT

Canadian Nuclear Laboratories
Laboratoires Nucléaires Canadiens

AECL EACL

Algonquins of Pikwakanagan First Nation

"This is a historic milestone in our relationship with the Algonquins of Pikwakanagan... Reconciliation is a journey – and the long-term relationship agreement between AOPFN, AECL and CNL is an important step in healing as well as building trust, founded on transparency and mutual respect. We look forward to working collaboratively together in the future." -
Fred Dermarkar, President and CEO, AECL

"At CNL, we believe that the inclusion of Indigenous knowledge into our projects and across all of our operations will help to improve the way we do our work, and to build understanding between CNL staff and Indigenous People. That is at the heart of this agreement and CNL's Reconciliation Action Plan, and I am incredibly excited to be working together with AECL and the AOPFN towards a shared vision for the sites that we manage."-
Joe McBrearty, President and CEO, CNL

PROVIDING APPRENTICE PROGRAMS TO INDIGENOUS COMMUNITIES

CNL initiated the Indigenous Millwright Apprentice program in 2022 to build capacity and provide employment opportunities for Indigenous communities. This program was driven by CNL employees and delivered in partnership with the Millwrights of Ontario, CNL's Capital organization and Human Resources department, and was supported by CNL's Corporate Affairs department. Through this pilot activity, 14 youth from various First Nations communities completed the pilot program at no cost to the students, preparing them for direct entry into the workforce. Building on the success of this program, CNL has undertaken discussions with Indigenous communities to explore further possibilities to enhance employment opportunities for Indigenous youth and individuals looking to re-enter the workforce.

Public Safety and Emergency Preparedness

Protecting the public's safety is paramount to CNL. In order to ensure our communities remain safe, CNL has developed and implemented various emergency response and safety programs and assessments, as outlined below.

CNL's Emergency Preparedness Program focuses on the prevention and mitigation of abnormal or emergent events, in addition to our response and recovery to such incidents. We conducted over 120 emergency response drills this year featuring scenarios that ranged from transportation accidents involving radiological material, chemical spill response drills in facilities, to site-wide emergencies. These drills are only a few of the scenarios for which an emergency response was practiced and exercised, to make sure CNL staff meet safety, legislative and regulatory requirements for abnormal or emergency events. Several of our Emergency Preparedness Program highlights for 2022-23 include:

- Our Pandemic Planning Committee wrapped up hundreds of initiatives over the last 3 years (2020 - 2023) to meet regulatory, health and legislative requirements to continue to operate CNL sites in a safe and efficient manner, while continuing to focus on strategic governmental and commercial priorities; and,
- Several internal and external reports were developed by the CNL Emergency Management Program to capture lessons learned from the pandemic and how operations were able to continue to run in a safe manner. These reports were also shared with groups such as the CANDU Owners Group.

Our Safety Analysis Program applies to all activities involving CNL Structures, Systems and Components, and all management, supervision and staff across CNL sites. CNL's Safety Analysis Program includes a suite of nuclear safety analysis documents to support the overall execution of requirements for planning, performing and documenting safety analyses for the full life cycle of nuclear facilities - from design to the decommissioning phases. As such, our Safety Analysis processes allow for the development, maintenance, oversight and effectiveness reviews of all work related to nuclear safety. CNL's dedicated Safety Analysis teams ensure that safety analysis activities are performed in a manner that considers the protection of our workers, the public and the environment, and comply with applicable regulatory and license requirements.

Our Nuclear Criticality Safety program provides a framework for safe operations at our Chalk River and Whiteshell sites to prevent nuclear criticality incidents by establishing company policies, processes and procedures that meet or exceed regulatory requirements. This program pertains to any activities that could affect safety in the use, process, movement and storage of fissionable materials. This past year, our Nuclear Criticality Safety program was enhanced through several key improvements, including:

- Provision of general training through a virtual platform and classroom training;
- CNSC staff providing updates on a semi-annual basis about the program;
- Development of a new Training Qualification Card for the appointment of Nuclear Criticality Control Officers. The process has been further strengthened by consistently and thoroughly assessing the suitability of personnel for the role of Nuclear Criticality Control;
- Participation in Emergency Preparedness drills pertaining to nuclear criticality safety;
- Included major revision of the annual nuclear criticality safety compliance assessment questionnaire to speak to adherence with Criticality Safety Documents and demonstrate that nuclear criticality safety requirements are being met; and,
- Launched an observation and coaching card for field visits to provide valuable data related to the frequency of field visits and frequency of findings during these visits.

Our Radiation Protection Program is designed to ensure that CNL complies with or exceeds the level of radiation safety that is required by the relevant regulations pursuant to the Nuclear Safety and Control Act. Our Radiation Protection program covers all CNL activities involving ionizing radiation and its fundamental objectives include limiting the doses to less than the regulatory requirements, limiting stochastic health effects in employees and the public to levels as low as reasonably achievable, and preventing non-stochastic health effects in employees and members of the public by CNL's use of ionizing radiation. This past year, we have enhanced our Radiation Protection program through the following improvements:

- Revised and submitted all Radiation Protection program documentation as required based on changes to the CNSC's Radiation Protection regulations;
- Changed our labeling practices to meet requirements outlined in the CNSC Radiation Protection regulations for legacy waste containers that are awaiting characterization and disposition. The changes to our labeling practices were also agreed to by CNSC staff; and,
- Consolidated and developed a Task Analysis and Training Plans, which was submitted to CNSC staff.

Further to these enhancements, CNL developed a comprehensive Radiation Protection Improvement Plan to drive continuous improvement and radiation safety across several key initiatives.

- This past year, we conducted a comprehensive Aging Management self-assessment, which resulted with the development of our Aging Management Implementation Plan. For instance, we are pleased to report that we executed all preventive maintenance activities on schedule at Chalk River Laboratories, with over 493,000 square feet of building condition assessments being completed.
- Finally, we annually leverage a provincial risk assessment tool issued by the Office of the Fire Marshal and Emergency Management called the hazard and risk identification assessment (HIRA). HIRA assesses the frequency, consequence, and changing risk factors of physical risks to develop a risk score based on the information that is entered.

In addition to our internal operations, CNL continues to monitor the conflict in Ukraine as part of the Federal Nuclear Emergency Plan to be ready to support any request for resources through the FNEP's Technical Assessment Group (on behalf of AECL). CNL received two requests due to the ongoing war in Ukraine to identify what capabilities and resources could be made available, ranging from the provision of subject matter expertise to availability of deployable field teams.

CANADIAN HYDROGEN SAFETY CENTRE

With a global focus on hydrogen as a key enabler for decarbonization, countries pledging to reach net zero emissions by 2050 are investing in relevant research and the development of necessary infrastructure. For this reason, CNL has initiated the concept development for the Canadian Hydrogen Safety Centre (CHSC) - a collaborative approach that integrates industry, government and academic membership. Newly launched this year, the CHSC's mission is to deliver hydrogen safety solutions across multiple industrial sectors and regions.

We have a dedicated team at CNL who is currently engaging with industry stakeholders to determine contributing memberships. For more information on CNL's CHSC, please visit www.ch2sc.ca.

"Hydrogen infrastructure in Canada needs to rapidly expand in order to support decarbonization efforts, and there are some key issues impacting the progress of this deployment...CNL, with the support of AECL, has been actively engaging with Canada's hydrogen industry over the past year to better understand the challenges being experienced. We've learned a lot in the process, helping to inform the strategy of a center of excellence in Canada to advance hydrogen safety." - Dr. Jeff Griffin, CNL's Vice-President of Science and Technology.

EMPLOYEE ENGAGEMENT AND WELLBEING

Safety Excellence Strategy

In pursuit of our ambitious Safety Excellence Vision, CNL's Safety Excellence Team (SET) took significant steps in enhancing our safety and wellness practices across our organization. Our four-year Safety Excellence Strategy and implementation plan, launched back in 2022, includes over 69 impactful actions aligned to 5 strategic priorities aimed at accelerating and enhancing safety measures and practices. At the end of our fiscal year 2022-23, we are proud to report that 21 of these initial actions are successfully completed, with 36 more in progress.

Figure 7. CNL's safety excellence initiative actions

As part of our commitment to ensuring and fostering a secure, healthy and thriving workplace, CNL's SET is playing a proactive role in engaging with our employees. To gain our employees' perspectives and feedback regarding CNL's safety performance, we conduct an annual safety perception survey. With a 52% response rate, the survey's participation rate reflects CNL's dedication to understanding the concerns and priorities of our workforce. We are using the results of our survey to guide us in the development of priorities and initiatives to ensure a safe and healthy environment for all. In alignment with our commitment to employee well-being, we introduced our Safety Excellence initiative which prioritizes psychological health and safety. Through the empowerment of our employees, transparent communication, and constant collaboration we are forging our own path toward sustainable safety excellence.

Occupational and conventional health and safety

Within the Occupational Health and Safety (OHS) area of focus, we are taking significant actions to ensure the safety and the well-being of our employees in alignment with the highest regulations and standards. Our Conventional Health and Safety Program, overseen by the OHS and Health Centre functional departments, went through a series of upgrades and enhancements over the past year. The Health Centre plays a key role in enhancing the relationship between our employees, corporate physicians and third-party disability management providers, and aids in identifying the appropriate accommodations and recommendations to ensure both the overall health and safety of our workplace.

We revised a range of internal procedures and standards in 2022 in response to various legislative and regulatory changes, including the Canada Labour Code and Canada Occupational Health and Safety Regulations and reference standards (e.g., CSA and ANSI). These updates not only align our core practices with current regulations, but pave the way for our ongoing program improvement.

Finally, we are continuously monitoring our safety performance, using various measures such as days away restricted transfer rate (DART), days away (DA), and total recordable case rate (TRCR) to keep a close eye on our performance and progress. Over the past five consecutive years, we are proud to share that our reported lost-time injury rate and working days lost have been steadily decreasing. Our injury rate is consistent with the safety performance of the Professional, Scientific and Technical Industrial Sector in the Workplace Safety and Insurance Board injury database.

Table 5. Health and safety performance figures

	2018	2019	2020	2021	2022
Person Hours Worked	5,396,450	5,729,010	5,346,690	5,358,630	5,709,410
Lost-Time Injuries	5	1	4	3	2
Working Days Lost	69	75	78	40	3
Frequency[a]	0.19	0.03	0.15	0.11	0.07
Severity[b]	2.56	2.62	2.92	0.15	0.15

a Frequency rate equals # of Lost-Time Injuries × 200,000 h of exposure divided by person hours worked (based on 100 Full-Time workers).

b Severity rate equals # of Working Days Lost × 200,000 h of exposure divided by person hours worked (based on 100 Full-Time workers).

Supporting our employees wellbeing

We adhere to a set of guidelines known as the National Standard of Canada for Psychological Health and Safety in the Workplace to ensure that employees' mental well-being is amongst our top priorities and ensure it contributes to their overall job satisfaction. As part of our endeavors to enhance Psychological Safety, a comprehensive assessment was undertaken back in September to evaluate the organization against the Psychological Safety maturity model indicator. As a result, the Psychological Safety indicator has remained at Stage 1.5, which signifies that while there is a continuous increasing understanding of the importance of psychological health and safety, challenges linked and correlated to stigma need to be addressed. To do so, we are taking a proactive approach in alignment with our SET (Safety Excellence Team) work plan for the period of 2023-2024. We are committed to positively cultivating an environment where psychological well-being is highly prioritized.

Our LifeWorks Employee and Family Assistance Program is designed to support employees and their families whenever needed and help foster a positive work-life balance for all. We offer a range of initiatives that further enhance our employee wellness experience such as LIFT, the LifeSpeak series, myCNL bulletins, and our 360 Wellness ambassadors. Each of these initiatives is carefully designed to improve the work environment and provide valuable support to our workforce. Other programs such as Aging Management and Fitness for Service also ensure that CNL is doing whatever it can to minimize risks and contribute to operational success.

We have implemented a Fitness for Duty Program to address issues related to fatigue and substance use among other mental and physical health concerns that our employees might face. We provide specific training such as Responsibilities in Supervising Employees (RISE) to our supervisors and managers to support them in effectively managing their own teams.

By prioritizing the well-being of our workforce, CNL is successfully able to foster a culture of excellence that benefits both our employees and the success of our business.

Diversity, Equity and Inclusion

Over the last year, CNL has developed a comprehensive Diversity, Equity, and Inclusion (DE&I) Strategic Action Plan. Designed with both short-term actions and long-term goals, this strategic framework aims to cultivate a diverse, equitable and inclusive workforce and acts as a blueprint for integrating DE&I principles into each stage of the Employee Lifecycle, the seven career phases that every employee experiences from the day they explore a job advertisement to the day they transition to a new opportunity. As we enter fiscal year 2023-24, we are initiating the launch and execution of this plan, ensuring its successful integration and awareness across our organization.

Figure 8. DE&I and the employee lifecycle

Accessibility Plan

CNL is committed to making its work environment and processes accessible. In order to meet our commitments to the Accessibility Canada Act, in the spring of 2023, CNL's Accessibility Plan was officially approved for use and implementation. The plan was developed following an assessment conducted in 2022 which identified barriers in the categories of employment, the built environment, information and communication technologies, procurement, design and delivery of programs and services, and transportation. In light of these results, the Accessibility Plan identifies actions to reduce the barriers and ensure that all individuals at CNL have access to the resources necessary to complete their jobs in a way that respects the dignity and independence of persons with disabilities. Specifically, the plan includes the following action items to be implemented over the next three years:

1. Ensure all emergency response plans in place account for assisting those with disabilities (physical and mental/psychological), for each building and location;
2. Provide all emergency postings to meet current accessibility requirements (e.g. large, easy to read font, high contrast, possible braille, etc.); and
3. Conduct assessment of existing alarms for accessibility concerns, such as whether alarms target multiple senses (e.g., visual, and auditory).

CNL will implement the plan and publish annual progress reports. The Accessibility Committee will meet periodically under the guidance of the Accessibility Manager, and each member will be responsible for monitoring accessibility actions in the various CNL departments. There will be a mechanism for employees to provide ongoing feedback and raise accessibility concerns so that the Plan can be continually updated and improved upon. In 2026, we will then publish a revised plan, considering the feedback received and progress reported, and then begin this three-year cycle of implementation, feedback, and revision again.

Gender and Pay Equality

To drive our commitment to gender equality, we actively support the Equal by 30 campaign. This initiative is designed to accelerate the proactive participation of women in the energy sector, striving for equal pay, leadership, and opportunities by 2030. We are currently working to formalize our targets and commitments to Equal by 30.

In addition, we have taken significant strides towards eliminating gender-based discrimination in pay practices and systems through the launch of the Pay Equity Act Project. To kick start this initiative, CNL has developed a project plan aligned with the requirements of the Pay Equity Act and retained an external consultant to progress CNL's pay equity commitment and ensure our project plan is executed. CNL has also established a dedicated Pay Equity Committee, comprising representatives from both union and non-union backgrounds across the organization. The Pay Equity Committee's primary responsibility is to review and assess CNL's compensation practices thoroughly, and to address the under evaluation of women's work, which contributes to the gender wage gap, by comparing job classes based on skill, effort, responsibility, and working conditions. This past year, CNL had the Union Presidents and Non-Union employees present the requirements of the act, what pay equity is and outline our pay equity project plan.

DE&I communication and engagement

We continue to enhance communication on DE&I areas and increase involvement in activities that promote DE&I, including highlighting and educating staff about significant historical events, cultural celebrations, and commemorative dates throughout the year. We sponsored and were an active participant in a number of local community events such as International Women's Day, Pride celebrations and multicultural festivals. We also attended the 2022 Women in Nuclear Conference with a large delegation of participants, encouraging women to network, share ideas, showcase their accomplishments and connect with potential female job candidates.

We prioritize educating our workforce on DE&I topics to increase awareness and understanding using an array of resources and tools that cover a wide range of subjects. These resources are designed to empower everyone in our organization to explore and learn at their own pace, on topics relevant to their individual experiences and circumstances.

We have also established a partnership with the Canadian Center for Diversity and Inclusion, a Canadian nonprofit organization with the mission to help promote DE&I in the workplace. Through our partnership, employees have access to educational resources, reports and webinars on various DE&I topics, such as unconscious bias, cultural competency and Indigenous reconciliation. We will continue to actively promote this partnership over the next year and ensure employees understand and utilize the unique benefits and resources provided.

Finally, we complete an annual employee survey to gather valuable DE&I employee demographics data. In December 2022, results of our survey found that CNL employed 3,569 people, with 6.4% identifying as coming from Indigenous communities and 6.2% of employees located at the Chalk River Laboratories identifying similarly.

TALENT ATTRACTION AND DEVELOPMENT

As is customary to CNL, we maintain a sufficient number of qualified workers to carry on our licensed activities safely and in accordance with the Nuclear Safety and Control Act and associated regulations. To continue this success, we are dedicated to fostering a workforce that thrives through continuous development and the attraction of diverse, talented professionals. Our commitment to talent attraction and professional development is present in every facet of our operations, ensuring that our employees are well-equipped to excel in their roles at full potential.

At the heart of CNL's commitment to employee success lies our robust Human Performance Program, which is designed to drive workforce empowerment and organizational excellence. Core aspects of the program include training, observation and coaching, communications, and event reporting.

Training

Our Training and Development initiatives ensure that our employees possess the skills and knowledge necessary to perform their roles effectively and safely. For this reason, we rolled out our new Learning Management System (LMS), called LearnCNL, in July 2022. Through our comprehensive LMS, we deliver training courses with precision and efficiency, as the system bundles training courses into certificates. As of December 2022, CNL has provided 846 training certifications through the LMS, along with 206 Company Roles in preparation for training assignment deployment in 2023.

We provide required training for employees, including: security awareness, values and ethics, violence and harassment prevention, and manager-specific content, such as behavioral observations and responsibilities in supervising employees. This past year, Human Resources rolled out two voluntary training programs, HR101 and HR105 (Harassment and Violence Prevention for Managers), which further reinforce our commitment to fostering a respectful workplace environment and preventing harassment. This year, we updated and continued to offer our "Human Performance Awareness – Fundamentals and Nuclear Safety Culture" course, which is an integral part of our New Employee Orientation, offering standardized messaging across our sites.

Our Human Performance Program also continued to support the Safety Excellence Initiative through attendance at biweekly SET meetings in order to provide programmatic support to the overall initiative. In addition, support was provided to a number of the Safety Excellence objectives including the Good Catch Program, supporting a revised company-wide Stop/Pause training package for managers and all employees, and producing an observation card for data capture and trending of events related to Stop/Pause conditions. A Focus-on-Four Initiative was developed and presented to the CNL management team in 2022 with the goal of increasing knowledge and awareness of key safety tools and to cultivate a series of safety culture behaviours. The Focus-on-Four Initiative is based on four key Human Performance tools: Stop/Pause, Self-Check, Verification, and Procedure Use and Adherence.

Academic Partnership

CNL S&T on-boarded a Director of Academic Partnerships to establish its new Academic Partnership Program (APP). This program will use the partnership network to develop talent and create a pipeline of highly qualified people who are excited to work at CNL, promote collaborative R&D to build networks and attract leveraged funding, and establish mechanisms to support reciprocal access to expertise and infrastructure. To achieve these objectives, CNL S&T is working to tie together the elements, such as: HR, legal, safety, quality assurance and, technical expertise that will provide a framework for a strong and enduring Academic Partnership Program. Close working relationships with the five academic partners has been established and discussions are underway on how to effectively create and implement programs (e.g., internship programs, R&D challenges, and collaborative R&D networks) to effectively implement the MOUs with an emphasis on actions and results. The APP expects to grow in the coming years to include a more pan-Canadian approach to its university partners and to include a network of colleges to strengthen the pipeline of skilled technologists and technicians that will be needed to support the S&T Mission.

Observation and Coaching

This year, our Human Performance team developed an observation card which can be leveraged as a management tool to assess performance influencing factors, such as the unique characteristics of people, work, or organization. Supporting coaches to observe and optimize these factors will improve reliability.

Communications and Events Reporting

We continued to implement our Human Performance Blog, featuring weekly articles on safety, cultural improvement, mental health, and other pertinent subjects, serving as a cornerstone of our communication strategy. We have developed a video series elucidating key Human Performance principles which has garnered positive feedback, providing accessible resources for employee growth.

We improved the process for Event Free Day Reset reporting, streamlining the approval process by reducing the number of line signatures required to approve distribution of the Event Free Day Reset flash reports and bulletins. This will ensure more timely distribution of significant events across the organization.

INTRODUCTION

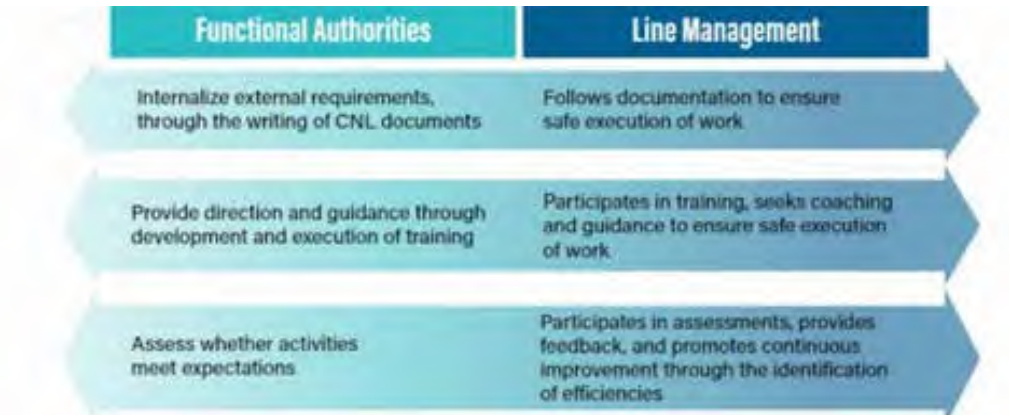
We believe that effective and efficient governance and management is a core prerequisite for consistently meeting our objectives and bringing value to our stakeholders. To this end, we established a strong corporate governance model and supporting policies to ensure that we are accountable to the CNEA, fulfill our obligations under contract to AECL, and conduct our work to the highest degree of ethical and quality standards. Our Integrated Management Control System establishes a framework to ensure that CNL can fulfill our mission and achieve our objectives.

Leadership and Accountability

CNL's Integrated Management Control System provides a control and accountability framework for all operations to ensure that work is conducted according to the expectations and requirements reflected in our corporate strategies, policies, and procedures. Embedded within the management system are CNL's strategic vision and mission, as well as our 11 corporate policies, which are reviewed, updated, and authorized annually by our Board of Directors and provide direction and requirements for all business activities performed by CNL. ESG is embedded throughout the management system in order to guide our operations sustainably, with several of our corporate policies directly supporting our ESG priorities and actions. The management system also defines our corporate governance structure and our organizational structure to operationalize our work effectively.

An overview of CNL's corporate governance model is provided in the ESG Oversight and Accountability section of this report, including a summary of the government-owned, contractor-operated model, our obligations to CNEA and AECL, and the governance structure in place at the Board of Directors level to ensure accountability. The section also describes specific governance structures in place to manage ESG at all levels throughout the organization.

Broadly, CNL's organizational structure combines two key elements, Line Management and Functional Authority, who work together to ensure that CNL's work is delivered safely, ethically, in compliance with requirements, and in alignment to the company goals. Line Management staff are responsible for conducting and directing CNL's operations. Functional Authority staff support Line Management in their implementation of operations by defining functional requirements for their specific area and ensuring implementation is consistent company-wide. The success of our management system depends on the integration and collaboration between Line Management staff and Functional Authority staff. The figure below shows an example of how the Line Management and Functional Authorities interact.



CNL's management system also defines our Contractor Assurance System (CAS), a framework that is used to measure and assess performance on our contractual obligations, provide data to management, and effectively manage processes, resources, and outcomes. Integral elements of the CAS include assessment, worker feedback, issue management, risk management, operating experience, continual improvement, and key performance measures. The system provides transparency between CNL, CNEA, and AECL to ensure alignment across the enterprise. There are currently several ESG performance indicators included within the CAS, including metrics related to greenhouse gas emissions, water usage, species at risk, and several others. To further improve our ESG monitoring efforts, CNL is currently developing an ESG dashboard which will enhance our data visualization and monitoring.

Another key function of our management system is to ensure accountability and compliance with relevant regulatory bodies. CNL operates in a highly regulated environment, particularly with respect to its licensed nuclear activities. External regulators grant CNL licenses that authorize us to undertake certain activities in accordance with defined expectations. These licenses define reporting accountabilities and subject CNL to periodic regulatory inspections to confirm compliance with conditions imposed by the license. Regulations and regulatory bodies to which CNL complies with include the Nuclear Safety and Control Act (NSCA), Canadian Nuclear Safety Commission (CNSC), Technical Standards and Safety Authority (TSSA), Environment and Climate Change Canada (ECCC), and Employment and Social Development Canada (ESDC), among others.

Overall, the effectiveness of the management system is subject to regular internal performance reviews by CNL's executive committee and senior management through processes such as:

- The Nuclear Performance Assurance Review Board, which reviews the performance of CNL's nuclear facilities, safety, and control areas on a quarterly basis;
- The Corrective Action Review Board, which reviews the status of CNL's corrective action program, our outcomes, and the results of quality audits;
- The CAS scorecard, which is used to integrate various performance measures and indicators to provide an evaluation of CNL performance; and
- Facility Authorities / Chief Nuclear Officer monthly reviews of nuclear facilities safety performance.

The CNL Management System Review for FY 2022–2023 concluded that the CNL's Management System is suitable to meet the necessary requirements, aligns with the strategic direction and, is effective at supporting CNL to achieve our objectives. Annual external audits are also conducted to ensure our management system remains compliant with the ISO 9001:2015 Quality Management System standard.

Ethics, Integrity, and Transparency

CNL's Ethics and Business Conduct corporate policy establishes and communicates high-level expectations for conducting business to a high standard of ethical business and conduct. CNL's Code of Conduct then provides more specific guidance on how to make decisions that are consistent with the Ethics and Business Conduct Policy. The Code of Conduct details CNL's core values and provides specific guidelines for personal conduct, business conduct, confidentiality, conflicts of interest, and the use of CNL assets and property. Both of these policies are integrated throughout the organization and inform all decisions made within our business.

We maintain a Supplier Code of Conduct to ensure our suppliers take responsibility for their own conduct and adhere to the highest ethical standards in compliance with the law, human rights and employment practices, anti-bribery and corruption and anti-competitive behaviours. CNL does not tolerate any forms of human trafficking, child or forced labour, or any form of fraud, bribery and corruption. We conduct due diligence on all our third parties to ensure our operations and supply chain are - and remain - free from all forms of corruption. CNL will soon be rolling out an even more comprehensive, integrated third party due diligence program, to screen all our third parties for risks related to corruption, foreign interference, modern slavery/force and child labour, and import/export compliance.

Under the government-owned, contractor-operated model, CNL is faced with many unique potential conflict of interest situations based on our ownership structure that must be managed ethically, proactively and transparently. In 2022-23, our Ethics & Business Conduct Office successfully managed 41 different potential conflict of interest situations within our operations.

To support employees who are seeking guidance or would like to report a concern related to our Code of Conduct, employees may contact our Ethics and Business Conduct Office, or leverage one of our confidential reporting channels. CNL maintains a robust whistleblower and internal compliance program, including an anonymous reporting tip line and a full time internal investigation function that includes Certified Fraud Examiners. In 2022-23, CNL's Ethics & Business Conduct office handled 283 complaints, reports, files and engagements from staff. We support our staff through mandatory annual training on values and ethics, as well as by hosting an annual Ethics Month to communicate and engage with employees regarding ethics topics throughout the month.

CNL also has an Ombuds Officer, who is independent of all line and staff management and reports directly to the Chief Operating Officer and the President and CEO. The Ombuds is a neutral, independent, confidential and informal problem-solver and change agent. The mission of the Ombuds Officer function is to offer an informal, impartial, independent approach to resolving concerns in a confidential manner while advocating for fair, efficient and transparent communication and policies that support a positive workplace culture.

Privacy and Data Security

CNL's Nuclear Cyber Security Section (NCSS) facilitates compliance with all applicable requirements for the protection of nuclear cyber assets and information. The team delivers various nuclear cyber security services and solutions to the business and ensures the confidentiality, availability, and integrity of all systems, information, data and intellectual property under CNL's control. The NCSS' responsibilities extend to providing security over operational technology, digital instrumentation, and the controls of CNL's nuclear and critical infrastructure. Key program elements include:

This past year we renamed our previous Cyber Security Department to Nuclear Cyber Security to align with the requirements within the CSA Standard N290.7-14. The requirements defined by National Institute of Standards and Technology Special Publication 800-53 have been moved to the Information Technology FSA. The new Nuclear Cyber Security governing documents were submitted to the CNSC as compliance verification documents for all CNL sites' LCHs.

A summary of our initiatives and accomplishments this past year include:

- Launched the Nuclear Cyber Security Program in March, 2023, with an opening meeting between CNL and CNSC where CNL delivered all initial requested documents on-time to initiate the formal inspection later that month. As of March 31, 2023 there has been no further request for information, however CNL's Information Security Solutions (ISS) team continues to engage with ANMRC for cyber and IT-related design elements.
- No IT security incidents experienced this year involving malicious emails - The ISS team conducted weekly email phishing campaigns along with one company-wide exercises. This was paired with the reporting of monthly statistics, with an average click rate of 6.7% for the year, well below our target of 15%. CNL remains confident that these exercises and associated awareness activities have bolstered CNL's ability to remain secure.
- Significantly reduced the number of unsupported servers identified in our Legacy Server Remediation plan. As of January 2022, there were a total of 171 unsupported servers and through various IT capital projects and operational remediation activities, this number was reduced to 70 (as of March, 2023), resulting in a 54.5% decrease in unsupported servers.

Cyber Security Program

The Cyber Security Program is implemented through the Security and Nuclear Cyber Security FSAs and is responsible for ensuring the protection of CNL personnel, facilities and nuclear materials in accordance with the CNL Security Policy. The Security Program is also responsible for administering security awareness programs, conducting minor investigations, providing technical direction to support security needs on a company-wide basis, and analyzing operational experience trends and data used to monitor performance. For example, key elements of the program include managing security services implementation, incident triage processes, remediation of unsupported services to reduce exposure, and regular social engineering exercises with staff.

The efficiency of our Security Program is evidenced by the program's ability to effectively manage and contain cyber and physical security risks/exposures for CNL and AECL, for which we obtained an "exceptional" rating as part of CNL's Health Safety Security & Environment report.

RESPONSIBLE SUPPLY CHAIN

Sustainable Procurement

Our supply chain is a vital component to CNL becoming a sustainable, high-performing national laboratory, and to be viewed as a trusted supplier and collaborator by the private and public sectors. CNL's Supply Chain Policy covers all activities across the company and supports Vision 2030. Further to our Supply Chain Policy, CNL previously developed a Sustainable Procurement Standard and relevant Sustainable Procurement Implementation Plan to implement the standard across our entire organization, paired with sustainable procurement awareness materials shared internally and with our external stakeholders.

We are currently working to align our procurement framework with global reporting recommendations in order to foster a more sustainable supply chain. This dedication to integrating sustainability within our procurement practices and policies is exemplified by several of our highlights this past fiscal year, including:

- Provided sustainable procurement training for staff;
- Updated our Supplier Code of Conduct to include more robust ESG considerations;
- Introduced ESG criteria in contractor scorecards, the criteria underwent several workshop reviews and will be released in the next fiscal year;
- Sent an ESG perception survey to suppliers in January 2023 in addition to a Supplier Readiness Survey in February 2023. Our Supply Chain team is currently reviewing the feedback to identify/inform any further improvements;
- Completed planning for a supplier sustainability program, with the intent to host 5 training sessions in 2023 and developed the conceptual blueprint for a CNL supplier ESG dashboard;
- Submitted a greenhouse gas questionnaire to suppliers in January 2023 for the purposes of collecting CNL's scope 3 emissions. Previous results of supplier readiness to report these GHG emission figures was approximately 26% (previously) and we are currently waiting for additional responses;
- Encouraged contractors/service providers to implement energy efficient tools and equipment and in addition to those that use water and waste management technologies;
- Prioritized low-carbon mobility, low-carbon fuels in mobile equipment and battery-powered and rechargeable equipment as part of our fleet management; and
- Successfully implemented the deliverables for FY 2022-23 under our Sustainable Procurement Implementation Plan.

Our procurement strategy and integration of sustainability considerations extends to our management of assets. For instance, CNL requires a wide range of vehicles and equipment to deliver our corporate objectives, many of which are leased, procured, allocated, managed, and maintained to meet or exceed applicable federal or provincial regulations. The management principles and considerations for CNL's fleet include: central coordination, optimization of fleet size, life cycle analysis of costs and benefits, service orientation to the business, optimized utilization with Car Share availability and genuine business needs, standard specifications, procurement demand, limited manufacturers/source to establish commonality in fleet, maintain pool of professional drivers, minimize carbon footprint and effectively manage fleet assets on behalf of AECL.

Indigenous Procurement Strategy

As previously mentioned in this report, CNL developed an Indigenous Procurement Strategy that aims to create economic opportunities through our supply chain. For instance, CNL's Indigenous Portal is a vendor portal dedicated to Indigenous businesses, and provides advanced notice of our upcoming opportunities. Additional features of our Indigenous Procurement strategy include a graded approach to encouraging use of regional Indigenous suppliers, and favored scoring for contractors that demonstrate use of Indigenous subcontractors. Our Indigenous Procurement Strategy is a living document that we intend to refine through ongoing engagement with Indigenous communities, businesses and our overall supplier network to ensure our policies support Indigenous business and continue to drive value. For further information please refer to the Economic empowerment for Indigenous communities section.

CNL also hosted the first Supply Chain Meet & Greet to build relationships between local Indigenous businesses and the nuclear supply chain. The networking event was organized in partnership with the Algonquins of Pikwakanagan, the County of Renfrew and Pontiac Regional County Municipality. Held at the Pembroke Inn & Conference Centre, the event welcomed over 100 local businesses and suppliers interested in working with CNL and its many strategic delivery partner companies. Attendees were given the opportunity to meet CNL and our major suppliers and to learn more about potential commercial and collaboration opportunities with both CNL and our partnership network.

"As Canada's national nuclear laboratories, CNL has a major economic footprint in the region, and we have a responsibility to extend commercial opportunities to local and Indigenous businesses wherever we can,"

- Joe McBrearty, CNL's President and CEO

OUR COMMITMENT CONTINUES....

Last year, CNL published its second Sustainability Report, which summarized our goals, achievements and ongoing efforts to become a more sustainable organization. This annual document is not only a record of our work – it also represents a sincere effort to help our neighbours, the public and Indigenous communities understand our operational decision-making, and to bring people along on our journey towards sustainable operations.

We want to thank employees at CNL who are working incredibly hard to make this journey possible, and to everyone who has followed along in the pages of this report. Looking forward, we will continue to make every effort to evaluate our operations and planning, and adopt policies and practices that build a better, brighter future for tomorrow.

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APPENDIX A: CNL'S ESG DATA

REFERENCES FOR ESG PERFORMANCE

Global Sustainability Standard Board GRI Standards:

GRI 305: Emissions (2016)
https://www.globalreporting.org/standards/media/1012/gri-305-emissions-2016.pdf

GRI 302: Energy (2016)
https://www.globalreporting.org/standards/media/1009/gri-302-energy-2016.pdf

GRI 303: Water & Effluents (2018)
https://www.globalreporting.org/standards/media/1909/gri-303-water-and-effluents-2018.pdf

GRI 306: Waste (2020)
https://www.globalreporting.org/standards/media/2573/gri-306-waste-2020.pdf

GRI 304: Biodiversity (2016)
https://www.globalreporting.org/standards/media/1011/gri-304-biodiversity-2016.pdf

GRI 2: General Disclosures (2021)
https://www.globalreporting.org/pdf.ashx?id=12358

GRI 403: Occupational Health & Safety (2018)
https://www.globalreporting.org/standards/media/1910/gri-403-occupational-health-and-safety-2018.pdf

GRI 201: Economic Performance (2016)
https://www.globalreporting.org/standards/media/1039/gri-201-economic-performance-2016.pdf

GRI 205: Anti- Corruption (2016)
https://www.globalreporting.org/standards/media/1006/gri-205-anti-corruption-2016.pdf

GRI 204: Procurement Practices (2016)
https://www.globalreporting.org/standards/media/1005/gri-204-procurement-practices-2016.pdf

2022 DATA TABLE			STANDARDS				
Measurement			GRI	2022 Data	SASB	TCFD	WEF
	ENVIRONMENTAL STEWARDSHIP						
	EMISSIONS						
Climate change	Total GHG Emissions (Scopes 1, 2 and 3)	tCO2e	305-1	40,419	-		•
	Total Direct GHG Emissions (Scope 1)	tCO2e	305-1	30,496	IF-EU-110a.1	•	•
	Total Indirect GHG Emissions (Scope 2)	tCO2e	305-2	1,623	-	•	•
	Total Indirect GHG Emissions (Scope 3)	tCO2e	305-3	8,300	-	•	•
	Reduction of GHG emissions	Metric tons of CO2e	305-5	30%	-		
	Total Nitrogen Oxides (NOx) (excluding N2O)	Metric tons (t)	305-7	94,807	IF-EU-120a.1		•
	Total Particulate Matter (PM10)	Metric tons (t)	305-7	30,686	IF-EU-120a.1		•
	Total lead (Pb)	Metric tons (t)	-	8.8E-5	IF-EU-120a.1		
	ENERGY						
Energy management	Non-renewable fuel consumed	GJ	302-1	4.26E+07	-		
	Electricity consumption	GJ	302-1	2.67E+05	-		
	Energy consumption outside of the organization	GJ	302-2	6.85E+03	-		
	Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives	GJ	302-4	16%	-		
	WATER AND EFFLUENTS						
Water and wastewater management	Total Water Withdrawn	Cubic meters	303-4	16,217.7	IF-EU-140a.1		
	Total Surface Water withdrawn	Megaliters	303-3	15,895.6	-		
	Total Groundwater withdrawn	Megaliters	303-3	0.54	-		
	Total Discharged Water	Megaliters	303-4	16,252.1	-		
	Total Surface Water discharged	Megaliters	303-4	10,094.6	-		
	Total Groundwater discharged	Megaliters	303-4	6,153.3	-		
	Total Consumed Water	Megaliters	303-5	41.62	IF-EU-140a.1		
	Total Water Storage	Megaliters	303-5	102.02	-		
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Number		8	IF-EU-140a.2		

2022 DATA TABLE			STANDARDS				
Measurement			GRI	2022 Data	SASB	TCFD	WEF
	WASTE						
Waste (hazardous and non-hazardous)	Total waste generated	Metric tons (t)	306-3	7,217.35	-		
	Total weight of waste diverted from landfill	Metric tons (t)	306-4	4,572.05	-		
	Total weight of non-hazardous waste directed to landfill	Metric tons (t)	306-5	2,386.01	-		
	Total weight of hazardous waste diverted from landfill (after treatment)	Metric tons (t)	306-5	0	-		
	Total weight of hazardous waste directed to a landfill	Metric tons (t)	306-5	259.29	-		
	Total weight disposed by incineration (with energy recovered)	Metric tons (t)	306-5	0	-		
	Total weight disposed by incineration (without energy recovered)	Metric tons (t)	306-5	0	-		
	Total weight disposed by other disposal operations	Metric tons (t)	306-5	0	-		
	Percentage waste diverted from landfill	Percentage	306-4	66%	-		
	BIODIVERSITY						
Biodiversity and land use	Size of operational site ("operational site" includes those owned, leased, and managed)	Km2	304-1	269,167 km2	-		
	Total number of critically endangered species from the IUCN Red List and the national conservation list	Number	304-4	1			
	Total number of endangered species from the IUCN Red List and the national conservation list	Number	304-4	6			
	Total number of vulnerable species from the IUCN Red List and the national conservation list	Number	304-4	3			
	Total number of near threatened species from the IUCN Red List and the national conservation list	Number	304-4	5			
	Total number of data deficient species from the IUCN Red List and the national conservation list	Number	304-4	20			
	Total number of least concern species from the IUCN Red List and the national conservation list	Number	304-4	0			
	Total number of endangered species from the SARA registry	Number	304-4	6			
	Total number of threatened species from the SARA registry	Number	304-4	12			
	Total number of special concern species from the SARA registry	Number	304-4	13			
	Total number of not at risk species from the SARA registry	Number	304-4	1			

2022 DATA TABLE			STANDARDS				
Measurement			GRI	2022 Data	SASB	TCFD	WEF
	PEOPLE AND COMMUNITIES						
	DIVERSITY AND INCLUSION						
	Percentage of Women	Percentage	2-7	31	-		
	Percentage of Indigenous employees	Percentage		6.4			
	Percentage of employees that are visible minorities	Percentage		8.8			
	Percentage of employees with disabilities	Percentage		2.1			
	TALENT ATTRACTION, DEVELOPMENT AND RETENTION						
	Percentage of total employees covered by collective bargaining agreements	Percentage	2-30	64%	-		
	HEALTH AND SAFETY						
Health, safety, and wellbeing	The number of fatalities as a result of work-related injury	Number	403-9	0	-		
	Number of recordable work-related injuries (OSHA TRC)	Number	403-9	15	-		
	The number of hours worked (for all employees) (excludes contractor hours)	Number	-	7,215,938			
	Fatality rate	Rate	-	0	IF-EN-320a.1		•
	Near misses	Number	-	52	IF-EN-320a.1		
	Total recordable incident rate	Rate	403-9	0.42	IF-EN-320a.1		
	Near miss rate	Rate	403-9	1.59	-		
	Number of mandatory reporting incidents (HOIRs – Hazardous Occurrence Injury Reports)	Number	-	15	-		
	Number of lost-time incidents (Number of DA cases)	Number	-	2	-		
	Frequency rate of lost-time incidents (DA Rate)	Rate		0.06	-		
	Number of days away or restricted Transfer (DART)	Number		7			
	Rate of DART Incidents	Rate		0.19			
	Percentage of employees covered by an occupational health and safety management system	Percentage	403-8	100			
	Percentage of employees covered by an occupational health and safety management system that has been internally audited	Percentage	403-8	100			

	COMMUNITY ENGAGEMENT						
Communities and economic development	Total community investment	Millions of Dollars	201-1	9.29 FY	-		•
	Total cash donations	Dollars	201-1	$274,497 FY	-		•
	RESPONSIBLE MANAGEMENT						
	BOARD COMPOSITION						
	Females	Number	2-9	2	-		•
Leadership and accountability	Non-Executives	Number	2-9	3	-		•
	Independent	Number	2-9	4	-		•
	Average Board Tenure	Number of years	2-9	4.6	-		•
	ETHICS						
Ethics, integrity and transparency	Percentage of employees acknowledging the code of conduct	Percentage	205-2	99	-		
	Potential conflict of interest situations within CNL's operations	Number		41			
	Number of complaints, reports, files and engagements from staff	Number		283			
	SUPPLIERS						
Sustainable procurement	Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally)	Percentage	204-1	58	-		
	Percentage of suppliers identified as having criteria to evaluate environmental performance	Percentage		40			
	Percentage of suppliers identified as tracking their water usage	Percentage		30			
	Percentage of suppliers identified as having identified their GHG emission sources	Percentage		34			
	Percentage of suppliers identified as tracking and reporting GHG emissions	Percentage		21			
	Percentage of suppliers identified as implementing energy efficiency strategies	Percentage		33			
	Percentage of suppliers identified as having a policy on waste management	Percentage		68			
	Percentage of suppliers identified as having a human rights policy	Percentage		63			
	Percentage of suppliers identified as having an anti- discrimination policy	Percentage		92			
	Percentage of suppliers identified as training employees on labour rights	Percentage		68			
	Percentage of suppliers identified as having a system to allow employees to report corruption or bribery concerns	Percentage		77			
	Percentage of suppliers identified as having a policy on protecting Indigenous People's rights	Percentage		61			

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