Canadian Nuclear Laboratories | Laboratoires Nucléaires Canadiens

Our Sustainability Journey

CNL's 2020-2021 Sustainability Report

2021 June 30

www.cnl.ca

Table of Contents

In the operation of our campuses and sites across Canada, CNL acknowledges the Indigenous Peoples, and their traditional territories upon which we carry out our work.

What We Learned This Year

What a year it's been. Like all organizations across Canada, the operations at CNL were heavily impacted by the COVID-19 pandemic. While we've had to confront a number of difficult decisions in order to navigate this event, I was personally inspired by the hard work of our employees, managers and contractors – through actions big and small – to protect one another from this virus.

It can be easy to forget, but the pandemic has reminded us that our lives are inextricably tied to the natural environment. Perhaps more than any event that's come before it, this experience should give us even more reason to take the threat of climate change and other environmental issues seriously, and to pursue the necessary steps as a society to confront these looming challenges.

I hope you will see this lesson reflected in the pages of this report. CNL's program of work is designed to deliver meaningful benefits to the lives of Canadians through our research, without compromising the well-being of our citizens, the environment and future generations. As we did during the pandemic, we must conduct our work carefully, ensuring that we look out for one another, respect the natural world and plan for a better future, every step of the way.

I'm pleased to say that we made strong progress in pursuit of this goal in 2020. Guided by our policy, CNL is striving to incorporate sustainability into all of our operations, embracing a holistic philosophy to our planning that considers sustainability in all stages of our projects and programs.

Whether it's our environmental work, workplace policies, capital program or procurement practices, sustainability is at the heart of every one of these activities, because it is at the centre of every decision we make as an organization, as we work to build a better world for Canadians. This is our objective, and I hope that you will see how hard we work to bring it to life in our 2020-2021 Sustainability Report.

Joe McBrearty
President and Chief Executive Officerr

The Right Thing To Do

Here at Canadian Nuclear Laboratories, we understand that the actions our employees take today have consequences for tomorrow. This is why we embrace sustainability as an organization, and why we incorporate sustainable principles and practices into all of our activities – to minimize the burden we place on future generations.

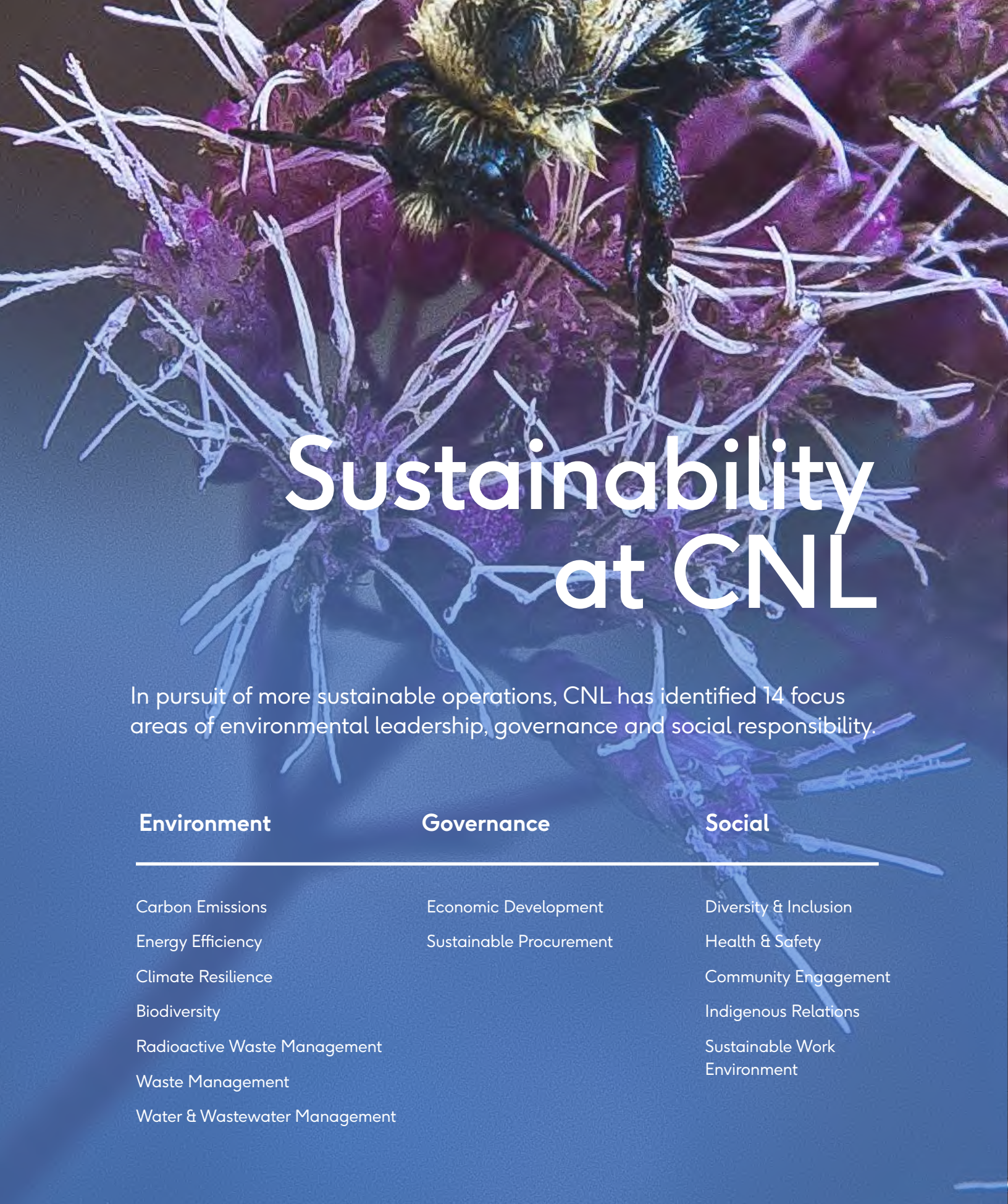
It's also why we work so hard to go above and beyond what's required of us as an organization. In the delivery of our program of work, we approach sustainability with ambition, continually identifying and pursuing more aggressive targets and measures that meet or exceed the rules and regulations we are subject to as Canada's national nuclear laboratory.

Registration of ISO 14001 at both the Chalk River and the Whiteshell Laboratories demonstrates our commitment to continual improvement and environmental stewardship. The international environmental management standards have challenged us to operate more responsibly, making more efficient use of our resources while reducing waste, wherever we can.

CNL's efforts extend beyond environmental performance. I'm pleased to report that sustainability is now making its way into all of the actions we take as an organization, from something as complex as the revitalization of infrastructure used to power and heat an entire nuclear site, to something as simple as turning off the lights. Across the company, we are evaluating our activities, programs and projects, to identify additional opportunities to improve as an organization and be a better corporate citizen.

Most importantly, we pursue sustainability because it's the right thing to do, for our employees, for our local communities, for the Indigenous Peoples on whose land we operate, and for the environment.

Jeff Willman
Vice-President, Health, Safety Security and the Environment (HSSE)



Sustainability at CNL

In pursuit of more sustainable operations, CNL has identified 14 focus areas of environmental leadership, governance and social responsibility.

Environment	Governance	Social
Carbon Emissions	Economic Development	Diversity & Inclusion
Energy Efficiency	Sustainable Procurement	Health & Safety
Climate Resilience		Community Engagement
Biodiversity		Indigenous Relations
Radioactive Waste Management		Sustainable Work Environment
Waste Management		
Water & Wastewater Management		

As Canada's national nuclear laboratory, sustainability is integrated into all of the work we do, and the decisions we make.

Whether it's deploying the next-generation of clean energy technologies to confront climate change, pursuing breakthroughs in the fight again cancer, developing pioneering nuclear waste management practices, or conducting research to improve Canada's national security, CNL scientists are hard at work every day building a better, healthier, more sustainable world.

But our commitment to sustainability also encompasses our own operations. In recent years, CNL has adopted a more holistic approach to our work that ensures our planning and goals are fully aligned with the Government of Canada's vision for a more sustainable Canada.

This includes our work to transform the Chalk River Laboratories into a modern, sustainable campus. The renewal of this site has provided CNL with the opportunity to transition to cleaner sources of energy to power the campus, adopt energy efficiency and sustainable features in its new buildings, and embrace the minimization of waste generation in all of its practices.

It includes our environmental protection program, which goes to extraordinary lengths to protect the wide variety of plants and animals that live on our sites. CNL has made a formal commitment to reduce or eliminate impacts to this wildlife and the lands that surround us, protecting the rare species of plants, birds, bats and turtles that call our sites home, including many species at risk.

It includes work we are doing to address Canada's nuclear legacy liabilities, restoring contaminated and affected areas all across the country. On the horizon is the delivery of major decommissioning and environmental clean-up projects, which are designed to ensure the safe and permanent disposal of nuclear waste liabilities within Canada.

Finally, it includes the pursuit of social and economic sustainability as well. In recent years, CNL has expanded its approach to sustainability, and now incorporates sustainable principles and practices to nurture a healthier work environment for its personnel, meaningful engagement with local and Indigenous communities, and economic opportunities for local businesses and organizations.

Sustainability Scorecard

CRL GREENHOUSE GAS EMISSIONS DOWN BY

31%

MEETING THE 2030 NATIONAL TARGET 10 YEARS AHEAD OF SCHEDULE

Target: Carbon Neutral Operations at CRL by 2040

11%

ENERGY USE INTENSITY

REDUCTION AT CRL FROM 2015 BASELINE

Target: Reduce energy intensity by 30% by 2035

A WORKPLACE WHERE ALL

EMPLOYEES

ARE APPRECIATED AND VALUED

Target: Supporting equality, inclusion and diversity

SUPPLY CHAIN

POLICY UPDATED TO STRENGTHEN CNL'S POSITION ON

SUSTAINABILITY

AND DRIVE ACCOUNTABILITY

Target: Building a sustainable supply chain

ESTABLISHED A GOAL OF

75%

RECYCLE RATE

Prevent and minimize the production of conventional waste

ESTABLISHED A GOAL OF

90%

DIVERSION FROM LANDFILL

MOVED TO A
VIRTUAL ENGAGEMENT PLATFORM

Target: Communicate and engage with the public, stakeholders and Indigenous communities and organizations

$724 MILLION
IN GROSS DOMESTIC PRODUCT

Target: Tracking the economic benefits of CNL activities

DEVELOPING CLIMATE RESILIENCE
PLANS TO ENSURE OUR
INFRASTRUCTURE
WITHSTANDS CHANGING ENVIRONMENTAL CONDITIONS

Target: Applying climate resilience standards

SUPPORTING
PARTICIPATION IN
TRADITIONAL KNOWLEDGE
AND LAND USE STUDIES

CREATING PARTNERSHIPS
WITH INDIGENOUS COMMUNITIES FOR ENVIRONMENTAL MONITORING

Target: Meaningfully engage with Indigenous Peoples, in an open and cooperative way, to achieve mutual understanding of interests and identifying opportunities for collaboration and partnerships.

WATER METERING,
MINIMIZATION EFFORTS AND COMMUNICATION
TO PROMOTE REDUCTION

Target: Track and minimize water Use

DONATED.
VOLUNTEERED.
PROTECTED.

CNL STAFF CONTINUE TO CONTRIBUTE TO THE FIGHT AGAINST **COVID-19**

Target: The safety and well-being of all employees

95%
LAND CONVERSION AVOIDANCE GOAL

DEVELOPED A SITE **MASTER PLAN** AND A **FOREST MANAGEMENT** PLAN FOCUSED ON MINIMIZING IMPACT ON SPECIES AT RISK

Target: Zero loss of Species at Risk (SAR) and Critical Habitat

INCREASED **MENTAL HEALTH** SUPPORTS
–
LAUNCHED OUR **DIGITAL WORKPLACE** INITIATIVE

Target: Providing a sustainable work environment

REMOVED
21,368 M²
OF BUILDING FOOTPRINT

COMPLETED EXCAVATION AND TRANSFER OF
1.3 MILLION TONNES
OF HISTORIC LOW-LEVEL RADIOACTIVE WASTE AWAY FROM THE LAKE ONTARIO SHORELINE TO A SAFE ENGINEERED CONTAINMENT MOUND

Target: Responsible radioactive waste management

Canada's **national** nuclear **laboratory**

For three quarters of a century, Canada's national nuclear laboratory has been home to new and exciting breakthroughs in nuclear science and technology.

This work has had profound impacts on people all over the world – from the way we power our homes and business, to the technologies we use to fight cancer. As we build on this history of innovation, CNL has developed a plan that charts our path forward for the next decade. Known as Vision 2030, this plan encompasses all-new programs and projects that focus on our competitive advantages, seek to grow our commercial business, and position the company as a sustainable, thriving business into the future.

Most importantly, Vision 2030 builds on what we already do best – cleaning up the environment, developing clean energy technologies for today and tomorrow, and improving the health of Canadians.

A Unique Management Model

Atomic Energy of Canada Limited (AECL) has contracted CNL to manage and operate its sites and facilities across the country, and to carry out its mandate, conducting nuclear science and technology on behalf of Canadians, and protecting the environment by fulfilling the Government of Canada's radioactive waste and decommissioning responsibilities.

While AECL owns the sites, facilities and the nuclear liabilities, CNL is responsible for the day-to-day operations and delivery of the work. This operational structure is known as a government-owned, contractor-operated model, or a GoCo model.

Clean Energy for Today and Tomorrow

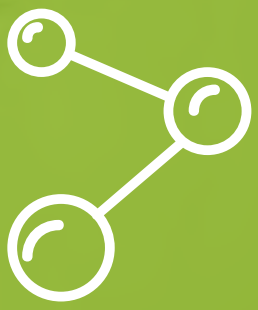
In clean energy, CNL is working to bring the next-generation of clean energy technologies to Canada – Small Modular Reactors (SMRs). But our work in clean energy extends into other areas as well, including the production of hydrogen, the development of advanced nuclear fuels, the integration of clean energy technologies, and research to enable the safe and reliable operation of today's nuclear generating stations.

Restore and Protect the Environment

CNL is managing the largest and most complex environmental clean-up missions in Canada, including the Chalk River and Whiteshell Laboratories sites, and the remediation of historic waste as part of the Port Hope Area Initiative. We are also leading a number of major environmental remediation projects, including the Near Surface Disposal Facility (NSDF) project, the Nuclear Power Demonstration (NPD) Closure Project, and the WR-1 Closure Project.

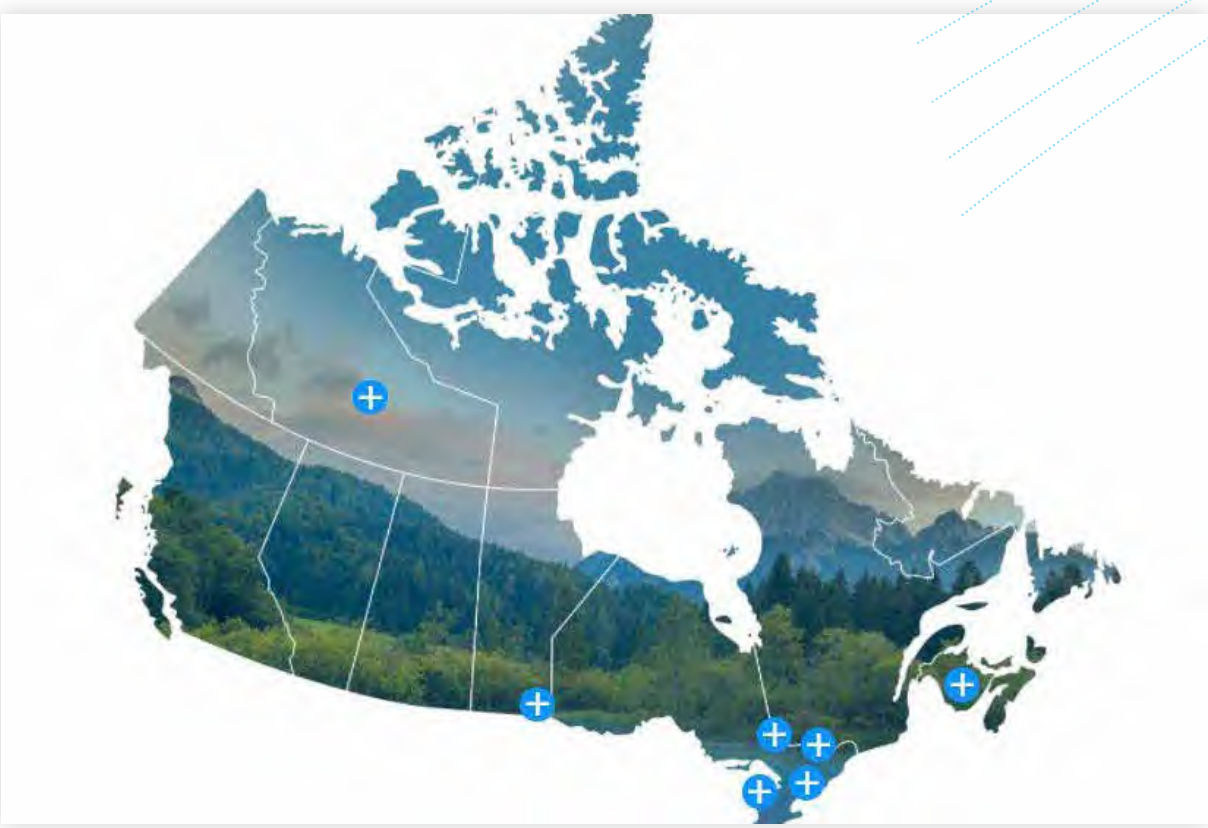
Contribute to the Health of Canadians

With over one billion medical treatments conducted using isotopes produced at CNL, we have been a world leader in the production of radiopharmaceuticals for decades. We are now leveraging this expertise to become an international hub in the research, development and supply of alpha-emitting isotopes, including Actinium-225, a rare isotope that can be used to create a revolutionary new cancer treatment .



Vision 2030 builds on what we already do best – cleaning up the environment, developing clean energy technologies for today and tomorrow, and improving the health of Canadians.

A National **Footprint**



CNL manages nuclear research and clean-up sites across Canada, including the Chalk River Laboratories. The site is situated on the banks of the Ottawa River, and is home to approximately 2,700 employees, including scientists, engineers, physicists, and other technical experts, and some of Canada's most advanced nuclear research facilities, technologies and equipment.

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 the company is 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.

Revitalization of the Chalk River Laboratories

As the birthplace of nuclear research here in Canada in 1944, the Chalk River Laboratories has been home to some of the world's most exciting advances in nuclear science and technology. To build on this legacy, the Government of Canada through AECL has committed to a 10-year investment of $1.2 billion dedicated solely to the revitalization of the facilities and infrastructure at the Chalk River Laboratories, presenting CNL with an opportunity to transform the site into a modern, sustainable campus.

This process began in 2016, and includes the renewal of essential site infrastructure, the decommissioning of outdated buildings and a significant investment in new, world-class science facilities. Environmental stewardship and sustainability is integrated into this work, reflected in the design of the new facilities being constructed, as well as the infrastructure improvements.

Modern and **Sustainable**

The Chalk River Laboratories is being modernized with sustainability in mind. In the design of its new buildings, CNL is pursuing strategies that include sustainable site development, water and energy efficiency, materials selection, and indoor environmental quality. In many of these buildings, CNL is also using a variety of renewable materials, such as cross-laminated timber products made in Canada.

A Campus of the **Future**

As part of the revitalization of the Chalk River Laboratories, CNL is exploring the adoption of smart technologies and other improvements that would transform the site into a 'campus of the future.' This smart campus would nurture a more flexible work environment, encourage innovation and collaboration, reduce impacts on the environment, and improve campus operations, ensuring:

- Employees are connected to their work and colleagues, everywhere and anywhere. This reduces commuter carbon emissions
- Operations are efficient, adaptive and automated
- Technologies drive improvements in environmental and safety performance
- Systems are intelligent, well integrated and securely managed

In early 2021, CNL's new site entrance building was named a recipient of the 2020 Ontario Wood Design Innovation Award. HDR Architects and our Integrated Project Delivery team have designed the building which was one of six winning projects celebrated through the Ontario Wood Design Awards program.

The site entrance building is one of several new buildings being designed and constructed at the Chalk River Laboratories campus using wood sourced from Canada. Wood is not only recyclable and biodegradable, which helps reduce CNL's carbon footprint, but it also aligns with the logging heritage of the Ottawa Valley.

16

The Harriet Brooks Building enables cutting-edge research activities as CNL's new laboratory for materials science.

The Advanced Nuclear Materials Research Centre will serve as a modern laboratory research complex and the backbone of CNL's research and development infrastructure.

The Business Hub will house CNL's business infrastructure and provide modern office space for approximately 400 employees.

The Support Facility will consolidate maintenance resources, work management and equipment into a single, centralized location at the campus.

Science & Technology for a Sustainable World

To build a clean energy future here in Canada, we must make scientific progress today. Science to develop energy that is free of greenhouse gases; science to protect our environment from pollutants and other harmful emissions; and, science to make clean energy technologies work better together, from nuclear energy and hydrogen to solar and wind power.

That work is underway at CNL, where we are working to help deploy the next-generation of nuclear reactors in Canada and around the world – small modular reactors. We are leveraging our expertise to make advances in other forms of clean energy as well, including the production, storage and safety of hydrogen, the development of advanced nuclear fuels, and the integration of clean energy technologies.

Small Modular Reactors

As a low-carbon source of energy, SMRs are smaller in size and in energy output than traditional reactors, can be constructed efficiently in a modular way, produce less waste, incorporate new safety technologies, and have the potential to be more cost-effective. They can also be deployed both on-grid and off-grid in remote communities, or at industry sites such as mines or the oil sands.

But the benefits of SMRs go beyond electricity generation. These reactors also produce heat, which could be used to warm people's homes, public buildings, or any number of other applications, including greenhouses for agriculture, hydrogen production to power vehicles of the future, or energy storage for power disruptions or emergency situations.

Siting Canada's First SMR

In 2018, CNL issued an invitation to SMR developers who wish to participate in the evaluation process for the construction and operation of an SMR demonstration project at a CNL-managed site. At present, there are four proponents engaged in various stages of the invitation process.

Global First Power has progressed the farthest in this process, and recently entered into the licencing process with the CNSC for its Micro Modular Reactor (MMR™) design. An Environmental Assessment for a demonstration project at our Chalk River campus is underway.

Clean Energy Demonstration Innovation Research (CEDIR) Park

CNL is exploring a new strategic direction that could broaden the company's vision – the creation of a clean energy research park at the Chalk River Laboratories campus, where nuclear research can be carried out alongside work to develop other clean energy technologies.

This could include the use of SMRs to provide baseload power for intermittent renewable energy sources like wind and solar, or using excess heat from SMRs to produce hydrogen or to enable district heating. Overall, the objective is to examine how these technologies can be used in tandem with one another to maximize their potential.

Hydrogen Research

In 2020, the Government of Canada released it Hydrogen Strategy for Canada, an ambitious plan to cement hydrogen as a key part of Canada's path to net-zero carbon emissions. Hydrogen offers low-carbon options for the energy and transportation sectors, supporting Canada's international commitments for carbon reduction.

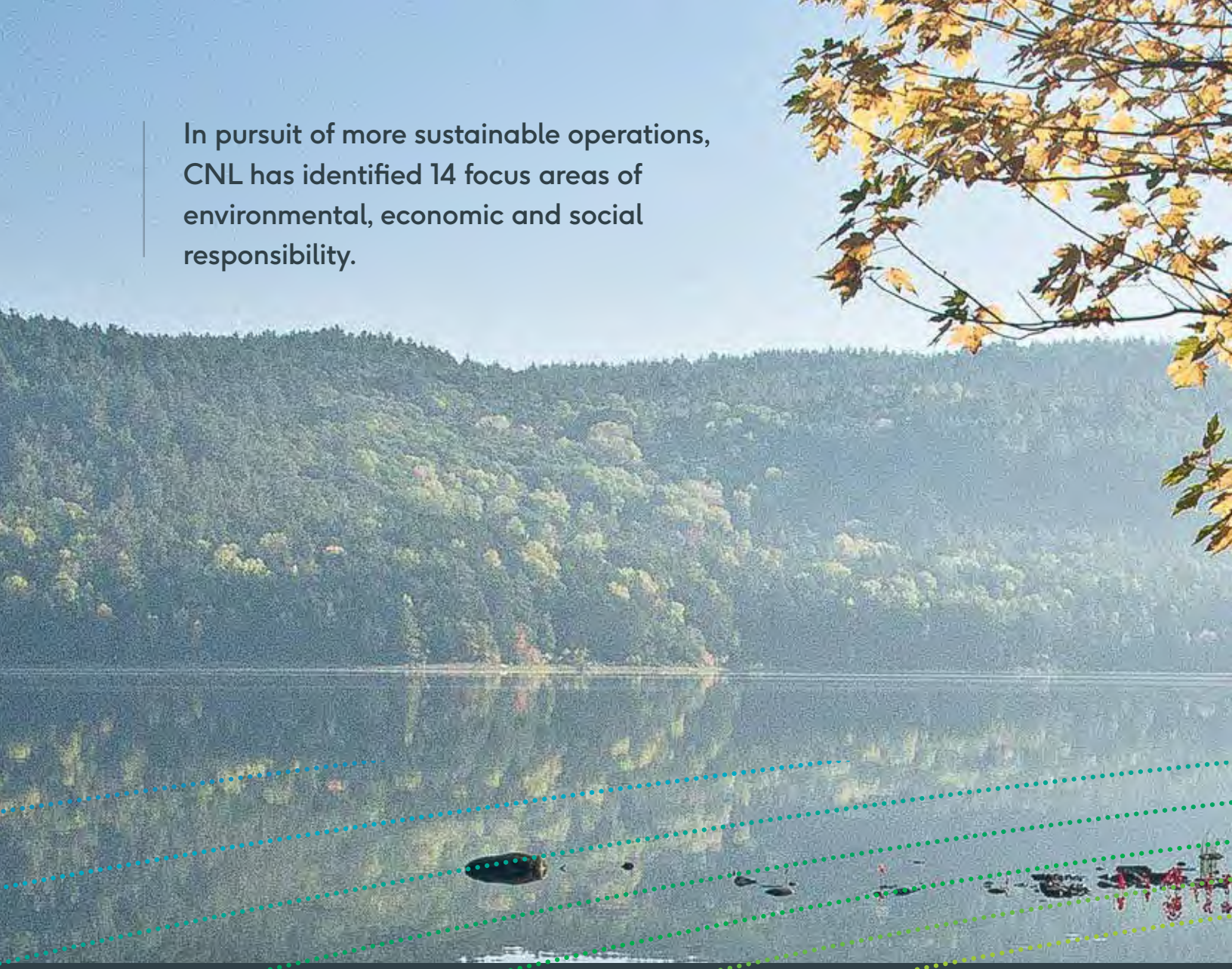
Through a series of projects with industry partners, CNL is working to demonstrate its large-scale hydrogen production process and support systems. This process will produce the required hydrogen to fuel bulk transport vehicles, such as freight trains and transport trucks.

Life Extension & Reactor Sustainability

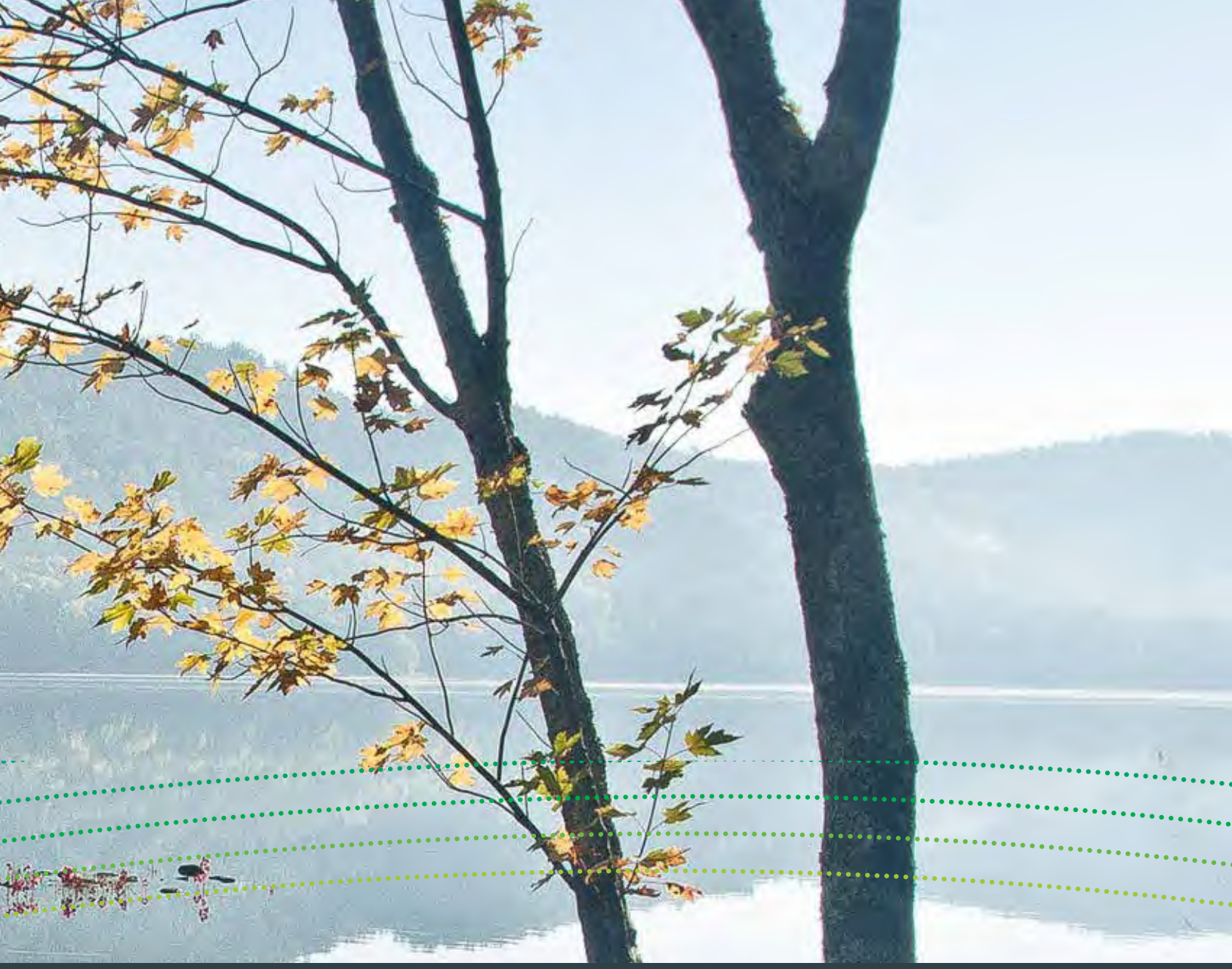
Building on decades of experience related to the CANDU® reactor technology, CNL continues to support the life extension and long-term reliability of the existing fleet of CANDU reactors domestically and internationally, and is now expanding its services to include support for other reactor designs.

Through this work, CNL helps make nuclear power plants around the world more efficient and reliable, support reactor life extension and long term operation, and enable plant modernization through innovative technologies and inspection services.

In pursuit of more sustainable operations, CNL has identified 14 focus areas of environmental, economic and social responsibility.



Sustainability Focus Areas



Environment

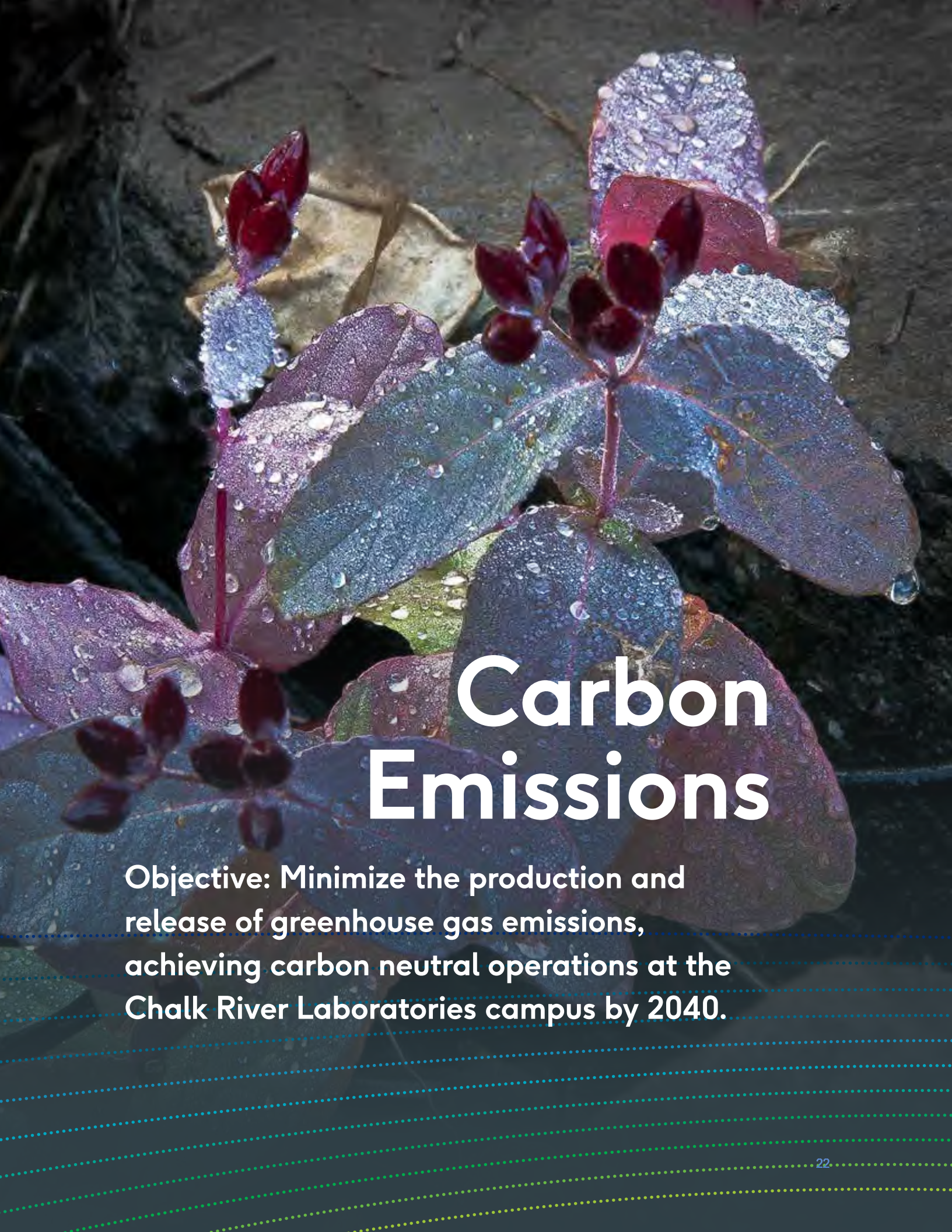
- Carbon Emissions
- Energy Efficiency
- Climate Resilience
- Biodiversity
- Radioactive Waste Management
- Waste Management
- Water & Wastewater Management

Governance

- Economic Development
- Sustainable Procurement

Social

- Diversity & Inclusion
- Health & Safety
- Community Engagement
- Indigenous Relations
- Sustainable Work Environment



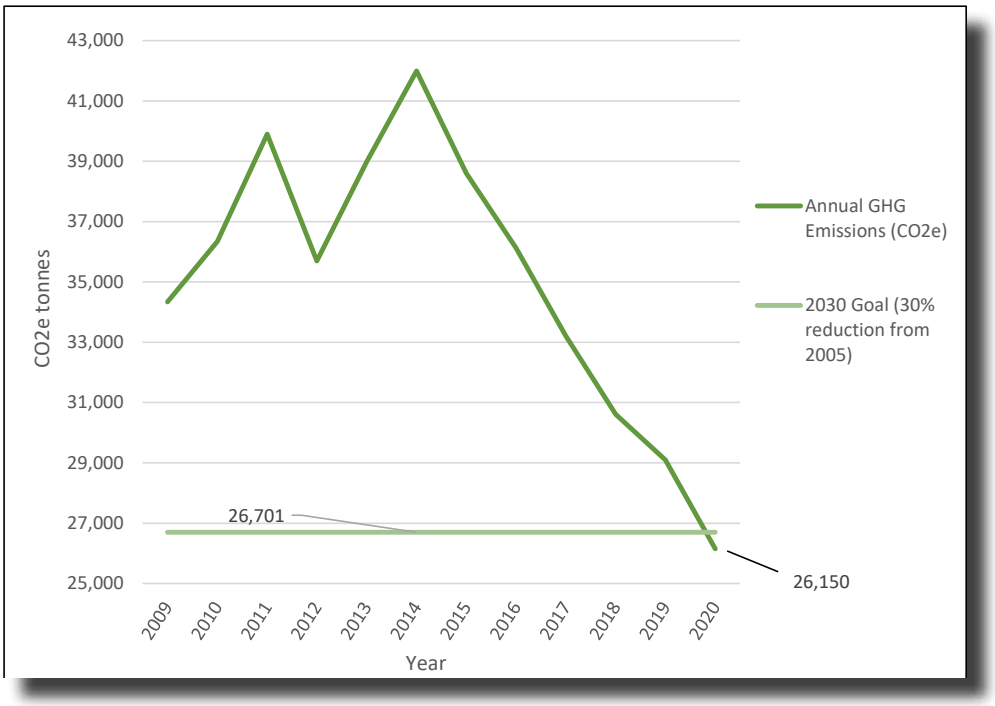
Carbon Emissions

Objective: Minimize the production and release of greenhouse gas emissions, achieving carbon neutral operations at the Chalk River Laboratories campus by 2040.

Climate change is now recognized as one of the defining challenges of the 21st century, and the Government of Canada is implementing implementing measures to reduce greenhouse gas emissions across Canada, moving the country towards a more sustainable, low-carbon future.

As part of this work, Canada has set a target to reduce the country's carbon emissions by 30% relative to 2005 levels, and CNL is doing its part to help meet this national target. By 2020, CNL had realized a 31% reduction in its emissions from the Chalk River Laboratories compared to 2005 levels, successfully meeting our target 10 years ahead of schedule.

In April 2021, the Government of Canada announced that it has established a new goal to achieve a 40% reduction in emissions by 2030, an updated target which CNL will incorporate into our own planning.



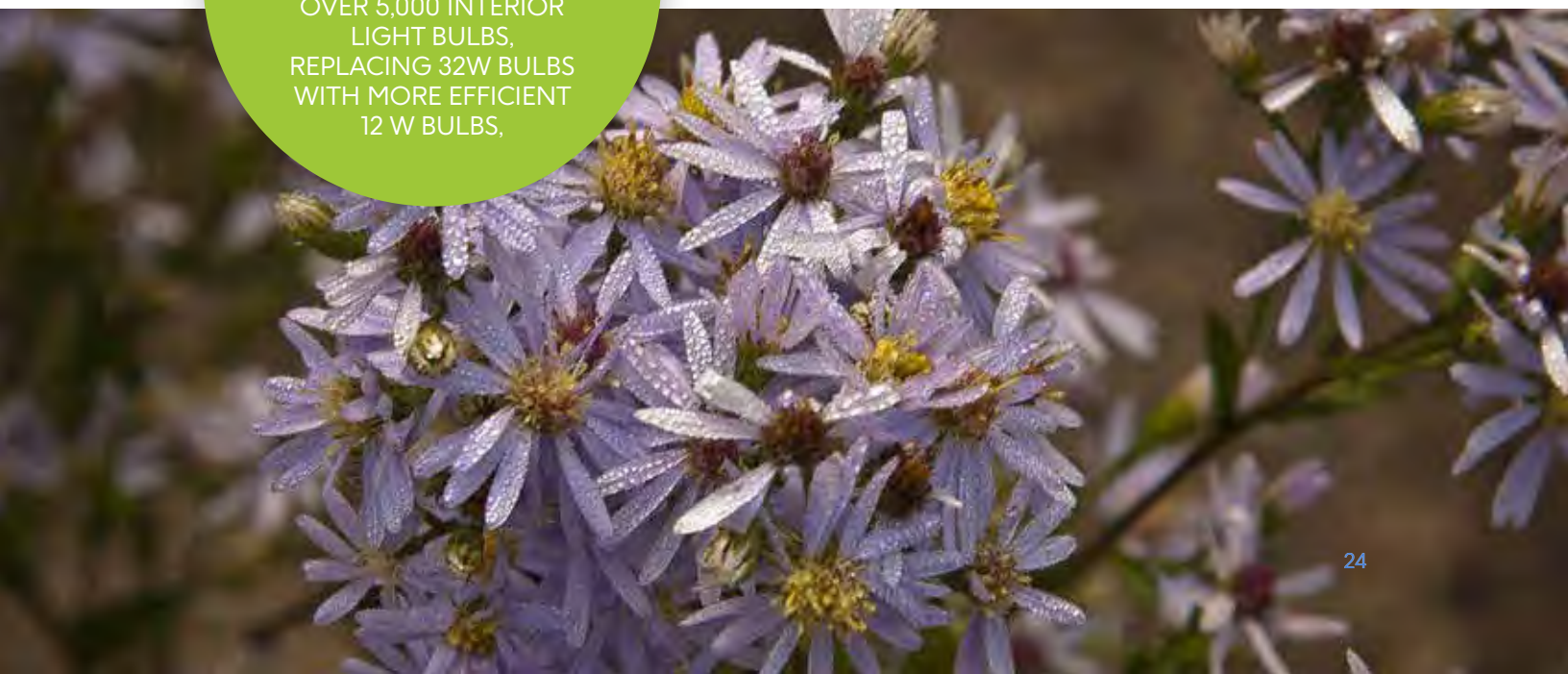
In 2020, CNL successfully reduced greenhouse gas emissions at the Chalk River Laboratories by 31% from the 2005 baseline, meeting a Government of Canada target 10 years ahead of schedule.

Taking action to reduce our **carbon footprint**

Since adopting our carbon reduction targets, CNL has implemented numerous measures and improvements to site operations to reduce greenhouse gas emissions at the Chalk River Laboratories, including:

- Conversion of the site powerhouse from oil to natural gas
- Efficiency improvements to the campus steam plant
- Discontinued use of carbon dioxide for operational activities
- Decommissioning of redundant buildings
- Reduced heating demands through energy optimization activities
- Construction of new, more efficient buildings
- Changes and improvements to the CNL fleet of vehicles to reduce the carbon footprint

IN 2020, CNL UPGRADED OVER 5,000 INTERIOR LIGHT BULBS, REPLACING 32W BULBS WITH MORE EFFICIENT 12 W BULBS,



Carbon Neutrality by 2040

To support Canada's goal to achieve net-zero emissions by 2050, CNL has set an aggressive target to achieve carbon neutral operations at the Chalk River Laboratories campus by 2040.

Strategies being implemented as part of this plan include the analysis of building retrofits for greenhouse gas savings, the reduction of embodied carbon in structural materials for major constructions projects, and the completion of lifecycle assessments for building and infrastructure projects.

In pursuit of these objectives, CNL has developed a Carbon Neutral Strategy that establishes high-level measures to incorporate into its operations. The strategy charts a cost-effective, strategic path towards low-carbon operations, including energy efficiency improvements to existing facilities and infrastructure, process improvements, changes to our fleet and the construction of sustainable buildings.

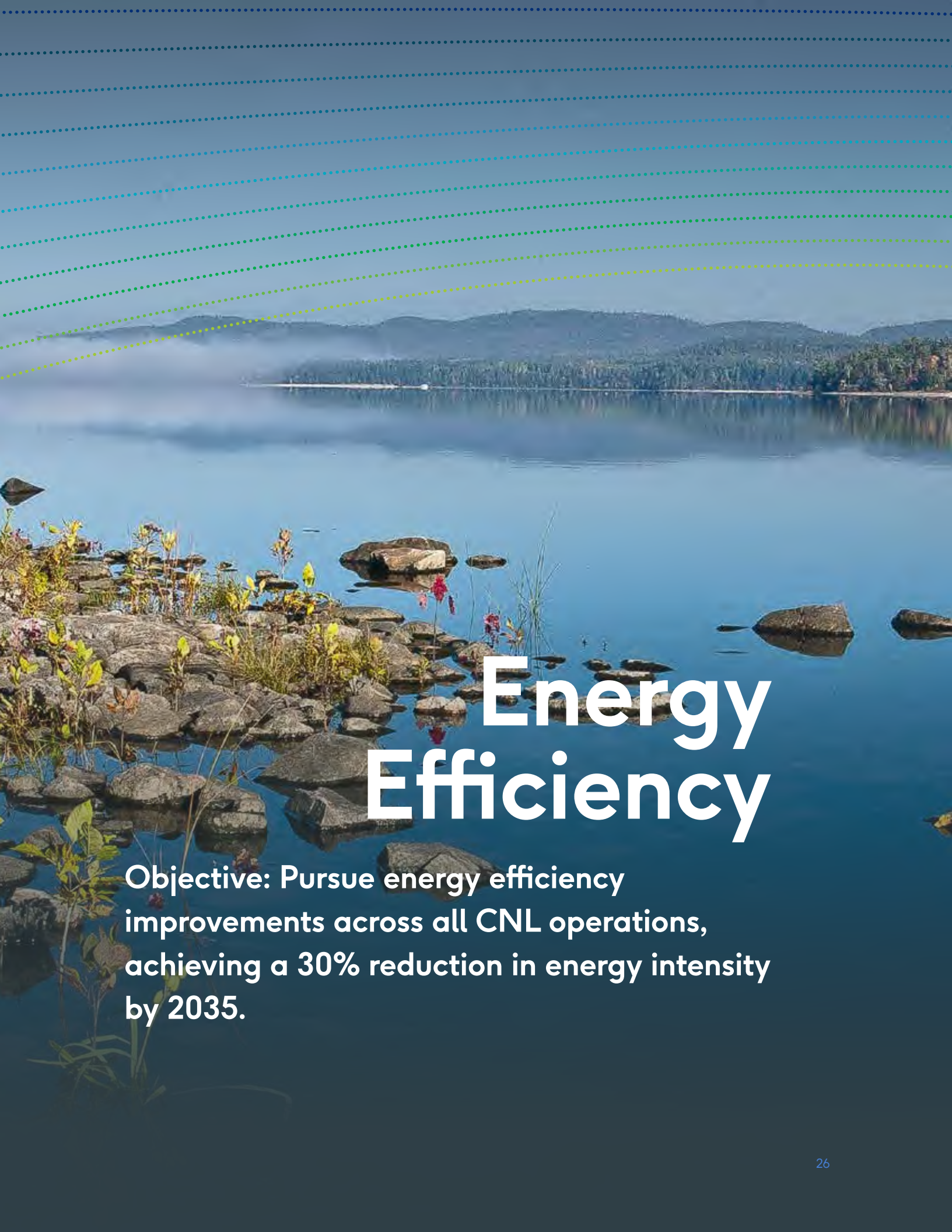
A More Sustainable Fleet

As part of the campaign to reduce greenhouse gas emissions, CNL conducted an in-depth analysis of the vehicle fleet at the Chalk River Laboratories campus.

This review identified opportunities for CNL to enact changes in the management of its fleet, many of which are now being implemented.

To date, CNL has:

- Reduced the number of light vehicles by approximately 20%
- Reduced the use of utility terrain vehicles, removing eleven vehicles from our fleet
- Adopted vehicle monitoring devices that track utilization and other performance indicators
- Established a target that new light vehicles will be zero-emission or hybrid
- Expanded the number of charging stations for employee electric vehicles



Energy Efficiency

Objective: Pursue energy efficiency improvements across all CNL operations, achieving a 30% reduction in energy intensity by 2035.

Clean Energy for Today and Tomorrow

As part of its commitment to be a leader in Canada in energy management, CNL developed an Energy Efficiency Strategic Improvement Plan for the Chalk River Laboratories campus, which targets a 30% reduction in energy intensity at the site by 2035 (compared to the 2015 baseline).

Guided by this plan, CNL is working to optimize its energy expenditures, and continue to reduce its carbon emissions through strategic operations, maintenance and capital energy initiatives. This includes the design and construction of several new buildings at the Chalk River Laboratories. These facilities will have a lifespan of 30 to 50 years, so it is critical that they incorporate the latest innovations for reduced energy consumption and reduced maintenance.

CNL is also expanding its participation in the Government of Canada's Smart Building Project to include eight new buildings, working towards a 10% reduction in energy use in these facilities, and has agreed to act as a testing ground for the Shift Energy Program, which provides energy optimization services for heating, cooling and peak savings. Finally, CNL has upgraded over 5,000 interior light bulbs at the site, replacing 32W bulbs with more efficient 12W bulbs, for a savings of approximately $1 million over the roughly 20 year life of the bulbs.

A Modern, Efficient New Campus

CNL is in the process of revitalizing its Chalk River Laboratories campus through the delivery of a capital program that includes the construction of new buildings and laboratories. In order to meet its energy efficiency goals and minimize resource consumption, CNL has established what are known as Thermal Energy Demand Intensity (TEDI) targets for the buildings, a measurement which calculates the annual heating demand needed to maintain a building's stable interior temperature.

For our new non-nuclear buildings, CNL established TEDI targets between 30 and 70 kWh/m2/year, levels which were developed based on the Toronto Green Standard Tier 1 and 2 Energy Performance Requirements, and a range which encompasses very high performance standards. As an example, the Business Hub is designed to be 33% more efficient than the previous generation of office buildings.

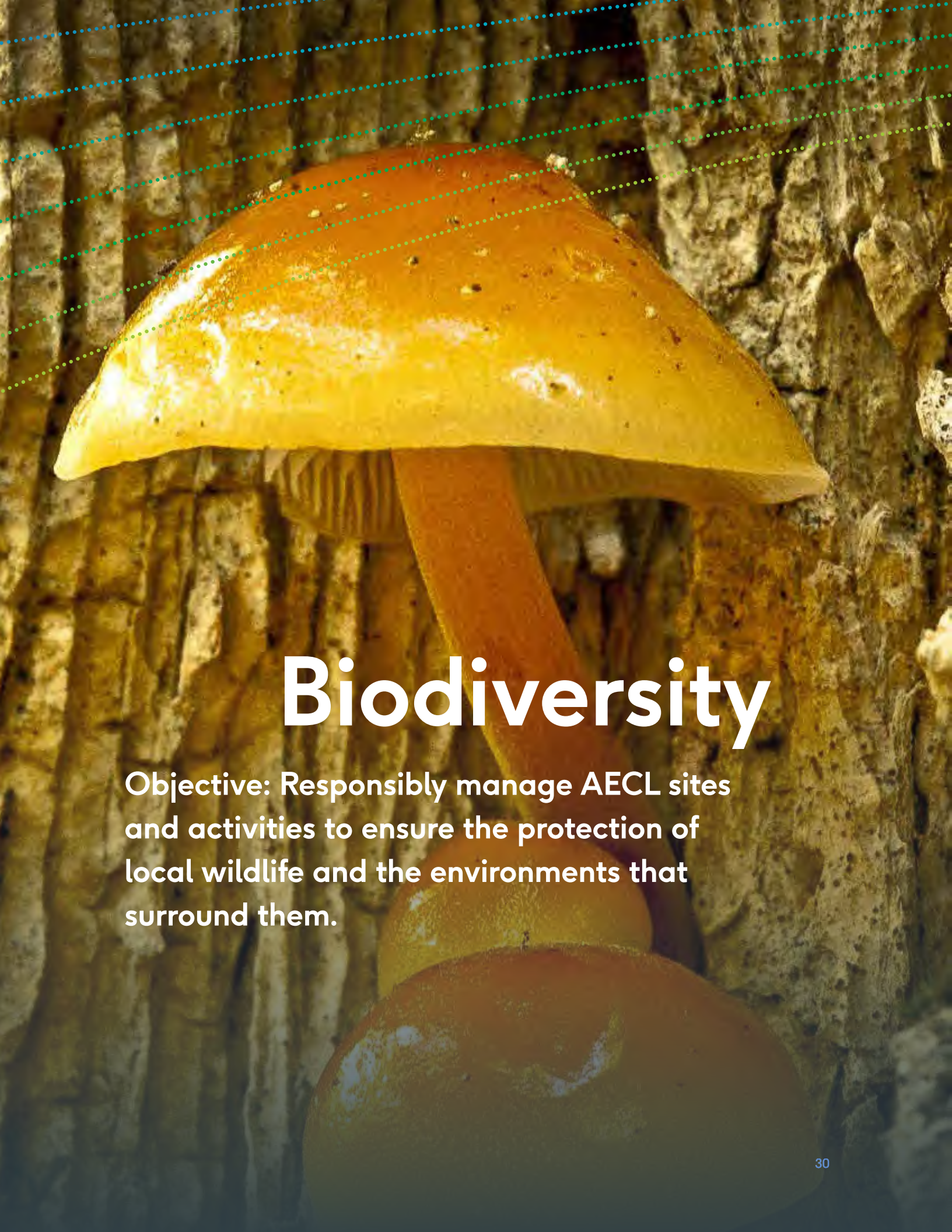
The Advanced Nuclear Materials Research Centre, the ANMRC, is also being built with sustainability in mind. By more strategically selecting construction material, CNL expects to achieve a 28% reduction in the facility's embodied carbon footprint, through the use of mass timber instead of steel and concrete, steel studs instead of masonry walls, and flyash in concrete mixing. Overall, the projected energy values for the building are 32.8% lower than a similar facility.

Climate Resilience

Objective: Develop and incorporate climate resilience practices and standards into all of CNL's major infrastructure projects and operational decisions.

CNL is determined to play its role in fighting climate change, both in the responsible management of its own operations, but also through the delivery of a clean energy program. However, as greenhouse gas emissions continue to rise around the world, it's important that all businesses and organizations prepare for the potential consequences of climate change, ensuring that economic, social and operational risks are properly managed and mitigated.

With that objective in mind, CNL is working to establish and implement climate resilience standards for all of its new infrastructure projects, as well as planning for all of its ongoing operations. This will take shape in the form of climate resilience planning for project management and climate resilience mitigation opportunities within CNL's asset management plans. Initial work includes forest management planning to reduce forest fire risk, larger culverts to accommodate stream crossings, and the use of longer lasting concrete in construction work.



Biodiversity

Objective: Responsibly manage AECL sites and activities to ensure the protection of local wildlife and the environments that surround them.

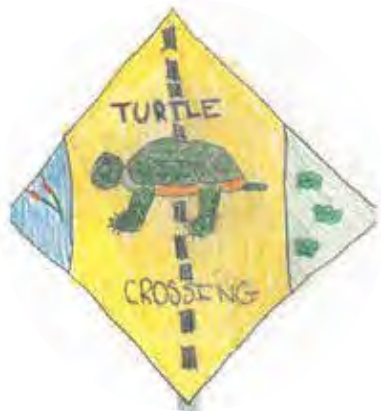
At our campuses across Canada, we're fortunate to work on beautiful sites that are surrounded by a rich variety of plant and animal species. On the drive to work at the Chalk River Laboratories, it isn't out of the ordinary for employees to see a family of bears scavenging in the forest, foxes walking alongside the river, wild turkeys squabbling with one another, or any number of other species that make the site such an important environment to protect.

As part of our commitment to sustainability, CNL is mindful of the impact of our operations on this wildlife and the lands that surrounds us, and works to reduce or eliminate that impact wherever possible. We want to ensure the protection of biodiversity that inhabit our sites – the unique variety of plants, animals, insects and aquatic life – for future generations.

With that goal in mind, Environmental Protection employees at CNL have spent the last decade assessing this wildlife in order to build a thorough database of species which exist on the sites, with a particular focus on 'species at risk.' Using this list, CNL has determined which species could be affected by our operations, allowing us to concentrate our attention on these vulnerable species.

CNL has established aggressive targets to minimize the use of undisturbed lands and conserve the habitats of its animal populations, which include:

- 0% loss of species at risk
- 0% loss of critical habitat for Species at Risk
- 0% loss of wetlands
- 95% of site development notices that don't require land conversion
- Recognizing and incorporating Indigneous Traditional Knowledge into our biodiversity work



Protecting our Turtle Population

If you've visited the Chalk River Laboratories, you may have noticed signs that warn drivers to watch for turtles. This is the result of a CNL study, conducted in partnership with the University of Ottawa, which examined the activities of the resident Blanding's turtle population.

To better protect this species and other species on site, CNL recently replaced aging culverts under the roadways with larger culverts to encourage wildlife to use these safe passageways instead of crossing the roads.

In addition to the larger culverts, permanent exclusion fencing is also being erected along the side of the road which will aid in funnelling the turtles through the culverts. These improvements will help keep the turtles safe and promotes long-term Blanding's turtle population success here at CNL. In turn, by keeping our turtles safe, we are helping to maintain a healthy and robust ecosystem on the site.

Pictured above: A reader artwork submission for a contest in CNL's newsletter "Kids CONTACT".

Preserving Habitat: **Chimney Swifts**

In another study, this time with Trent University, CNL examined the roosting behaviour of Chimney Swifts, another species at risk that is found in two locations on our sites – the ventilation stack at the Nuclear Power Demonstration (NPD) site in Rolphton, and a similar stack at the Chalk River campus.

These small birds are known to nest and roost in chimneys and other hollow manmade structures. Unfortunately, the Chimney Swift population has decreased by 95 per cent since 1968, qualifying the bird as a Species at Risk. Our study determined that these stacks have become essential roosting locations for the birds during their annual migration. After hosting a workshop to review its options, CNL decided to keep the existing ventilation stacks as a home for the Chimney Swifts.

CNL came to this decision with valuable input from knowledgeable and interested groups, including Environment and Climate Change Canada, the Shawville Roost Initiative, Bird Studies Canada, Ontario SwiftWatch, the Canadian Nuclear Safety Commission, Trent University, the Ontario Ministry of Natural Resources and Forestry, and Brock University.

Protecting **Wildlife**

In addition to turtles and chimney swifts, CNL has taken steps to protect other species that might be disturbed through our ongoing activities. For example, CNL has installed four artificial nesting structures for Barn Swallows and 16 bat boxes in suitable habitat that can be used during the summer months. To date, CNL has detected Little Brown Myotis, an endangered bat species, using 75 per cent of the boxes.

As CNL's decommissioning and revitalization activities continue, so do our efforts to understand and mitigate the impacts of our work on wildlife and the land around us. We have initiated another research project with Trent University to identify maternity roosting sites for multiple endangered bat species, and we are also planning to protect Monarch Butterfly habitats, which are essential to the lifecycle of these endangered butterflies.

A New Forest Management Plan

In 2020, CNL developed a Forest Management Plan in consultation with the Petawawa Research Forest. The work included the completion of forest inventory research and modeling to identify the best management practices for the site, while incorporating wildlife considerations for bats, turtles and other species. The modeling, which included forest harvesting and growth, encompassed a 150-year period to ensure that good quality habitat for our species will be successfully maintained for decades to come.

Recognition for Environmental Excellence

In 2019, CNL was awarded Gold Certification by the Wildlife Habitat Council (WHC) for the Chalk River Laboratories campus, a designation that recognizes the company's commitment to environmental stewardship in the management of the property. A Silver Certified site since 2016, the Chalk River campus has now reached the highest tier of environmental certification with the WHC.

Radioactive Waste Management

Objective: Support the Government of Canada's commitment to a clean and healthy environment for Canadians.

CNL is managing the delivery of major decommissioning, environmental remediation and radioactive waste management projects across the country. These activities are designed to safely manage risks, hazards and liabilities, as well as address the Government of Canada's long-term management and disposal of radioactive waste.

This work encompasses the largest and most complex environmental clean-up projects ever undertaken in Canada. In addition to the Chalk River site, it includes the Whiteshell Laboratories, a former national research laboratory undergoing decommissioning, and the Port Hope Area Initiative, where CNL is cleaning up historic low-level radioactive waste in the municipalities of Port Hope and Clarington.

A number of major environmental remediation projects are also in various stages of development, including the Near Surface Disposal Facility (NSDF) project, the Nuclear Power Demonstration (NPD) Closure Project, and the WR-1 In Situ Decommissioning.

Clean-up of the Chalk River Laboratories Campus

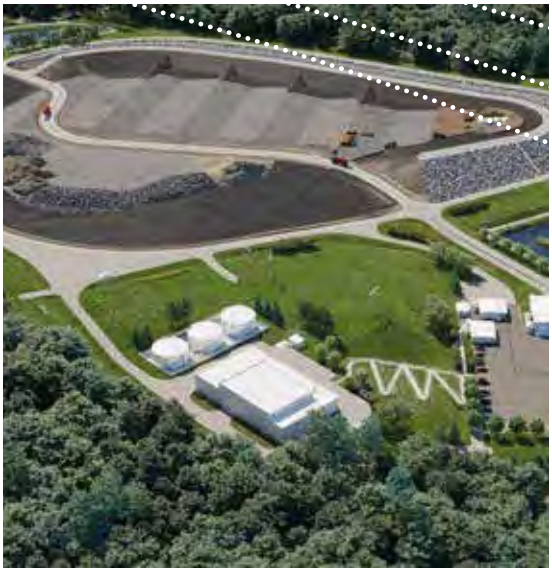
While many extraordinary advances in nuclear science have been made at the Chalk River Laboratories, including the production of medical isotopes used in over 1 billion medical treatments around the world, that research has also led to the production of radioactive and other hazardous waste.

While the majority of the Chalk River Laboratories site remains undisturbed, certain areas have been contaminated to varying degrees, including wastes in soils that have been affected by historic and ongoing operations, or historic building materials that require decommissioning. Responsible decommissioning and radioactive waste management is necessary in order to clean up the Chalk River site, protect the environment, and make way for new buildings that will support Canada's ongoing nuclear science and technology mission.

Near Surface Disposal Facility

While the legacy of our research has improved the lives of millions of Canadians and people around the world, it has also created nuclear liabilities. This waste has been managed safely with the evolving best practices and regulations, but times have changed, and as a responsible steward of the environment, CNL is seeking to retrieve and dispose of these wastes using modern technology.

To do so, CNL has proposed building and operating the Near Surface Disposal Facility (NSDF), an engineered containment mound at the Chalk River Laboratories campus that is designed to isolate 1,000,000 cubic metres of low-level radioactive waste from the environment. Following its closure, the NSDF will resemble a grassy outcrop built into an existing hillside, and will occupy a 16-hectare footprint on the 4,000 hectare Chalk River Laboratories site.



Revitalization of the Chalk River Laboratories

Since 2016, environmental remediation work at the Chalk River Laboratories has resulted in the safe decommissioning and demolition of 98 buildings and structures, representing a footprint of 21,368 m^2. This work not only supports CNL's radioactive waste management goals, but also our energy and carbon reduction planning, since these facilities no longer require heating, cooling or maintenance.

Protecting Canada's Great Lakes

In 2020, the Port Granby project team completed the safe excavation and transfer of 1.3 million tonnes of historic low-level radioactive waste away from the Lake Ontario shoreline to an engineered containment mound. This work fulfills the Government of Canada's commitment to clean up the lakefront site so generations to come will enjoy the benefits of a cleaner environment.

Northern Transportation Route

On behalf of Atomic Energy of Canada Limited, CNL is implementing the Northern Transportation Route (NTR) initiative to cleanup legacy ore spillage sites in the Northwest Territories and northern Alberta.

These sites contain small quantities of uranium impacted soils resulting from past handling of uranium ore at certain points along the Northern Transportation Route, a 2,000 kilometer route made up of waterways and portages between Port Radium, Northwest Territories and Fort McMurray, Alberta.

Waste Management

Objective: Prevent and minimize the production of conventional waste, wherever possible, while reusing and recycling waste when it is generated.

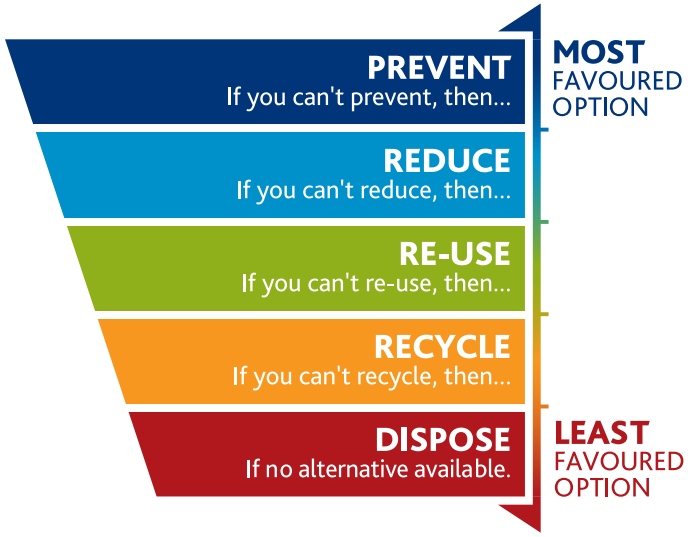
CNL's commitment to sustainability starts with preventing waste from being generated, wherever possible. If that can't be avoided, we implement the principles of Reduce, Reuse, and Recycle. Disposal is used only as a last resort if no alternative is available.

This prevention means less waste in landfills and other disposal facilities, protection of the environment, maximizing the use of raw materials, reducing the footprint of landfill areas, and saving energy that would have been required to create new consumer products. Overall, waste minimization is a key element of our Environment Policy and commitment to sustainable operations.

CNL Waste Management Targets

To ensure CNL continues to decrease the amount of waste that is generated and increase the amount of waste diverted from landfills, we have established targets for waste diversion and recycling rates at the Chalk River Laboratories campus that we are now working towards, including an annual goal to divert 90% of office waste from landfills and to recycle 75% of our operational waste.

CNL is also implementing similar, aggressive targets at the other sites it manages including Whiteshell, Douglas Point, Port Hope, the NPD site and the Gentilly-1 site, where practical.



Waste Hierarchy

At CNL, the waste hierarchy guides the management of all waste. Prevention and minimization is the preferred approach but, when waste is generated, reuse and recycle are preferred to disposal.

Integrated Waste **Strategy**

CNL's Integrated Waste Strategy ensures that responsible waste management is an integral component of every aspect of our work, and that it is carried out uniformly in every location across the country. It is also an aspirational strategy, encouraging employees to constantly seek waste management improvements and take action when and where they can.

The program also defines the processes for managing waste, including the steps to correctly plan, assess, characterize, segregate, package, transport, process, store, and dispose of waste. This ensures that all waste generated or received at CNL-operated sites not only meets the necessary standards and requirements, but is managed in a safe and environmentally responsible manner.

Waste Analysis

CNL's Waste Analysis Facility is a critical part of the waste management process at all CNL sites. Waste from decommissioning projects and day-to-day operations is sent to dedicated facilities for analysis, then sorted for reuse, recycling or disposal. Waste that is free of radioactive contamination is sent off-site to a variety of local waste receivers – organics and recycling are sent to the local centres, electronics are sent for recycling, garbage is sent to landfill, metals are sent for recycling or reuse, and concrete is crushed and reused on site in construction projects.

Greening Government Initiative & Plastic Waste

To take action on climate change and reduce environment impacts across federal operations, the Government of Canada has established the Greening Government Strategy, a program that provides national leadership toward net-zero, climate-resilient and green Government of Canada operations.

Included in the initiative is a focus on plastic waste, with objectives that include the elimination of single-use plastics in government operations, the reduction of plastic packaging waste, the procurement of sustainable plastic products and the diversion of plastic wastes from landfills.

In support of this initiative, CNL is performing an assessment of the plastic waste streams at the Chalk River Laboratories campus in 2021.

Water and Wastewater Management

Objective: Optimize the use of water and wastewater management practices.

For any organization, the withdrawal, consumption and release of water can have a major impact on the health and well-being of the local ecosystem in profound ways. With that in mind, as part of its commitment to sustainability, it's important that CNL understand how our water use and wastewater affects the environment, the economy and local communities.

The vast majority of water used by CNL is at the Chalk River Laboratories, which is the largest focus of our conservation efforts. The Chalk River Laboratories campus is located on the banks of the beautiful Ottawa River in Ontario, which is part of the St. Lawrence River watershed. Water is drawn from three sources, including the Ottawa River, Corey Lake and groundwater, which is then spread out across various buildings and facilities, and used as service water, process water and fire water.

The majority of Chalk River's service water is supplied by nearby Town of Deep River municipal water, which is drawn from the Ottawa River. On average in 2020, approximately 40% of the incoming service water was directed through CNL's Sanitary Sewage Treatment Facility (SSTF) and safely discharged to the Ottawa River as effluent. The remaining 60% is used for non-domestic purposes, and therefore directed to the process water drains and discharged through the process outfall to the Ottawa River. CNL's process water is drawn directly from the Ottawa River at the Chalk River location through pumps in our powerhouse, as is our fire water, which is only used in emergency situations.

Tracking of Water Consumption

In 2020, CNL gathered baseline data on water consumption at the Chalk River Laboratories to establish future reduction targets for the campus. Once these targets are in place, CNL will implement a variety of waste minimization efforts – including water metering – to limit water use in our operations.

Sanitary Sewage Treatment Plant

In 2019, a new Sanitary Sewage Treatment Plant was put into operation at the Chalk River campus that allows CNL to meet new requirements for sewage treatment. In pursuit of more sustainable operations, CNL no longer uses chlorine to disinfect wastewater, since the practice is not environmentally-friendly.

As part of the treatment process in the new facility, the wastewater is subjected to ultraviolet disinfection, a technique which decontaminates the water without the need for chemicals, before it is safely discharged to the Ottawa River. Overall, the new Sanitary Sewage Treatment Plant represents an enormous improvement in the way CNL manages its wastewater, resulting in meaningful reductions to site emissions, and the adoption of safer and more sustainable practices.

CNL's Environmental and Effluent Monitoring Program

As part of our commitment to understand and reduce the impacts of our operations on the environment, CNL maintains extensive environmental monitoring programs, designed to track potential contaminants throughout the geosphere, atmosphere, and biosphere. The monitoring and evaluation of environmental impacts from CNL operations 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.

Monitoring is conducted on a multitude of media, including air effluent, liquid effluent, groundwater, ambient air, surface water, vegetation, soil and sediments, fish, and game animals. More than 60,000 analyses are performed annually for radionuclides, major ions, trace elements, and a broad range of organic compounds. From direct release monitoring to contaminant pathways monitoring and biological effects monitoring, this integrated approach means that the evaluation of impacts on the environment from our operations is carried out in a comprehensive manner, and is effectively used to demonstrate protection of the environment and the health and safety of the public.

Monitoring Data

With more than 60 years of monitoring data, CNL's environmental monitoring programs are well established and mature. Designed and operated according to the Canadian Standards Association N288 suite of environmental standards, and subject to an extensive regulatory framework that includes the Canadian Nuclear Safety Commission, Environment and Climate Change Canada and Fisheries & Oceans Canada, the results are assessed and compiled annually into reports available on CNL's website.

Sustainable Procurement

Objective: Integrate sustainability into CNL's procurement activities, policies and standards.

CNL's Supply Chain department is responsible for purchasing the materials and services we buy as an organization, and has taken great strides to incorporate CNL's sustainability objectives into its all of its practices. This work culminated in the development of an updated Supply Chain Policy in 2020, which reinforces CNL's commitment to sustainability in the operation of our supply chain, strengthens our policies and standards, and enforces more accountability on our suppliers.

While CNL's Supply Chain is working to embrace sustainable procurement, the process begins much sooner than the purchase of goods and services. The design of a new building, the development of a new technology or the renewal of aging infrastructure are all opportunities to consider sustainability, so that CNL can plan to work with more socially responsible suppliers, source renewable materials and pursue more environmentally-friendly practices well before the procurement process officially begins.

CNL also strives to be conscientious and proactive in the selection of the companies that it works with. We are evolving sustainable procurement and related supply chain measures as we further develop the sustainability program.

Improving CNL's **Procurement Practices**

Our Supply Chain organization has made strong progress in recent years to adopt more sustainable practices in its operations. Recently, we began moving towards paperless practices to reduce our environmental footprint, which includes the adoption of an online data management system and an electronic communications and supplier management system.

We also continue to diversify our supply chain and cultivate relationships within the local business and Indigenous communities. CNL recently hosted its first economic development workshop in partnership with the County of Renfrew, the MRC Pontiac and the Algonquins of Pikwàkanagàn to help Ottawa Valley companies participate in the revitalization of the Chalk River Laboratories site.

Finally, CNL's Supply Chain department participated in a workshop on sustainability hosted by Supply Chain Canada and other industry leaders from around the world. The event allowed CNL to collaborate with supply chain leaders, openly discussing initiatives and best practices that are used around the world, and exploring new and innovative sustainable opportunities to apply to its own operations.

Vendor Portal

CNL has established an online Vendor Portal. This resource shares upcoming CNL procurement opportunities and awards with the public, offering the latest news and information about procurement activities, upcoming events, and guidance on how to conduct business with CNL.

OCNI Tradeshow

Since 2011, CNL has hosted an annual fall tradeshow and networking event in collaboration with the Organization of Canadian Nuclear Industries (OCNI), known as Industry Day, which exposes local businesses, organizations and Indigenous communities to economic opportunities in our supply chain and the broader nuclear industry.

"CNL will implement sustainable procurement practices that reduce environmental impacts and support community engagement, economic development, diversity and inclusion, where capability exists, and ensure a sustainable and safe work environment for CNL staff and its suppliers."

- CNL Supply Chain Policy

Economic Development

Objective: Extend economic benefits and opportunities through CNL's program of work to local organizations, businesses and Indigenous communities.

The Economic Impact of the Chalk River Laboratories

While CNL's activities impact residents, businesses, and municipalities across the country, its major area of influence is the County of Renfrew, Pontiac County and Eastern Ontario.

The County of Renfrew is home to the Chalk River Laboratories, which employs approximately 2,700 people in both professional and trades related occupations. These employees are paid $380 million annually in wages, salaries, bonuses and benefits, much of which circulates through the local economy through consumer spending.

The Chalk River Laboratories operations drive the purchase of goods and services totalling $115 million annually from organizations in Eastern Ontario, $43 million of which is sourced directly from suppliers in Renfrew County. These figures demonstrate the important role that we play in supporting business activity within Ontario, and in particular, within Renfrew County.

- ~2,700 employees
- 4,169 people years of employment in Renfrew County
- $380 million paid in wages
- $115 million in purchases in Eastern Ontario
- $724 million impact to GDP
- Significant spin off and indirect economic benefits

Supporting Those in Need Within Our Communities

CNL employees have always dug deep into their own pockets to support those in need within our communities. Since the 1960s, we've held an annual, company-wide fundraising program for the United Way, which raised over $85,000 in 2020 to support this much-needed program. This annual campaign is in addition to numerous fundraising and other charitable activities that are held annually across the country, from hockey tournaments to community barbeques.

To help our communities respond to the COVID-19 pandemic, CNL recently donated thousands of pieces of personal protective equipment and clothing to local hospitals and healthcare organizations, delivered food on behalf of our local food banks, and manufactured protective face shields for front-line workers. CNL also donated two of its trailers to the Deep River and District Hospital (DRDH) and the Renfrew County Long-Term Care Centre to use as safe locations for COVID-19

In a 2021 Social, Economic and Environmental Impact Analysis of CNL, results revealed high levels of public support for the Chalk River Laboratories campus, including:

Acknowledging the positive impacts the Chalk River Laboratories has on local employment and business growth

Appreciating the importance of the Chalk River Laboratories in generating employment, talent attraction and retention, and business activity

Recognizing the strict environmental standards that CNL adheres to in the operation of the Chalk River Laboratories campus

Renewal of the Chalk River Laboratories Campus

In support of the renewal of the Chalk River Laboratories campus, the Government of Canada through Atomic Energy of Canada Limited has committed a $1.2 billion investment into a 10-year capital program that began in 2016. Assuming renewal activities are evenly spread out over that timeframe, the annual spending of $120 million is estimated to support approximately 672 jobs on a steady basis.

Supporting Economic Development in Pinawa

CNEA, the consortium that operates CNL, recently donated $80,000 to North Forge East to support economic development in Pinawa, Manitoba, which is home to the Whiteshell Laboratories campus. In total, CNEA has donated $400,000 to North Forge East over the past five years to help support entrepreneurial initiatives in the region.

Economic Impacts in Port Hope

The PHAI projects are supporting area business as contracts are awarded to provide supplies and services that support the construction underway. For example, between 2017 and 2019, the prime contractor for the Port Granby Project awarded over $35 million in subcontracts for construction material hauling, site services and fuel supplies.

Staff and subcontractors working on the PHAI projects also contribute to the local and regional economy in many ways, including renting and buying homes, dining at local restaurants, and purchasing goods and services.

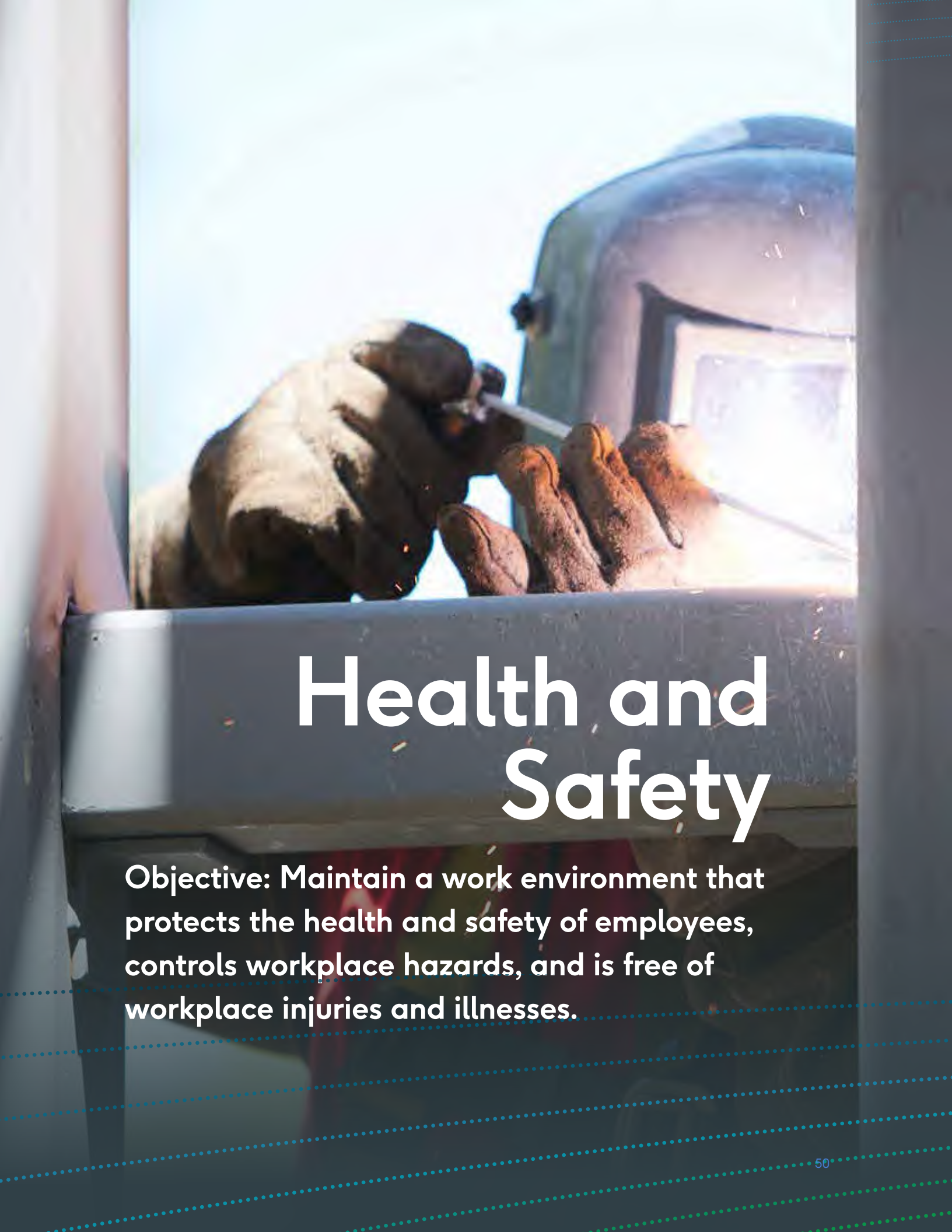
Diversity, Equity and Inclusion

Objective: Create a workplace experience where all employees feel involved, valued, and appreciated.

In order to attract and retain the most talented personnel, and to cultivate a work environment that is inclusive to people from all walks of life, CNL is developing a company-wide Diversity, Equity and Inclusion (DE&I) program. Among other objectives, the program is designed to nurture a more diverse and equitable workplace, establish practices to support the unique needs and identities of our workforce, and meet federal legislatives requirements and standards.

As part of this vision, in 2018 CNL announced its support for the Equal by 30 Campaign, a campaign that asks organizations to make meaningful commitments towards principles that include equal pay, equal leadership and equal opportunities for women in the clean energy sector. Later that year, CNL launched a DE&I pilot program to better understand our own work environment, and to build our cultural competence so that we can make CNL a better place to work while driving innovation, collaboration, and business success.

CNL is working with a diversity and inclusion firm to conduct a comprehensive analysis of its workplace policies, procedures and practices and other facets of the organization as they relate to diversity, equity and inclusion. Following the completion of this needs assessment, with the support of the external firm, CNL will work to develop a DE&I strategy and action plan, which we will implement in the coming years.



Health and Safety

Objective: Maintain a work environment that protects the health and safety of employees, controls workplace hazards, and is free of workplace injuries and illnesses.

CNL's Commitment to Health & Safety

CNL acknowledges and embraces its responsibility to provide a safe and healthy working environment for all its employees, contractors and visitors to our sites.

CNL's emphasizes continual improvement of our health and safety performance. While CNL's primary focus is prevention, we also provide processes for emergency response and mitigation. To achieve this goal, CNL promotes health and safety through the provision of information, training, instruction and supervision. Employees are required to participate in these activities, and to report concerns in order to help identify hazards and ensure that the necessary safety measures are in place to protect one another.

Responding to COVID-19

Since the emergence of the COVID-19 virus in Canada at the beginning of 2020, CNL has taken extensive measures to protect the health and welfare of its employees, contractors and visitors. In line with directions set out by public health authorities, CNL reduced operations at all sites, with more than 2,000 employees transitioning to remote work.

In the ensuing months, we implemented a comprehensive set of COVID-19 protocols, including mandatory face masks, physical distancing requirements, capacity limits in meetings rooms, enhanced sanitation standards, carpool restrictions, and one-way pedestrian traffic requirements. CNL also adopted a mandatory hazard screening for all personnel seeking access to any of the sites.

Incorporating Sustainability into Health & Safety

CNL's Occupational Safety and Health program fulfills a critical component of the company's organizational objectives, ensuring that our staff work in an environment that prioritizes their physical, mental and psychological health and safety.

In the pursuit of sustainability in conventional health and safety, CNL is working to improve its safety culture and performance through increased presence of safety specialists and company leadership in the field, changes to encourage better safety reporting, and better documentation to more clearly define the roles and responsibilities of all personnel in maintaining a safe work environment.

CNL has also adopted a company-wide integrated work control program to ensure that rigorous safety practices are incorporated into all of its activities, projects and programs. This includes the continued implementation of CNL's multi-year Hazardous Products Management Project Plan, which will provide electronic, on-demand access to hazardous product safety information.

Community Engagement

Objective: To enable respectful and open dialogue with the public, local municipalities, and Indigenous communities regarding CNL's program of work.

To gather direct feedback and input from our local communities, CNL has invited members of the public to participate in different groups and committees at a number of our sites. This includes the Environmental Stewardship Council which meets regularly to discuss activities at the Chalk River Laboratories, and the newly formed Community Advisory Panel.

CNL hosts a Public Liaison Committee at the Whiteshell Laboratories, and a Port Hope Project Citizens Liaison Group for the Port Hope Area Initiatives.

A school group pauses for a photo after a tour of CNL's Biological Research Facility.

Site Visits & School Tours

While the COVID-19 pandemic prevented CNL from hosting visitors for most of 2020, we normally host frequent site visits and tours. This program includes local high schools providing students with insight into our work, but also to the many career paths that are available to them in scientific fields of study.

Kids CONTACT bring science to life through short stories, puzzles and interviews.

CONTACT Newsletters

CNL regularly publishes a bilingual newsletter, CONTACT, which provides local communities with insight into our work, projects and achievements, including our environmental performance.

Recently, CNL began publishing Kids CONTACT, which features scientific content that is packaged in a fun and exciting format.

CNL engages with the public through on-site tours, virtual meetings and webinars, and speaking engagements.

Public Engagement: Key Projects

CNL's major environmental remediation projects, including the proposed Near Surface Disposal Facility (NSDF), the NPD Closure Project, and the WR-1 In Situ Decommissioning are each subject to a federal, government-led, and very public, environmental assessment process.

As part of this process, CNL has conducted extensive outreach to help build a shared understanding with residents on the details of this work, which includes hundreds of engagement activities with members of the general public, Indigenous communities and organizations, government representatives, members of the media, interest groups, concerned citizens, and many others. From open houses, information sessions, site tours and presentations at local council meetings to media interviews, meetings and webinars, CNL is working hard to ensure that all stakeholders and Indigenous communities have an opportunity to meaningfully engage on these proposed projects.

CNL welcomed the Pikwàkanagàn Wildflowers at the Chalk River site to celebrate National Indigenous Peoples Day in 2019.

Indigenous Relations

Objective: Participate in meaningful engagement activities with Indigenous communities, in an open and cooperative way, to pursue a mutual understanding of shared interests and opportunities in CNL's work.

CNL recognizes that Indigenous knowledge and involvement can complement or improve the general operation of our sites, as well as environmental and employment matters. We encourage early and regular outreach with local indigenous communities regarding the possible effects of our work on people and the environment. We are committed to meaningful engagement, establishing mutually beneficial partnerships and opportunities for collaboration between CNL and the Indigenous communities and organizations we engage with.

Indigenous communities located near CNL sites across the country are engaging with CNL on a wide range of interests related to CNL's operations. CNL is working with each of these communities to explore opportunities to collaborate on and address each area of interest with the view to developing meaningful relationships.

One example is an ongoing interest in cultural heritage. Indigenous peoples have been involved for a number of years with CNL's archaeological assessment field studies ensuring culturally sensitive work. Of particular significance is the work being done between Indigenous communities and CNL to involve Indigenous Peoples in environmental monitoring at the Whiteshell site, as well as preliminary discussions and support for the development of Indigenous-led monitoring at the Chalk River and Whiteshell sites. CNL recognizes that this is a desirable path and acknowledges that it is in a planning phase. It's how we want to grow.

Another goal is to ensure communities have the ability to engage with CNL. To this end, some Indigenous communities and organizations have agreements in place with CNL and we at CNL look to further develop formal relationships with interested Indigenous communities to build understanding and involvement in CNL's activities.

CNL continues to adapt and improve its Indigenous engagement practices to align with each communities' needs and interests.

Sustainable Work Environment

Objective: Maintain and improve a work environment that promotes positive physical and mental health for our personnel.

While CNL is home to some of the most unique nuclear facilities and equipment in the world, it is the people who work here that serve as our greatest asset. Our commitment to sustainability includes workplace policies designed to ensure the well-being of our employees.

CNL's campuses are located in some of the most beautiful areas in the country, and the company encourages employees to take advantage of recreational activities to better connect with nature. At the Chalk River Laboratories, employees can bike or cross-country ski to work through the permitted use of scenic roads and trails, or take advantage of on-site walking paths during their breaks to enjoy the beautiful views of the Ottawa River and historic Oiseau Rock.

Health & Wellness Programs

To support employee health and wellness, we maintain an on-site Health Centre that offers a variety of services, including weekly visits from regulated health professionals, support from registered nurses, mental health training and the provision of return to work programming. In 2020, CNL also continued the implementation of the Canadian Standard Association's Psychologically Safe Workplace standard.

To help employees stay physically healthy, CNL has a fitness centre at the Chalk River Laboratories campus and hosts weekly exercise classes with an on-site wellness coordinator. A team of Occupational Safety and Health professionals are also available to consult on physical issues, offer support for industrial and office ergonomics, and provide field assessments to encourage good work practices.

Employee & Family Assistance

In order to help CNL employees and their families work through a wide range of issues and challenges in their lives, CNL maintains an Employee and Family Assistance Program (EFAP) that is delivered through an external provider. This service is completely confidential, free to employees, and available 24/7 by phone or online.

Digital Workforce

In response to COVID-19 pandemic in March 2020, CNL had to quickly adjust its operations to ensure the protection of its personnel, reducing its on-site headcount to fewer than 500 employees, while at the same time transitioning over 2,000 employees to remote work.

This shift accelerated a change that was already taking place at CNL, which is the adoption of a more flexible work environment. Many of our employees fully embraced working from home and the benefits that come with it, and in a survey conducted later in the year, 83% of CNL employees indicated that they were interested in continuing to work remotely in the future.

In response to this change, CNL established a new "Digital Workplace" program that allows eligible employees to work from home or in other remote locations, giving them more flexibility, better work-life balance, and more access to the many local resources and services in their communities. Today, more than 1,000 employees continue to work from home through the initiative.

Our Commitment

In the pursuit of a brighter future, CNL is committed to delivering improvements in our operations and research programs in a manner that is also sustainable.

The world will certainly change over the next few decades, and CNL is ready to change with it, ensuring that we are responsive to technological progress and innovation, that we consider the feedback of our neighbours, the public and Indigenous communities in our decision-making, and that we continually evaluate our own planning, ensuring it continues to confront the challenges of the future.

Canadian Nuclear Laboratories

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