Atomic Energy of Canada Limited

Building the Platform for a Global Shift

2025 Annual Report

AECL
EACL

AECL Overview

As a federal Crown corporation, Atomic Energy of Canada Limited (AECL) advances Canada's interests through leading edge nuclear science and technology and environmental stewardship. This includes combating climate change, clean energy growth and decarbonization strategies, pioneering new treatments for cancer and other diseases, and accelerating Canada's environmental remediation projects.

Since 2015, AECL has been delivering its mandate through a Government-owned, Contractor-operated model, whereby a private-sector organization, Canadian Nuclear Laboratories (CNL), operates AECL's sites.

AECL operates on territories that have, since time immemorial, been the traditional lands of Indigenous peoples in Canada. AECL's sites were established without consulting Indigenous Nations. Today, we are committed to advancing reconciliation with First Nation, Métis, and Inuit peoples through a renewed relationship based on recognition of rights, mutual understanding and respect, and meaningful engagement, collaboration, and partnership.

Building the Platform for a Global Shift

This past year has been a remarkable period for Atomic Energy of Canada Limited (AECL), marked by significant achievements in the areas of nuclear innovation, environmental stewardship and engagement with Indigenous communities.

With our strategic plan in mind, we have not only met our ambitious objectives, but we also accomplished these goals while adopting a new set of company values. Our commitment to nuclear research advancements, radiological remediation and relationship building with First Nations has been the cornerstone of our success, and we are proud to share the highlights of our accomplishments in this annual report.

As we enter a new 10-year contract period with a new contractor later this year, and reflect on the successes of the past year, we are filled with optimism for the future. Our achievements of 2024-25 have laid a solid foundation for continued growth and innovation. We are ready to tackle the challenges ahead and excited to build on this momentum, and continue delivering exceptional value to Canadians now and long into the future.

Table of Contents

Message from the Chair of the Board

This past year has been one of significant progress and transformation for Atomic Energy of Canada Limited (AECL). As Chair of the Board of Directors, I am proud to witness the organization's continued leadership in advancing nuclear science and technology, while upholding its commitment to environmental stewardship, safety, and reconciliation with Indigenous Nations.

AECL's achievements in 2024-25 reflect the strength of its strategic vision and the dedication of its people. From the revitalization of the Chalk River Laboratories to the expansion of strategic partnerships and the advancement of the next generation of CANDU technology, AECL is delivering on its mandate with purpose and guided by a strong set of core values.

The Board has been particularly encouraged by AECL's efforts to deepen relationships with Indigenous Nations and communities. These relationships are essential to building trust, fostering mutual understanding, and ensuring that AECL's work furthers our shared reconciliation journey.

We also commend the organization's continued focus on innovation. Whether through work on fusion fuel cycle technologies, the production of life-saving medical isotopes, or investments on a range of federal science priorities and projects, AECL is helping to shape a cleaner, more secure energy future.

As AECL prepares for the transition to a new contractor under the government-owned, contractor-operated model, the Board remains confident in the organization's ability to manage this change effectively and maintain continuity in its operations.

On behalf of the Board of Directors, I extend our sincere appreciation to AECL's leadership team and employees for their unwavering commitment to excellence. Together, we are building a future where Canadian nuclear science and technology continues to serve the public good and contribute to global sustainability.

James Burpee, *Chair of the Board of Directors*

Message from the President and CEO

As we reflect on the past year, it is clear that Atomic Energy of Canada Limited (AECL) is not only keeping pace with the global momentum toward clean energy and innovation – we are helping to lead it. The 2024–25 fiscal year has been a transformative period for AECL, marked by significant progress in nuclear innovation, environmental stewardship, and meaningful partnerships with Indigenous Nations and communities.

At the heart of our success is a dedicated team that continues to deliver on our ambitious mandate with integrity, collaboration, and a deep commitment to safety. Together, we have advanced critical projects, strengthened our science and technology capabilities, and laid the groundwork for a sustainable and secure energy future for Canada.

An important achievement this year is the continued revitalization of the Chalk River Laboratories. With the opening of the Science Collaboration Centre and ongoing construction of the Advanced Nuclear Materials Research Centre, we are building a world-class nuclear science campus that will serve Canada for generations. These investments are not only modernizing our infrastructure – they are attracting the next generation of scientists and innovators.

However, our ability to complete the revitalization of the Chalk River site is tied to our ability to safely dispose of low-level waste at the site. This depends on the proposed Near Surface Disposal Facility (NSDF). Last year the Canadian Nuclear Safety Commission approved the construction of the NSDF, but 2024-25 saw some unfortunate setbacks to the project, as two separate judicial reviews of elements of the permitting process mandated additional work – notably additional effort to meet Indigenous consultation expectations under the *United Nations Declaration on the Rights of Indigenous Peoples Act* – and therefore delays. We remain committed to working through the required regulatory and permitting processes to get the NSDF built and operational; these setbacks have delayed the project but the long-term plan remains the same.

Our partnerships continue to grow in scope and impact. From advancing the next generation of CANDU reactors with partners AtkinsRéalis, utilities, and the federal government, to launching joint ventures in medical isotopes and fusion fuel cycles, to exploring new partnership opportunities for our SLOWPOKE and nuclear battery technologies, AECL is fostering the innovation that drives Canada's nuclear future.

We are especially proud of the deepening relationships with Indigenous Nations. As an example, the Long-Term Relationship Agreement (LTRA) with the Algonquins of Pikwàkanagàn First Nation (AOPFN) is a model for inclusive, respectful collaboration. In 2024-25 we entered the second year of the LTRA, deepening processes for how we work together and, most importantly, the relationships around the table that bring life to the relationship. This partnership, and the many relationships we have with Indigenous Nations, are essential to our work and to our shared vision for reconciliation and sustainable development.

Finally, 2024-25 was a very important year for AECL in terms of our oversight and contract management role. We have expended significant effort and care on the process to select a new contractor to operate AECL-owned sites, under the government-owned, contractor-operated model, with a new operator to be in place for September 2025. I am pleased that we remain on track, and have learned a number of important lessons from international peers and our own experiences, to make the next contract even more impactful, and deliver value for Canadians.

Looking ahead, AECL is well-positioned to deliver on its strategic priorities. With stable, long-term funding from the Government of Canada and a renewed focus on innovation, we are ready to meet the challenges of the future. As we prepare for the transition to a new contractor under the government-owned, contractor-operated model, we remain focused on continuity, excellence, and delivering value to Canadians.

Thank you to our employees, partners, and stakeholders for your continued trust and support. Together, we are building a brighter, more sustainable, and more secure future – powered by Canadian nuclear science and technology.

Fred Dermarkar, *President and CEO*

Executive Summary

The 2024-25 fiscal year has been a period of significant achievements and progress for AECL. This report outlines the key accomplishments and milestones reached by AECL, as detailed in the 2024-25 Corporate Plan Summary.

AECL's commitment to nuclear innovation, environmental stewardship, and community engagement has driven substantial advancements in several areas, including science and technology advancements, the procurement of a new contractor, decommissioning and remediation initiatives, workforce development, safety and security, and Indigenous engagement.

AECL has been at the forefront of nuclear innovation, leveraging strategic partnerships both nationally and internationally to enhance research capabilities and foster innovation. Nationally, AECL and Canadian Nuclear Laboratories (CNL) have strengthened collaborations with academia, signing Memoranda of Understanding (MOUs) with nine universities to facilitate research, development, and mobility of Highly Qualified Personnel (HQP). The inaugural "University Day" hosted at Chalk River Laboratories united partner universities to explore joint projects and initiatives, further solidifying AECL's role in advancing nuclear knowledge and supporting Canada's clean energy future.

Internationally, AECL has built strong relationships with key global players such as the US, UK, and France, conducting reciprocal site visits and bilateral meetings to explore collaborative research opportunities. AECL's participation in multilateral organizations like the Generation IV International Forum (GIF), International Atomic Energy Agency (IAEA), and Organisation for Economic Co-operation and Development (OECD) Nuclear Energy Agency (NEA) underscores its commitment to global nuclear innovation. Notably, AECL and CNL hosted Fusion Day, unveiling the "Fusion Energy for Canada" report, which outlines a national strategy to make fusion energy a reality in Canada.

AECL's Federal Nuclear Science and Technology (FNST) Work Plan supports government priorities in health, nuclear safety, security, energy, and the environment. Activities in 2024-25 included advancing small modular reactor technologies, examining the safety of Actinium-225 for medical applications, and enhancing Canada's emergency response capabilities. The FNST Work Plan also focuses on environmental stewardship, radioactive waste management, and supporting Canada's international commitments. AECL's efforts in nuclear innovation are pivotal in maintaining Canada's status as a tier-1 nuclear nation and driving progress towards decarbonization and energy security.

AECL has also been actively preparing for the transition to a new contractor under the government-owned contractor-operated (GoCo) model. The procurement process, initiated in 2023, aims to ensure the continued management of CNL beyond September 2025. AECL has engaged in detailed consultations and site visits with Qualified Respondents, focusing on aligning activities and expectations to ensure a smooth transition and mitigate risks associated with workforce distractions.

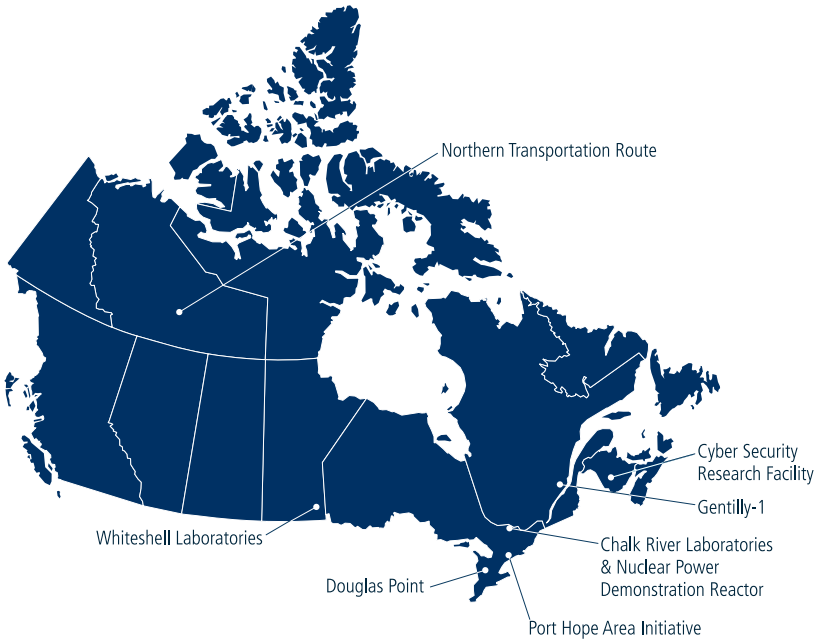
Decommissioning and remediation work has also been a significant focus for AECL. The organization has made substantial progress in addressing its environmental liabilities, with the demolition of 127 outdated buildings at the Chalk River Laboratories. This effort not only reduces maintenance costs but also paves the way for new, state-of-the-art facilities. AECL's commitment to environmental stewardship is further demonstrated through its collaboration with Indigenous Nations and local communities to develop long-term waste management solutions. The proposed Near Surface Disposal Facility (NSDF) at Chalk River is a critical project aimed at safely disposing of low-level radioactive waste, thereby advancing decommissioning and remediation activities while protecting the environment.

Safety and security remain paramount at AECL, with the Safety Excellence Team at CNL leading the completion of key actions within the Safety Excellence Strategy Implementation Plan. Efforts to enhance leadership training, metrics visualization, and psychological health and safety have strengthened AECL and CNL's safety culture. Additionally, internal security protocols and cyber security measures have been continuously improved to address evolving threats and ensure robust protection.

Indigenous consultation, reconciliation, and partnership have been integral to AECL's mission. The organization has fostered strong relationships with Indigenous Nations, developing Nation-specific memoranda of understanding (MOUs) and agreements to enhance capacity, knowledge sharing, and economic development opportunities. AECL's landmark Long-Term Relationship Agreement with the Algonquins of Pikwàkanagàn First Nation exemplifies the commitment to meaningful engagement and shared decision-making in project planning and implementation.

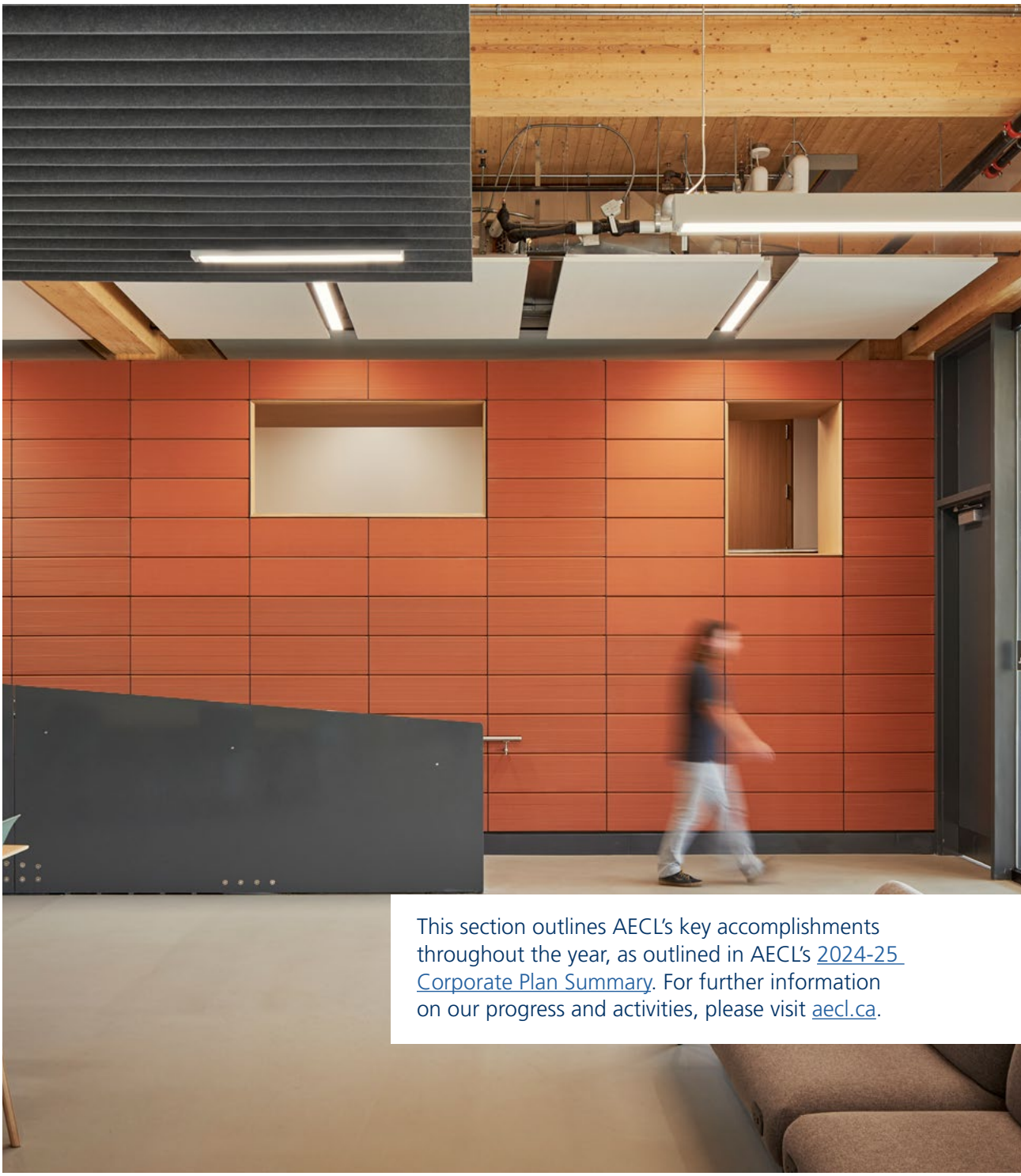
AECL's workforce has seen notable improvements in diversity and inclusion, reflecting the organization's dedication to creating an equitable and inclusive workplace. With a workforce comprising 50% women, 8.9% visible minorities, and 7.14% Indigenous people, AECL has made strides in fulfilling its commitments under the Equality in Energy Transition Initiative's Equal by 30. The DE&I working group, sponsored by the executive, has successfully completed 19 of the 41 actions on AECL's DE&I roadmap, demonstrating a strong commitment to long-term inclusivity goals.

As AECL continues to build on these achievements, the organization remains focused on driving innovation, supporting environmental stewardship, and fostering strong community partnerships. The accomplishments of 2024-25 set a solid foundation for the future of energy security, positioning AECL as a leader in nuclear science and technology, committed to delivering benefits to Canadians and contributing to global sustainability goals.



Site	Location	Overview
Chalk River Laboratories	Chalk River, Ontario	The Chalk River Laboratories is Canada's largest science and technology centre. The federal government is investing in the site's infrastructure, which will help build a state-of-the-art nuclear science and technology campus. This includes constructing the Near Surface Disposal Facility for the management of AECL's low-level radioactive waste.
Nuclear Power Demonstration Reactor	Rolphton, Ontario	The Nuclear Power Demonstration reactor was Canada's first nuclear power reactor to supply electricity to the grid and served as a key training facility for engineers and operators. It has been in safe shut down state for more than 30 years. CNL has proposed to decommission the reactor *in situ*.
Port Hope Area Initiative	Port Hope and Clarington, Ontario	The Port Hope Area Initiative represents the Government of Canada's commitment to cleanup and safely manage historic low-level radioactive waste located in both municipalities.
Douglas Point Reactor	Kincardine, Ontario	The Douglas Point reactor is a shutdown prototype nuclear reactor currently in a safe shutdown state pending full decommissioning.
Gentilly-1 Reactor	Bécancour, Québec	The Gentilly-1 reactor is a shutdown prototype nuclear reactor currently in a safe shutdown state pending full decommissioning.
Whiteshell Laboratories	Pinawa, Manitoba	The Whiteshell Laboratories were formerly AECL's second largest research site; today, they are being decommissioned for closure. CNL's plans include a proposal for in situ disposal of the WR-1 research reactor.
Northern Transportation Route	Northwest Territories and northern Alberta	The Northern Transportation Route represents AECL's commitment to work with Indigenous peoples and local communities to cleanup small quantities of uranium ore in the Northwest Territories and northern Alberta, specifically in Sawmill Bay, Great Bear River sites, Hay River, Bell Rock, Fort Smith, Fort Fitzgerald and Halfway House.

Achievements 2024-25



This section outlines AECL's key accomplishments throughout the year, as outlined in AECL's 2024-25 Corporate Plan Summary. For further information on our progress and activities, please visit aecl.ca.

Indigenous Consultation, Reconciliation and Partnership

Indigenous engagement and reconciliation are integral to AECL's mandate. Our innovation and environmental stewardship missions depend on strong relationships with Indigenous Nations and their communities. Most importantly, the exchange of knowledge and information and ongoing cultural awareness training make our work better.

As a federal Crown corporation, it is AECL's responsibility to support the Government of Canada's broader reconciliation objectives, including the commitment to implement the *United Nations Declaration on the Rights of Indigenous Peoples Act*. In addition, strong Indigenous engagement and consultation – built on relationships, not just project-driven interactions – is critical for ensuring that current work and future projects meet and exceed regulatory requirements.

Working closely with CNL, we continue to build relationships with Indigenous Nations on the lands on which we operate, developing and implementing Nation-specific memorandum of understanding (MOUs) and agreements to increase capacity, knowledge sharing, and economic development opportunities. Longer-term relationship agreements are enabling stronger partnerships and informing AECL's reconciliation action planning.

AECL is particularly proud of the Long-Term Relationship Agreement formed with the Algonquins of Pikwàkanagàn First Nation (AOPFN). This landmark agreement brings together AECL, CNL, and AOPFN to share plans and information through multiple working groups and the AOPFN's Neyagada Wabandangaki Guardian Program. Moreover, it is ensuring a strong AOPFN decision-making role in the planning, design and implementation of projects and activities at AECL sites in traditional Algonquin territory.

In collaboration with CNL, AECL engages with Indigenous Nations on waste disposal projects, fuel consolidation and waste transportation, small modular reactors, site remediation and future use considerations. This includes, for example, engagement and consultations with Indigenous peoples regarding remediation plans for the Northern Transportation Route and active discussions on an MOU with Mississauga First Nations regarding the creation and management of a nature reserve surrounding the Port Granby project in Clarington and Port Hope, Ontario. In addition, under the Federal Nuclear Science and Technology (FNST) Work Plan, CNL is working closely with the Clearwater River Dënë First Nation on a project in Saskatchewan's uranium-rich regions that integrates traditional knowledge with scientific research.

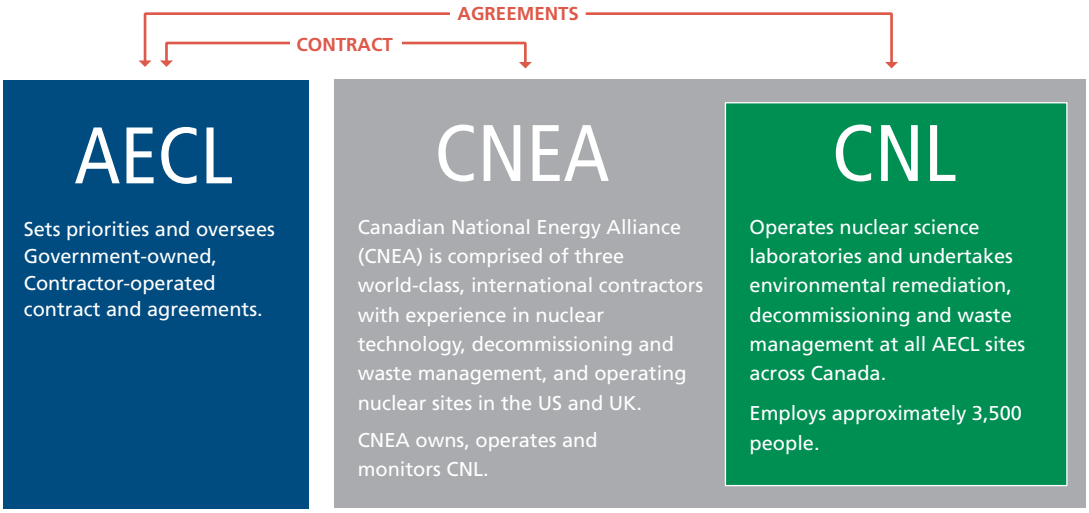
While these initiatives are only steps on our journey to reconciliation, they mark important progress toward AECL's commitment to meaningful engagement with Indigenous peoples and the achievement of shared priorities and mutual benefits.

Targets	Results
Develop or renew between 3 and 5 agreements with Indigenous communities.	Finalized and signed three agreements with Indigenous Nations related to three separate sites. Discussions continue with respect to eight other renewals and new MOUs/agreements.

Government-owned Contractor-operated Procurement

Canadian Nuclear Laboratories (CNL) has been managed since September 2015 by Canadian National Energy Alliance (CNEA), a consortium currently made up of three partner companies – AtkinsRéalis, Jacobs Engineering and Fluor Federal Services – under a government-owned contractor-operated (GoCo) contract that will expire in September 2025. In 2023, AECL launched a procurement process to award a follow-on GoCo contract to continue the management of CNL beyond this period.

Following the issuance of a Request for Pre-Qualification in March 2023, interested bidders were evaluated to assess whether they met mandatory technical criteria, financial capability requirements, security requirements, and integrity criteria. Those who did were deemed to be Qualified Respondents. In 2024-25, AECL issued the Request for Proposal to Qualified Respondents, and held site visits as well as detailed consultations with Qualified Respondents on the Request for Proposals and form of contract.



Activities in 2024-25 also focused on planning for the transition to a new contractor, planned for September 2025. AECL worked closely with CNL and CNEA to prepare transition plans and align activities and expectations to ensure a smooth transition, with a particular focus on managing the risks associated with a distracted CNL workforce.

Building a Diverse Workforce

As of March 31, 2025, AECL had 56 employees. Our workforce was made up of 50% women, 8.9% visible minorities and 7.14% Indigenous people. During the 2024-25 period, we honoured our commitment to the Equality in Energy Transition Initiative's Equal by 30 Campaign (an international effort, endorsed by Canada, to deepen efforts to advance gender equality and diversity in the energy sector). We remained engaged with our Diversity, Equity and Inclusion (DE&I) Working Group to achieve our long-term vision of having an inclusive, equitable and diverse workplace. The employee-driven and executive-sponsored Working Group has now completed 19 of the 41 actions on AECL's DE&I roadmap.

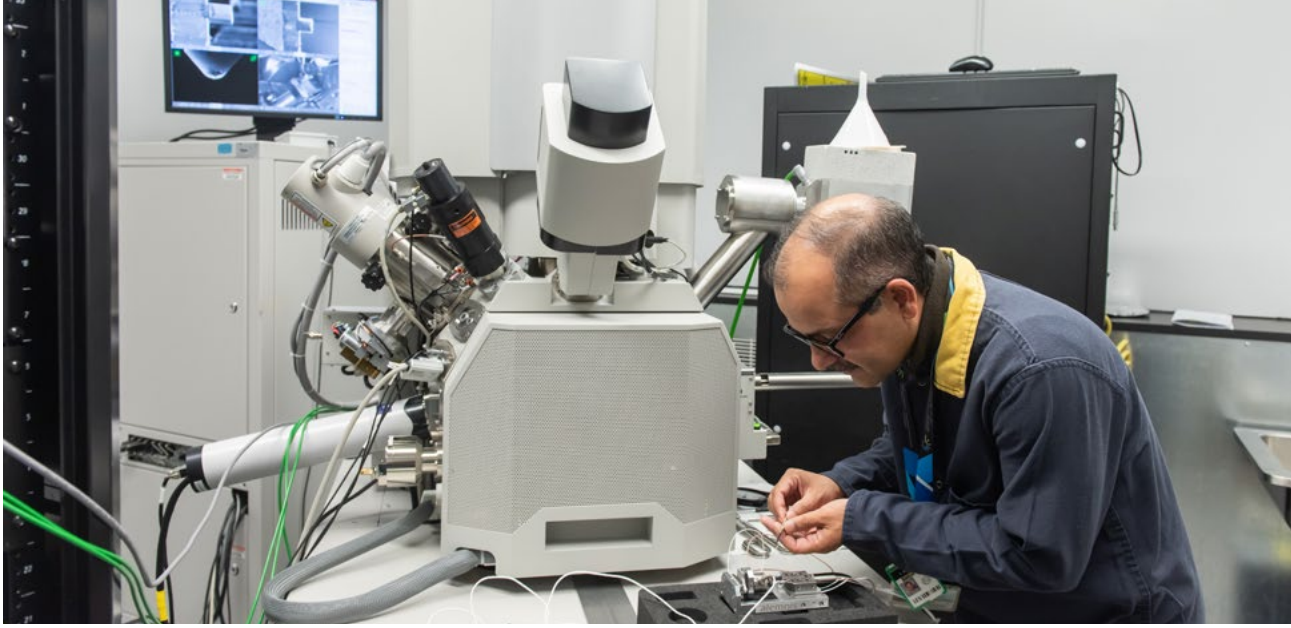
With operations in remote locations, attracting and retaining highly-qualified personnel is a key focus. Efforts in this area included significant work on developing and implementing inclusive job descriptions and job ads, publishing AECL's first Pay Equity Plan, launching AECL's first Employee Engagement Committee, refreshing its onboarding program, and conducting a total compensation and benefits review for the organization. AECL aims to remain competitive among similar employers nationally and internationally. AECL also refreshed its core values to who we are and how we work. Our primary commitment in everything we do is safety, and our values are: accountability, integrity, respect, innovation and collaboration.

Our Values

AECL continued to experience low voluntary turnover with a rate of 5.4% annually in 2024-25. However, approximately 8.9% of employees are eligible for retirement. Based on forecasted growth, AECL is accordingly focusing on implementing its strategic workforce plan and developing a broader talent mapping framework to mitigate risk. Given its small size, the impact of attrition in any particular area can be significant, particularly given the specialized knowledge and unique skillset of employees.

Environmental, Social and Governance

AECL published its third Environmental, Social and Governance (ESG) report demonstrating commitment to the Government of Canada's Greening Initiative and reported against the Task Force on Climate Related Financial Disclosures (TCFD). AECL has seven strategic differentiators, which enable broader business achievements, and supporting eight baseline expectations. AECL's initiatives are contributing to support eight of the 17 United Nations Sustainable Development Goals, including advancing affordable and clean energy, good health and well being, and decent work and economic growth.



Through its own work, and through CNL, AECL has had an enormous and positive ESG impact. To date, 220,000 metric tonnes of radioactive waste have been safely moved to a Long-Term Waste Management Facility. We have realized a 51% reduction in Scope 1 and 2 greenhouse gas emissions compared to 2005, exceeding our 2025 target of 40% ahead of schedule. Also, approximately 15% of electricity in Canada is powered by AECL's legacy CANDU technology, avoiding the annual emission of around 70 megatonnes of carbon dioxide, equivalent to removing 21 million cars off the road. The full report, linked above, provides greater detail on AECL's ESG priorities and achievements.

Safety and Security

Safety and Security are critically important to everything we do at AECL, and are a major focus of our oversight of CNL. The Safety Excellence Team at CNL demonstrated exceptional performance in leading the completion of 31 key actions within the Safety Excellence Strategy Implementation Plan. Their efforts were focused on advancing leadership training, enhancing metrics visualization, and promoting Psychological Health & Safety in the workplace. The Mental Health and Wellbeing program was strengthened with a variety of tools and learning opportunities designed to support employees in managing day-to-day challenges.

The Contractor Safety Forums and Councils continued to drive a strong safety culture, fostering positive behaviors and engagement among CNL contractors.

CNL's review of its Safety and Control Area programs identified improvement actions across various programs and missions, demonstrating a proactive and comprehensive approach to continuous improvement. The Central Technical Authority/Health Safety Security Environment Multi-Year Improvement Plan and the Compliance Improvement Plan successfully met their objectives, achieving over 90% completion of the actions scheduled for 2024-25.

While the recordable injury rate metrics – Total Recordable Cases (TRC), Days Away Restriction Transfer (DART), and Days Away (DA) – did not meet internal targets, CNL's performance remained stronger than the average across the U.S. Department of Energy (DOE) laboratories, highlighting a solid foundation of safety performance.

AECL's internal security protocols and cyber security posture continue to improve, mitigate risk, and mature against an ever-present and growing threat environment. Similarly, CNL has focused on security culture assessments and subsequent improvement actions, achieving noted program improvements and acknowledged by the nuclear regulatory body. In addition, CNL has implemented a robust third-party risk assessment process with broad and far-reaching implications to mitigate risk to the business, and there has been change focused on further rigor to mitigate cyber risk exposure.

Nuclear Innovation

Fueling the Next Generation of CANDU

AECL manages the intellectual property for the CANDU reactor technology on behalf of the Government of Canada. Rights to the commercialization of the CANDU technology are licensed to a partner company: AtkinsRéalis. Looking ahead at the five-year planning period, AECL sees a vital opportunity for CANDU technology in answering the call for new reactors to meet Canada's forecasted need for far greater clean electricity supply, supporting ongoing energy security and sovereignty through the use of a domestic technology and existing supply chain as well as creating jobs and economic growth for Canadians. This opportunity will involve competition among leading foreign companies and designs, and AECL sees CANDU as a prime contender for business in Ontario and beyond because of the articulated benefits it provides Canada. However, CANDU's competitive position for such opportunities will benefit from further investment in the CANDU design to meet the needs of the modern utility customer, including their interest in a 1GWe CANDU reactor.

To achieve this, AECL concluded in 2023-24 a Memorandum of Understanding with its current licensee, AtkinsRéalis, to further efforts for an optimized CANDU model to position CANDU for the next generation of large nuclear reactors in Canada and abroad. Key to the future success of any new CANDU projects will be the availability of heavy water, which has not been produced in Canada for over 25 years. AECL and CNL will look to leverage their extensive experience of heavy water related technologies to develop and demonstrate new production pathways, and ensure the timely availability of a secure, low carbon, domestic supply for the benefit of Canada.

In early 2024-25, AECL and CNL signed a non-exclusive, non-binding agreement with AtkinsRéalis to cooperate on the upgrading and production of heavy water for the commissioning and operation of new CANDU nuclear reactors in Canada.

Throughout 2024-25, AECL has worked closely with Natural Resources Canada, its commercial licensee, utilities, and the CANDU Owners Group (now Conexus Nuclear) to set the stage for further CANDU development, benefiting from the many innovations, iterations, and investments, on the part of numerous players.

In March 2025 the Minister of Energy and Natural Resources announced that the Government of Canada has entered into a preliminary agreement with AtkinsRéalis to support the development and modernization of a new, large-scale CANDU reactor (the MONARK). The intent of this agreement is to allow AtkinsRéalis to access a maximum of $304 million over four years to finance half of the design project. AECL is excited by this development, and will continue working with all partners, and the nuclear supply chain, to position CANDU for success.

Nuclear Laboratories

AECL has been leading nuclear science and technology for over seven decades. The organization was the birthplace of Canada's nuclear industry, having hosted the first sustained criticality (controlled nuclear chain reaction) outside of the United States. More importantly, the Chalk River Laboratories were the birthplace of the CANDU reactor technology developed and commercialized by AECL's former CANDU Reactor Division, a technology that today is deployed both at home and internationally (Argentina, China, India, Korea, Pakistan, and Romania). It also provided the research and facilities for breakthroughs in the life saving application of medical isotopes, including cobalt-60. Work undertaken at the Chalk River Laboratories has led to numerous and important scientific achievements – including two Nobel Prize winners.

Over the years, AECL has played an important role in supporting public policy and in delivering programs for the Government of Canada. This includes the production of medical isotopes and the provision of nuclear science and technology in the areas of energy, non-proliferation, emergency preparedness, counterterrorism, health, and security. AECL's unique facilities have made it an attractive research destination for scientists across Canada and the world, leading to home-grown innovation and the development and retention of highly qualified nuclear workers and scientists.

To further enhance these capabilities, the federal government is investing in new and renewed science and site infrastructure that is helping build a state-of-the-art nuclear science and technology campus.

Nuclear science and technology activities at the Chalk River Laboratories support federal needs and priorities, and CNL offers research and development services that support the broader nuclear sector in Canada. Importantly, CNL is focused on innovation, aligning science and technology activities with best-in-class project management practices, increasing the number of commercial partnerships, and optimizing administrative and management costs to deliver more science for the benefit of Canadians.

Strategic Partnerships

AECL has built strategic partnerships nationally and internationally to maximize our investments in research and capabilities at the lab and enhance innovation. Nationally, AECL and CNL are strengthening our partnerships with academia to facilitate research collaborations, the development and mobility of Highly Qualified Personnel (HQP), and access to specialized infrastructure.

Memoranda of Understanding (MOU) have been signed with nine universities: McMaster, Ontario Tech University, Western University, University of Waterloo, University of Saskatchewan, University of Regina, University of New Brunswick, and Queens University that are aligned with science and technology (S&T) priority areas, a demonstrated history of successful collaboration, and complementary expertise & infrastructure.

In July 2025, AECL and CNL hosted the inaugural "University Day" to unite all partner universities, at Chalk River Laboratories to foster collaboration and to strengthen relationships, share knowledge, and explore opportunities for joint projects and initiatives. AECL is a non-voting member of University Network of Excellence in Nuclear Engineering (UNENE) and retains a board and Research Advisory Chair seat. UNENE is a network of Canadian Universities, industry, government, and international institutions dedicated to advancing nuclear knowledge, building capacity and heightening visibility of Canada's strength as a global partner and to elevate the role of nuclear in advancing global sustainability and a clean energy future.

In 2024-25, we continued to build on our international relationships with the US, UK, and France. AECL and Commissariat à l'énergie atomique et aux energies alternatives (CEA) held reciprocal site visits to share information and explore opportunities to collaborate on research projects on energy, and to leverage the unique infrastructure in each of our respective laboratories. Reciprocal site visits were also conducted with the U.S. National Nuclear Safety Administration (NNSA) Oakridge Laboratories to explore collaboration on TRISO (Tristructural-Isotropic) fuel, remote SMR deployment, and nuclear security. AECL also hosted a delegation from the United Kingdom National Nuclear Laboratory for a bilateral meeting on infrastructure and asset management, corporate governance and value framework, and S&T collaboration on advance reactors, research reactors, and the Federal Nuclear Science and Technology (FNST) Work Plan.

AECL is active in our multilateral participation in international organizations such as the Generation IV International Forum (GIF), International Atomic Energy Agency (IAEA) and Organisation for Economic Co-operation and Development (OECD) Nuclear Energy Agency (NEA).

In June 2025, AECL and CNL hosted Fusion Day, a forum with industry, academia, government and other national labs to discuss and explore the path to fusion deployment in Canada. CNL unveiled its *Fusion Energy for Canada* report, funded under the FNST Work Plan, that outlines CNL's vision for a national strategy to make fusion energy a reality in Canada.

The Framework for Micro-reactor deployment led by AECL and CNL to inform the safe deployment of SMR and microreactors which are best suited to off-grid applications in communities and applications across Canada has been stood up, with governance including a secretariat, Steering Committee, and ten Technical working groups from eighteen organizations. The inaugural meetings were held on the margins of the Generation IV and Small Reactors (G4SR) conference in October 2024. The Technical Working Groups have drafted a Framework addressing critical steps, research, challenges and opportunities required for SMR deployment for further engagement with relevant stakeholders.

Federal Nuclear Science and Technology Work Plan

AECL oversees the delivery of the Federal Nuclear Science and Technology (FNST) Work Plan for nuclear research and development to support the government's priorities and core responsibilities in the areas of health, nuclear safety and security, energy, and the environment. The Federal Nuclear Science and Technology Work Plan serves to build, maintain and maximize those capabilities that are unique to CNL. AECL engages with fifteen federal departments and agencies to develop a program of work that meets broad federal needs and priorities and fosters innovation through the development of technologies and applications, while supporting Canada's international partnerships, commitments, and obligations.

The Federal Nuclear Science and Technology Work Plan focuses on four themes

- Biological applications and understanding the implications of radiation on living things
- Environmental stewardship and radioactive waste management
- National and global security, nuclear preparedness, and emergency response
- Safe, secure, and responsible use and development of nuclear technologies

Activities in 2024-25 supported AECL's priorities, including support for the government's priorities and the achievement of its climate change targets in 2030 and 2050. This included:

- Advancing small modular reactor technologies and deployment for Canada to inform regulatory guidance, assessments, and policies such as experimental validation of predictive models in support of safety analysis and licensing and the development of sensor monitoring of remote and underground structures.
- Examining the safety and efficacy of Actinium-225 in support of new medical applications and developing proof-of-concept production of high-quality radioisotopes for cancer treatments.
- Supporting regulatory and licensing decisions for projects to understand the behavior of materials in advanced reactors, small modular reactors and the current fleet in extreme environments.
- Examining the effects of aging, corrosion and degradation of in-core materials for new and current reactor types as well as developing state of the art online monitoring networks.
- Examining the potential for small modular reactors (SMRs) to meet the needs of a near-zero carbon remote mining operation.
- Contributing to Canada's emergency response capability by developing improved bio dosimetry techniques for rapid triage in emergency response; improvement of techniques for rapid measurement of radionuclides and development of decorporation and decontamination techniques.
- Improving the understanding of the basis of biological effectiveness of different radiations at low doses and dose rate.
- Advancing technologies for the detection of special nuclear materials at the border.
- Studying nuclear security and emergency response considerations for deployment of SMRs in remote sites.
- Reducing uncertainties in low-dose risk assessment to address challenges in regulatory policy, health assessment and public communication through in vivo mice studies.
- Improving the understanding of environmental impacts and waste of SMRs operations in support of the SMR Action Plan.
- Hosting exercises to test cyber security resilience for nuclear power plants in a full-scale cyber physical simulation of the control and safety systems.
- Supporting Canada's interests, commitments and arrangements in non-proliferation, counter-terrorism and disarmament priorities such as the International Partnership for Nuclear Disarmament Verification.
- Developing a roadmap for fusion energy in Canada to support decisions to develop a domestic fusion energy R&D program.
- The Canadian Hydrogen Safety Centre was newly launched to provide needed safety expertise. Countries across the globe are pledging and investing into the research, development and infrastructure to reach net-zero emissions by 2050. With hydrogen as a key enabler for decarbonisation, the Canadian Hydrogen Safety Center was developed to understand the challenges and safety considerations that come with technology.

Targets	Results
Deliver quality research projects on time, as set out in the FNST Work Plan and detailed in CNL's annual plan.	100% project milestones were met across the FNST Work Plan.

Canadian Nuclear Laboratories as a Federal Laboratory

In addition to working for federal departments and agencies under the FNST Work Plan, CNL provides services and access to its unique expertise and facilities on a commercial basis. These capabilities are also made available to international agencies such as the International Atomic Energy Agency and the Nuclear Energy Agency. In 2024-25, CNL continued to work with various government departments and agencies, including Defense Research and Development Canada through its Canadian Safety and Security Program, the Canadian Coast Guards, Fisheries and Oceans, and the Department of National Defense.

Targets	Results
Propose and develop between 3 and 5 collaborative agreements, memoranda of understanding or other agreements with organizations.	8 new agreements were signed with the Government of Canada.

New Nuclear & Emerging Technologies (N2ET) Program

CNL has consolidated a number of clean energy and health sciences projects into a single program: the New Nuclear & Emerging Technologies (N2ET) program. The goal of the program is to fast-track promising research and technologies, toward commercialization and deployment. The program directly supports AECL's vision of nuclear innovation and leveraging nuclear science and technology for the benefit of Canada. The N2ET program encompasses the SMR Invitation Process, which invites vendors to construct small modular reactors, and other advanced reactor demonstration units at one of the sites that CNL manages on behalf of AECL. It also includes the Canadian Nuclear Research Initiative (CNRI) program, which is designed to accelerate the development and deployment of advanced reactor designs, which allows participants to optimize resources, share technical knowledge and gain access to CNL's expertise and unique facilities. In August 2024, CNL and the Business Development Bank of Canada announced a $20M investment in Canadian company General Fusion ($10M from each party). This investment is targeted toward fast-tracking the path to commercialization of the Lawson Machine 26 plasma compression system, and includes a seat on the General Fusion board of directors for CNL. This is another step in building a Canadian fusion ecosystem.

In addition, AECL has signed an MOU with the Saskatchewan Research Council (SRC), a provincial Crown corporation with a complementary research mandate. The intent of this agreement is to enable collaboration between the two organizations, particularly with respect to the eVinci microreactor being sited at the SRC. AECL and CNL have important expertise and capabilities that will be of great value to SRC in the furtherance of this project, and cooperation here furthers national clean energy progress and important federal-provincial cooperation.

The N2ET program also includes the Clean Energy Demonstration, Innovation, and Research (CEDIR) Initiative, which advances the science behind hybrid energy systems to better understand how clean energy technologies can work together alongside other renewable energy technologies. Also under this program are joint ventures, such as Actineer Inc., a joint venture company between CNL and Isotope Technologies Munich (ITM) that is pursuing the industrial scale production of Actinium-225, a promising new medical isotope in the fight against cancer, and Fusion Fuel Cycles Inc., a joint venture between CNL and Kyoto Fusioneering, which aims to develop and deploy deuterium-tritium (D-T) fusion fuel cycle technologies.

In January 2025, N2ET expanded the 'SMR Invitation Process' to include fusion reactors and renamed to the 'Clean Energy Invitation Process'. Similarly, the CNRI program will also expand to include other forms of clean energy, including a larger focus on fusion-based research and development. Investment to advance the Actineer Inc. and Fusion Fuel Cycles Inc. joint ventures will continue to ensure Canada's competitive advantage in medical isotopes and fusion fuel cycles.

New Technology Initiatives Fund

The New Technology Initiatives Fund (NTIF) allows CNL to undertake science and technology activities to build expertise and capability at the Chalk River Laboratories, with a long-term view to attracting and retaining world-class expertise and building skills and knowledge that are anticipated to be needed for future or emerging opportunities. The NTIF is consistent with similar programs at national laboratories around the world, providing funding to support work and projects that may be at very early stages, peripheral to current research priorities, high risk, or exploratory. The NTIF is expected to promote innovative thinking, reward initiative, balance near-term priorities with long-term vision, and improve employee engagement.

Highlights for the reporting period include:

- Launch of the seventh iteration of the Strategic, Enabling, Engaging, Development (SEED) Crowd Sourcing Initiative. This program draws inspiration from the startup model and crowd sources employee ideas for new projects, investing in those selected for the research pipeline.
- The integration of nuclear and renewable energy systems by modelling hydrogen production processes. It also positions CNL to have the expertise to perform process simulations for integration of SMRs and Fusion reactors with hydrogen-production.
- Targeted alpha therapy using intracellular nanobodies for targeted delivery of radioisotopes in cancer therapy.
- A novel prototype neutron detector based on nanoparticle aerogels. This project was initiated following a successful SEED project, where neutron absorbing nanoparticle aerogel technology was investigated as possible alternative neutron detectors to Helium-3. This project will enable CNL to maintain and expand its unique expertise in neutron detection and development of novel neutron detectors.
- Developing a muon-induced neutron emission technique for nuclear verification and non-proliferation. A peer-reviewed journal publication has been accepted by Taylor & Francis, one of the world's leading academic publishers.

Targets	Results
Maintain and enhance expertise and capabilities.	Ten projects are continuing from the previous year.

Commercial Science and Technology

CNL is inherently an applied-science laboratory with a unique role in connecting basic research to real-world industry applications. To meet the specific needs of industry, CNL provides technical services and research and development products to third parties on a commercial basis. CNL has also expanded its commercialization efforts into intellectual property development with strategic partners and participating in industry-led or partnership initiatives to advance technology, products, or services and make them available to industry.

CNL continues its vital work to provide key expertise in support of the operation and maintenance of the existing fleet of reactors in Canada and around the world. In doing so, CNL continually seeks to improve the efficiency and value of the services it provides, and establish longer-term strategic relationships and contractual frameworks with key customers.

In addition to strengthening its traditional lines of business in support of the existing fleet of CANDU reactors, CNL continues to expand its reach and diversify into new markets. In doing so, CNL continues to focus on those areas where it has a unique offering that supports the health and success of the wider Canadian nuclear supply chain, such as access to unique facilities and expertise, playing its crucial role to enable the potential of nuclear technology to deliver maximum benefit to Canada. Such opportunities include but are not limited to:

- The light water reactor fleet
- Decommissioning and waste management
- Small modular reactors
- Hydrogen
- Tritium (fusion fuel cycle)
- Safety & Security
- Health Research & Development (R&D)
- Medical isotope production

Commercial work is both an important component of, and an enabler to, CNL's science and technology mission. Working with private industry not only supports the success of the Canadian sector, it further enables CNL to maintain and enhance its scientific and technical capabilities and facilities, and attract, develop and retain world leading experts within Canada. This further underpins Canada's role as a tier-1 nuclear nation, (meaning a nation with a complete nuclear ecosystem, technology, capabilities, facilities, research, and a robust nuclear supply chain), and contributes to Canada's broader science and innovation goals on both the domestic and international stage.

Building on previous years' efforts, in 2024-25, CNL continued to engage with and respond to existing customers' requests and explore new markets.

Targets	Results
Generate $69.7M in revenue	Revenue generated for 2024-25 was $86.1M or 124% of target.

AECL, through CNL, continues to build on its vision to serve the world as a global hub for SMR research and technology. This includes ambitions for the siting of a demonstration unit built on a CNL managed site. CNL's staged invitation process for those technology developers interested in siting their demonstration unit was revised and relaunched, learning the lessons from previous engagements and taking account of the highly dynamic external operating environment. This relaunch included an expansion to encourage applicants looking to demonstrate any form of clean energy technology, including fusion.

CNL has continued to build on the success of its Canadian Nuclear Research Initiative (CNRI), a CNL-led program that supports collaborative research projects on advanced reactor technology with third-party proponents, attracting a further 7 applications to its 2024-25 program, with 5 of the 7 joint R&D scopes of work proceeding to the project negotiation phase. This cost share program has been developed by AECL and CNL to make technical capabilities and expert knowledge available and accessible to the advanced reactor community, in order to equip them with the technical support required to progress towards deployment in Canada. In doing so, CNL further strengthens the unique role it must play to accelerate the deployment of safe, secure, clean, and cost effective advanced reactors in Canada.

AECL and CNL recognize the importance of partnerships in maximising the value derived from the unique capabilities, expertise, and facilities at CNL as critical to drive nuclear opportunity for Canada and deliver benefit to Canadians. CNL is therefore adopting a proactive approach to existing and new markets, deploying a range of models to best utilize CNL as a catalyst for Canadian nuclear innovation. This includes the formation of new strategic commercial partnerships to develop products and services, and facilitate their route to market. Examples include:

Small reactor IP: As part of ongoing efforts to ensure Canadian IP is being utilized to deliver the maximum possible benefit to Canadian society, CNL successfully concluded a request for Expression of Interest (RFEOI) in licensing AECL's SLOWPOKE and Nuclear Battery reactor technologies for commercialization opportunities. The RFEOI invited technology developers and other interested stakeholders to submit their insights and feedback about the innovative reactor designs and technologies, which collectively have broad applications that include electricity generation, district heating, isotope production and physics research. The level of interest and rate of formal responses from the market exceeded expectations, with CNL and AECL now considering the most appropriate next steps in the interests of Canada.

Radiopharmaceuticals: CNL achieved many notable technical successes since launching Actineer Inc., its joint venture with Isotope Technologies Munich (ITM) in 2023. As a service provider to the joint venture, throughout 2024-25 CNL has successfully proven and subsequently continued to scale the technology to produce & irradiate radium targets and successfully extract Actinium-225. This represents a significant industry success story, and further signals CNL's important role in the Canadian medical isotope ecosystem.

National Research Universal Reactor

After 60 years of operation, the National Research Universal reactor was shut down in March 2018. Designed in the early 1950's, the low-temperature, low pressure, research reactor enabled great advances across a wide variety of globally important industrial sectors. The National Research Universal reactor was used to prove out many concepts which later appeared in the CANDU reactor. It spawned a global medical radioisotope industry and provided the neutron source to conduct research across a wide spectrum of sciences, both applied and basic.

The reactor shutdown has left a significant gap in research capabilities at the Chalk River Laboratories. AECL and CNL are currently exploring options around a future research reactor. A decision to deploy domestic nuclear technology (i.e. CANDU) to support Canada's energy transition will have a significant impact on the business case for a research reactor, though a research reactor would be able to support any technology choice.

Revitalization of the Chalk River Laboratories

Owned by AECL and managed by CNL, the Chalk River Laboratories comprises several licensed nuclear facilities and more than 50 unique research amenities. It supports key nuclear science and technology priorities for government and industry, including research and advancements in health, safety, security, environmental stewardship, and clean energy.

CNL's long-term plans for targeted and strategic capital investments will allow the laboratories to grow the unique complement of science and technology capabilities, while remaining flexible to quickly adapt to the evolutionary opportunities of nuclear and energy-related, leading-edge innovation. These investments will contribute to an efficient and cost-effective campus, replacing aged facilities and infrastructure that are costly to operate and maintain.

As part of AECL's role in overseeing CNL's activities for the management and operations of our sites, a clear focus is placed on the ongoing, safe operations of the nuclear laboratories and decommissioning sites. Above and beyond the role of the Canadian Nuclear Safety Commission (CNSC) which, as a regulator, ensures that all nuclear activities in Canada are delivered safely, AECL expects high levels of performance from CNL in health, safety, security, and environmental protection.

AECL has also asked CNL to transform its operations to increase value for money and reduce costs and risks to Canada. The overall objective is to have in place a cost-effective, modern campus-like site with new and refurbished facilities to support the future growth of CNL. Any capital investments at AECL sites will take into consideration best practices with respect to sustainability and green building standards in order for AECL to meet its greenhouse gas emission reduction targets.

The Capital Plan addresses two main areas of focus:

New Science Infrastructure: These investments are part of a longer-term plan to revitalize the Chalk River site and construct new science facilities in order to build a modern, world-class nuclear science and technology campus that serves the needs of government and industry.

Current Site Infrastructure: Investments have been required to support existing and aging infrastructure systems and facilities at the Chalk River site such as potable water, storm sewer, sewage treatment, electrical and other utilities. These investments are necessary to respond to regulatory and health, safety, security and environmental requirements, as well as to maintain a cost-effective and reliable site. The following projects are transforming the site into a modern, world-class nuclear science and technology campus.

Advanced Nuclear Materials Research Centre: This centre combines the capabilities of existing but outdated facilities into a modern shielded facility and laboratory research complex that will support further advancements in nuclear science and technology, including small modular reactors and nuclear safety and security. Construction was started in 2022 and is expected to be completed in 2030. In 2024-25, the south side foundation was completed with installation of the structural steel and mass timber. Work continues on the design to complete the north side foundation, hot cell fabrication, and structure.

Science Collaboration Centre (SCC): This six-story office building will serve as a business hub and accommodate current and future CNL staffing projections. The SCC will support process efficiencies, collaboration and business development, and enable potential expansion based on the future of work and programs at the Chalk River Laboratories. Construction was completed in 2023-24 with energy audit expected to be completed this year.

Targets	Results
Complete and commission new non-nuclear facilities.	The Science Collaboration Center (SCC) is completed and operational.
Improve stability in health, safety, security, and environmental industry standard metrics against industry standard benchmarks.	At the Chalk River site, CNL achieved excellent safety performance and is well placed in the top quartile of industry performance, while other key indicators demonstrate solid continuous improvement.
Implement actions to achieve CNL's objectives to manage operating costs while maintaining safety and the protection of the environment, with a view to ensuring a sustainable and science-focused organization in the long-term.	Cost pressure due to post-pandemic inflation and abnormal escalation continue to be a challenge. Efforts have been made to reduce costs through energy efficiency initiatives and other means. Activities in this regard will continue in the coming years.

Advanced Nuclear Materials Research Centre

The Advanced Nuclear Materials Research Centre (ANMRC) is AECL's most significant capital investment at the Chalk River Laboratories. The objective is to combine the capabilities of existing, outdated facilities into a modern shielded facility and laboratory research complex essential to Canada's nuclear operations and status as a tier-1 nuclear nation.

Environmental Stewardship

Decommissioning and Waste Management

AECL's objective is to protect the environment by advancing key decommissioning, remediation, and waste management projects to address risks and hazards.

AECL has been conducting nuclear science and technology activities for seven decades. While these activities have had important benefits for Canada and Canadians – for example the production of medical isotopes used in the detection and treatment of cancer – they also produced radioactive waste. AECL has various types of radioactive waste at its sites, including high-level waste (used fuel), intermediate- and low-level waste. Several sites, buildings and structures have also been contaminated as a result of nuclear science and technology activities and past waste-management practices; these need to be decontaminated and demolished, sites cleaned up and remediated, and the radioactive waste managed properly and safely.

AECL is also responsible for fulfilling Canada's responsibilities with respect to historic low-level waste at sites where the original owner no longer exists, or another party cannot be held liable and for which the government has accepted responsibility. This includes the cleanup and safe long-term management of historic, low-level radioactive waste in the municipalities of Port Hope and Clarington, in Ontario pursuant to an agreement between Canada and the municipalities. This project is one of the largest and most complex environmental projects in Canada.

With the implementation of the government-owned, contractor-operated model, AECL was given a mandate to accelerate these activities to reduce risks and costs for Canada in a safe manner, consistent with international leading practices. Specifically, AECL has asked CNL to propose long-term radioactive waste disposal solutions and to advance other decommissioning activities to reduce its environmental liabilities.

This work is well underway, with significant progress having been made at the Chalk River Laboratories where 127 old and outdated buildings and facilities have been demolished to date. This not only reduces AECL's environmental liabilities and overall site maintenance costs, but it also paves the way for new facilities to be constructed as part of the site's revitalization.

Working in collaboration with Indigenous Nations and local communities, industry experts and key stakeholders, AECL and CNL are advancing decommissioning activities and looking at various solutions to address the unique challenges and opportunities associated with long-term radioactive waste disposal.

Remediation, Decommissioning and Radioactive Waste Management at the Chalk River Laboratories

Activities in this area include all waste and decommissioning activities to address AECL's environmental, decommissioning, and waste management responsibilities at its Chalk River Laboratories.

Waste Management and Disposal at the Chalk River Laboratories

Radioactive waste is safely stored at the Chalk River site. However, long-term management and disposal solutions must be developed for various types of waste to allow for the remediation of contaminated buildings, lands and soils, and to move away from continuous temporary storage. As such, CNL has proposed to build a Near Surface Disposal Facility (NSDF) for the disposal of AECL's low-level radioactive waste, as well as small amounts of waste from other Canadian producers such as hospitals and universities.

The facility would allow for the disposal of the vast majority of AECL waste currently in interim storage, as well as waste extracted as a result of contaminated land remediation activities, decommissioning activities and continued operations of the nuclear laboratories. This project is critical to advance decommissioning and remediation activities at AECL sites, and to further protect the environment.

Permission to begin construction of the NSDF was granted to CNL on January 9, 2024, following public hearings by the Canadian Nuclear Safety Commission (CNSC). Following the regulatory decision, three Judicial Reviews (JR) were filed by intervening organizations, relating to various aspects of the regulatory process. All three JRs have been heard in court and decisions were rendered. As a result, work on the project has stopped while, separately, the Minister of Environment and Climate Change reviews permitting under the *Species at Risk Act*, and the Canadian Nuclear Safety Commission develops a renewed consultation process with the Kebaowek First Nation. CNL, under AECL oversight, has filed to appeal these decisions, but regardless of the outcome of judicial processes, continues to work to meet regulatory and permitting requirements to advance the project. Construction of the NSDF is now slated to begin in 2026. However, CNL continues to progress on its pre-construction commitments, which are now almost all complete. This setback creates several challenges, but AECL understands the complex legal issues – particularly associated with the implementation of *United Nations Declaration on the Rights of Indigenous Peoples Act* – at play, and that time and additional effort may be required to work through outstanding issues. We remain committed to supporting reconciliation activities with Indigenous peoples and are confident that we can overcome remaining challenges and advance this vital environmental clean-up project.

In the meantime, interim waste storage has continued to expand to accommodate waste which is produced as a result of continued building decontamination and decommissioning at the Chalk River site, as well as ongoing nuclear science and technology operations.

Following the 2023 October acceptance by the Minister of Energy and Natural Resources of the recommendations of the Nuclear Waste Management Organization (NWMO) on an Integrated Strategy for Radioactive Waste (ISRW) for Canada, Canada's major waste owners and producers (including AECL and CNL) have formed a Radioactive Waste Collaboration Committee to implement and update the strategy going forward, in line with their obligations under the current Policy for Radioactive Waste and Decommissioning. Consistent with the ISRW, AECL and CNL continue to engage with the Nuclear Waste Management Organization (NWMO) as they develop their project to pursue deep geologic disposal for Canada's intermediate-level waste.

AECL's high-level waste (used fuel) is destined to be disposed of in the NWMO's proposed repository. Projects to manage used fuel are discussed in more detail in the section on Management of used fuel and repatriation of highly-enriched uranium below.

CNL also manages AECL's inventory of highly radioactive stored liquid waste which is a byproduct of Science and Technology (S&T) and medical isotope production. A project is in place to safely remove and process the legacy radioactive liquid waste from existing tanks at the Chalk River site and to decommission the tanks and associated structures. CNL achieved emptying a further five of the legacy tanks bringing the total to 9 of the 20 tanks now confirmed to meet the criteria necessary for handover to Facilities Decommissioning.

Until disposal solutions are approved and available, CNL continues to manage radioactive waste inventories at dedicated waste management facilities at the Chalk River site in a manner that is safe and minimizes the impacts on the environment.

Targets	Results
Prepare for and commence construction of the Near Surface Disposal Facility (NSDF).	Pending successful resolution in court, the construction is planned to start in the Fall of 2026. CNL has completed almost all of the pre-construction work.
Radioactive waste from other AECL sites is received at the Chalk River Laboratories (low-level radioactive waste received for storage and disposal when NSDF is operational, and intermediate-level waste for storage).	Low and intermediate-level radioactive waste from other AECL sites (including the Whiteshell Laboratories) continues to be shipped to Chalk River Laboratories for storage and eventual disposal.
Complete the construction of a facility for the interim storage of intermediate level radioactive waste at the Chalk River Laboratories (CRL).	A solution was developed to integrate commercially available intermediate-level waste (ILW) containers within existing Waste Management Areas. This capability provides immediate relief to storage constraints and ensures near-term capacity for sites including CRL, Whiteshell Laboratories, Gentilly-1, and Douglas Point, enabling the acceleration of key program activities and addressing potential storage limitations.

Environmental Restoration at the Chalk River Site

For more than 70 years, nuclear science and technology activities at the Chalk River site have led to the production of a variety of radioactive and other hazardous wastes. This waste is carefully managed in dedicated areas, otherwise known as waste management areas. While the majority of the Chalk River site remains undisturbed, certain areas, including the waste management areas have contaminated soil and waste requiring retrieval and processing to allow for final disposal. As there remains a significant amount of buried waste, soil contamination and associated plumes, remedial actions are required to further protect the environment. Until such a time, legacy waste is being safely managed and closely monitored.

The remediation of the Waste Management Areas cannot progress until the NSDF is available. The intent is to align the completion of the characterization and remediation planning of the waste management areas with the availability of the disposal facility. CNL completed the geophysical investigation of the subsurface at the Nitrate Plant as well as the characterization of the lands along the former LDA pipeline route and completed Land Use Assessments for Chalk River Laboratories, Douglas Point and Gentilly-1.

Targets	Results
Complete characterization and remediation plans for various waste management areas at the Chalk River site.	Characterization is ongoing for waste management areas at the Chalk River site. Land Use Assessments for CRL, Douglas Point and Gentilly-1 are completed as well as characterization of LDA Pipeline lands and subsurface assessment of Nitrate Plant.

Decommissioning at the Chalk River Site

The Chalk River site includes multiple redundant and outdated buildings which require decontamination, decommissioning and demolition. The site has been in existence since the 1940s, and some buildings still standing today date back to that era. Some facilities were used as nuclear science and technology facilities (and therefore may have some level of radioactive contamination), while others were used as support buildings (for example machine shops, garages, etc.). Most of these facilities and buildings are outdated, no longer required to meet operational needs and contribute to high site costs through ongoing maintenance for safety and security purposes, energy consumption, etc. Buildings also need to be removed to make way for the Chalk River site revitalization.

Since 2015, there has been significant acceleration of decommissioning work at the Chalk River site: 127 buildings and structures have been decontaminated, decommissioned and demolished. This significantly reduces site costs and makes way for safer, more sustainable world-class nuclear science and technology buildings. Permission to begin construction of the NSDF was granted to CNL on January 9, 2024. Shortly after, three Judicial Reviews (JR) were filed by intervening organizations. All three JRs have been heard in court and decisions were rendered. Two of the applications were granted in part which caused the project to pause and take a step back while CNL and AECL are studying the decisions and contemplating action. Pending successful resolution in court, construction for the NSDF is now slated to begin in 2026.

Targets	Results
Demolish 1 building and structure at the Chalk River site.	Three structures were demolished in 2024-25.

Management of Used Fuel and Repatriation of Highly-Enriched Uranium

Highly-enriched uranium originating in the United States was used at the Chalk River site as reactor fuel and in the production of medical isotopes. This material requires high levels of security as well as costly and complicated storage. As part of the Global Threat Reduction Initiative (an initiative which aims at reducing proliferation risks by consolidating highly enriched uranium inventories in fewer locations around the world), AECL is working with the United States Department of Energy (DoE) and CNL to return (repatriate) this material to the United States for conversion and reuse. This initiative provides for a safe, secure, timely and permanent solution to Canada's long-term management of this material.

CNL is also advancing efforts to consolidate AECL's inventory of used fuel. This entails transferring used fuel, currently stored in various locations across Canada, to the Chalk River Laboratories. Consolidating used fuel in a single location will increase safety and security and reduce costs while the Nuclear Waste Management Organization develops a permanent disposal solution.

Targets	Results
Continue to investigate and pursue the disposition or repatriation of fresh and irradiated fuel material to further reduce liabilities for Canada.	Continued preparing for the repatriation of fuel, consistent with international commitments made by Canada, and preparing for a shipment in 2025-26.
Prepare plans and begin stakeholder and Indigenous engagement activities for the shipments of AECL used fuel to the Chalk River site.	Planning a variety of stakeholder and Indigenous engagement activities is ongoing to support the shipment of AECL used fuel to the Chalk River site from within Canada.
New fuel storage capacity is ready to accommodate AECL used fuel.	The new fuel storage capacity was successfully licensed by the CNSC and consolidation of Gentilly-1 Fuel commenced in 2024-25.

Decommissioning of Prototype Reactors

Gentilly-1 and Douglas Point are shutdown prototype nuclear reactors owned by AECL and located in Bécancour, Québec and Kincardine, Ontario, respectively. The reactors operated in the late 1960's through the mid 1980's to advance the understanding of boiling light water power reactors (Gentilly-1) and steam condenser power reactors (Douglas Point). Both reactors are now in a safe shutdown state prior to being fully decommissioned.

At Douglas Point, the administration building has been demolished and the demolition of the turbine hall has begun and will be complete this year. Decommissioning of the purification building and the resin tanks has also begun and is expected to be completed this year as well.

At Gentilly-1, electrical and mechanical rationalization is complete and awaiting Hydro Québec to energize the newly installed switch room. Also in Gentilly-1, the transport of the fuel to Chalk River has begun and will continue into the next year. CNL has also submitted the required regulatory documents to request permission to proceed with the next phase of decommissioning. A hearing or approval to proceed is expected later in 2025 or early in 2026.

Targets	Results
Demolish supporting and/or redundant facilities at the Douglas Point reactor.	Demolition work began in 2024 and the administration building has been fully demolished. The turbine building demolition has begun and will be completed this year.
Review options for Douglas Point and Gentilly-1 for transport of fuel to the Chalk River Laboratories.	Consideration for the consolidation of the Douglas Point used fuel at Chalk River Laboratories remains on hold while CNL reviews the business and safety benefit of transferring this fuel to CRL. CNL has begun to transfer the used fuel from Gentilly-1 to the Chalk River Laboratories. This work will continue this year.

Port Hope Area Initiative

The Port Hope Area Initiative represents Canada's commitment to clean up and safely manage historic low-level radioactive waste situated in the municipalities of Port Hope and Clarington, in Ontario. The objective is to safely relocate and manage roughly 2.1 million cubic meters of historic low-level radioactive waste and contaminated soils. To achieve this, two projects are being undertaken: the Port Granby Project and the Port Hope Project. Both involve the remediation of contaminated material and the construction of a near surface long-term waste management facility (one in each municipality). Whereas the Port Granby Project is now complete, the Port Hope Project is significantly more complex and will remain ongoing for the coming years.

The project has faced challenges associated with scope increase on many fronts as remediation work has progressed, with higher-than-anticipated volumes of waste needing to be remediated. At the Port Granby site, the total estimated waste volume increased 1.36 times from the original estimates (550,000 m^3 to 750,000 m^3) due to the wider spread of contamination. That said, remediation was completed in the fall of 2020 and the facility is now capped and closed, with internal roads having been removed. The Port Granby site has now transitioned to the long-term monitoring and maintenance phase.

In 2024-25, CNL continued to make progress on the remediation of the Port Hope harbour, despite technical challenges. Wall repairs and dredging are within a few weeks of completion with the final remediation activities of the East of the pier on the Ganaraska River as well as the North and South walls of the turning basin remain on schedule for completion in the summer of 2025. The project therefore expects to complete the radiological remediation of the harbour later this year with the final restoration continuing into 2026-27.

Significant progress was made on the remediation of industrial sites during 2024-25. Both the Chemetron Lagoon and the Lions Park sites were fully restored with hand back to the Municipality of Port Hope being finalized and carrying over into 2025-26. The Water Work West site was completed in early 2024-25. This project was behind schedule due to the extensive spread of contamination; over three times the amount of contaminated soil had to be removed than had originally been estimated. Restoration of this site will be performed in collaboration with First Nation communities and is expected to begin late in 2025 or early 2026, and continue into the summer of 2026. The remediation of the coal gasification site is now complete with restoration taking place in the summer of 2025. The Alexander Street Ravine was completed in 2024-25 and its restoration will be complete in the summer of 2025. Both the Highland Drive South Ravine and the Highland Drive Landfill will continue into 2025-26 but will be completed later in 2025.

The largest remaining challenge in this project relates to the scope and execution of the remediation of residential properties. As characterization activities have advanced, the number of properties requiring remediation work has increased. Port Hope property owners and residents have expressed dissatisfaction about the time it will take to remediate their properties. CNL's experience in the field has identified the fact that a significant number of property cleanups are being driven by the generic, conservative cleanup criteria. As such, CNL is recommending changes to the Port Hope Area Initiative cleanup criteria to minimize unintended negative environmental impacts and disruption to the community.

CNL has made an application to the Canadian Nuclear Safety Commission to amend the cleanup criteria and is engaging federal and provincial regulators, the municipality, local Indigenous Nations and communities, and the public to move its application forward. This would minimize impacts to the environment and to the surrounding communities, while still being protective of human health and the environment. Importantly, it would continue to meet the intent of the Government of Canada's commitment in the original Legal Agreement with the municipalities to leave properties such that they can be used for "all current and foreseeable unrestricted uses." Should the revised cleanup criteria be accepted by the Canadian Nuclear Safety Commission, this would have the effect of reducing the scope of the cleanup, the overall number of properties and the remediation duration and the overall disruption to property owners. CNL and AECL are continuing to pursue a revision to the clean up criteria which satisfies both the community and the regulatory bodies.

Targets	Results
Place the long-term waste management facility into long term surveillance.	The Port Granby site is now transitioned to a long-term monitoring and maintenance phase.
Engage local Indigenous Nations and communities to explore options and gather feedback on potential changes to the cleanup criteria for the Port Hope Project.	Engagement continued with Indigenous Nations, the local municipality and community members.

Low-Level Radioactive Waste Management Office

The Government of Canada, through AECL, has assumed responsibility for historic, low-level radioactive waste where the original owner no longer exists, and the current owner cannot reasonably be held responsible. Through CNL, AECL is managing these responsibilities which include the cleanup of historic low-level radioactive waste at various sites across Canada (excluding the Port Hope Area Initiative, discussed above). This includes ongoing interim waste management and remediation projects mostly in Ontario, Alberta and the Northwest Territories.

Planning, stakeholder and Indigenous engagement continued to enable the remediation of sites along the Northern Transportation Route.

Targets	Results
Engage local stakeholders and Indigenous communities to agree on cleanup plans for sites along the Northern Transportation Route located in the southeastern Northwest Territories and northern Alberta.	Engagement activities continued with local stakeholder and Indigenous communities regarding phase 2 cleanup plans.

Decommissioning and Closure of the Whiteshell Laboratories

The Whiteshell Laboratories, located in Pinawa, Manitoba, is the second largest of AECL's sites operated by CNL. It was established in 1963 as a research laboratory, with a focus on the largest organically cooled, heavy water moderated nuclear reactor in the world, the WR-1. Facilities also included a SLOWPOKE reactor as well as shielded hot cell facilities and other nuclear research laboratories. The site also includes a radioactive waste management area which serves to provide interim storage of radioactive waste which was created as a result of the operations of the research reactor and nuclear laboratories.

> ***In Situ* Decommissioning:** *In situ* (leaving in place) decommissioning approach involves preparing systems and structures for grouting whereby the below-grade sealed structure will encapsulate and contain radiological sources and hazardous materials for a defined period of institutional control. In situ decommissioning encapsulates both Intermediate and Low Level Waste (ILW & LLW).

In 1998, the Government of Canada announced the closure of the Whiteshell Laboratories, and decommissioning activities have been underway since then. With the implementation of the Government-owned, Contractor-operated model and the increased emphasis placed on tackling its environmental and decommissioning responsibilities, AECL has asked CNL to accelerate and complete the decommissioning and closure of the site. As a result, CNL is proposing to decommission and close the site closer to 2035, nearly 25 years ahead of the initial schedule. The acceleration of the decommissioning of the site includes a proposal by CNL to decommission the WR-1 reactor in situ. That project is undergoing an Environmental Assessment.

Since 2016, CNL has been undertaking environmental and technical assessments and engaging regulators, Indigenous Nations, local municipalities, and the public to share information about in situ disposal, gather input, and respond to questions and comments about the proposed project.

In 2024-25, CNL submitted a final version of its Environmental Impact Statement to the Canadian Nuclear Safety Commission, based on its work to broaden understanding of municipal and Indigenous perspectives through collaborative capacity-building initiatives, Traditional Knowledge studies and community participation in site monitoring activities. In January 2023, the Canadian Nuclear Safety Commission indicated that CNL's proposal had passed the completeness check. The WR-1 Environmental Impact Statement completed its Federal, Provincial and Indigenous review. CNL is in the process of dispositioning the comments from this review.

Other activities to advance the decommissioning of the Whiteshell Laboratories have included the decontamination and demolition of several buildings. However, significant challenges have emerged with respect to the complexity and level of hazard related to the retrieval, processing and transport of radioactive waste currently being stored in a radioactive waste management area known as the 'standpipes and bunkers'. These are concrete structures, mostly below grade, which contain intermediate-level waste and potentially fissile nuclear material that cannot be fully characterized before retrieval begins. Given the level of risk involved with their remediation, CNL has had to adjust its approach, to include a more complex and costly (as it is based on remote tooling and robotics) method, to protect workers and the environment. The strategy was further modified to include manual retrieval of waste from certain standpipes. The significant achievement of the first manual retrieval was completed in 2024-25.

In order to safely and compliantly accomplish the above-noted waste retrieval work there is a considerable focus on infrastructure modifications necessary to move the site from the planning phase to the execution phase. Where possible infrastructure modifications, such as repurposing the Shielded Modular Above-Ground Storage (SMAGS) building to a Cask-Loading Facility for waste transport, are underway. Where necessary new infrastructure, such as power supply and security monitoring in the Waste Management Area, are being established.

These achievements notwithstanding, no discussion of the progress at the Whiteshell site is complete without highlighting the improved performance of the fire protection team in 2024-25. After a dedicated effort to further improve the training and fire protection program, CNL successfully achieved a full return to compliance and operations following an eight-phase corrective approach over several months that was closely monitored by the CNSC and AECL.

Targets	Results
Decommission the majority of buildings on the main campus by 2022.	Given the complexities related to the retrieval of some of the waste located in the management area (discussed above), a decision was made to extend the life cycle of many buildings beyond 2022 in order to accommodate staff and operations. The length of extended operations in these buildings is still being developed.
Prepare the retrieval system for the standpipes and bunkers to start operations.	Design of the retrieval system was advanced in 2022-23, with integrated system operability testing at the fabrication facility in 2024-25. Site preparations are underway to receive the equipment at Whiteshell site in 2025-26.
Submit the final Environmental Impact Statement for the proposed in situ decommissioning of the WR-1 reactor.	CNL submitted the final Environmental Impact Statement in 2022-23, with the document passing the completeness check as assessed by the Canadian Nuclear Safety Commission. It is now undergoing final technical reviews by the federal, provincial and Indigenous review team.

Looking to the final site closure and being mindful of the impact on the local community, AECL will continue to work with local communities and Indigenous communities to discuss the future of AECL's lands, which could include consideration for siting a small modular reactor at the Whiteshell site.

Closure of the Nuclear Power Demonstration Reactor Site

The Nuclear Power Demonstration reactor, located in Rolphton, Ontario, was the first Canadian nuclear power reactor and the prototype for the CANDU reactor design. For 25 years, the reactor produced low-carbon energy and operated as a training centre for nuclear operators and engineers from Canada and around the world. Operations at the Nuclear Power Demonstration reactor ended in 1987, after which the first stages of decommissioning were completed, including the removal of all fuel from the site and the draining of the systems. The site has been in a safe shutdown state for the last 30 years.

As part of its objectives to protect the environment and address its environmental and decommissioning responsibilities, AECL has asked CNL to propose plans to safely decommission and close the reactor site. As a result, CNL is proposing to decommission the reactor in situ, meaning that it would be immobilized in place by grouting (cementing) the reactor which is located below the surface. The project is currently undergoing an Environmental Assessment.

Since the launch of the Environmental Assessment process in 2016, CNL has been developing its safety case and preparing scientific studies with a view to providing all necessary documentation and responding to stakeholders and Indigenous groups' concerns. A final draft Environmental Impact Statement was submitted in 2023. While the project is more than three years delayed, it has allowed for additional engagement of stakeholders and Indigenous communities on the project in order to gather input and adjust the proposed approach as necessary. Activities have included multiple meetings, site tours and outreach to Indigenous communities, including providing funding for capacity building and traditional knowledge studies, and to enable Indigenous communities to engage technical experts to comment on the Environmental Impact Statement. The final draft of the environmental impact assessment was accepted by the CNSC as a complete package and has moved into the assessment phase by the federal, provincial, indigenous peer review team. This is expected to conclude in May 2025.

Targets	Results
Submit the final Draft Environmental Impact Statement for the proposed in situ decommissioning of the Nuclear Power Demonstration reactor.	The CNSC have accepted the draft Environmental Impact Assessment as a complete package and began the assessment phase by the Federal, Provincial and Indigenous Peer Review Team.

Third-Party Waste

AECL's sites and waste management capabilities are unique in Canada. Historically, AECL has accepted small amounts of radioactive waste from Canadian facilities, most notably hospitals and universities. CNL continues to provide these services to third parties for the handling, storage and disposal of radioactive waste. These activities are delivered on a full cost-recovery basis and do not require government funding.

Management Discussion and Analysis

Forward Looking Statements

This Management Discussion and Analysis has been reviewed by AECL's Audit Committee and approved by AECL's Board of Directors. It provides comments on the performance of AECL for the year ended March 31, 2025, and should be read in conjunction with the financial statements and accompanying notes included in this Annual Report.

This Management Discussion and Analysis contains forward-looking statements with respect to AECL based on assumptions that management considers reasonable as at June 10, 2025, when AECL's Board of Directors approved this document. These forward-looking statements, by their nature, necessarily involve risks and uncertainties that could cause future results to differ materially from current expectations. We caution the reader that the assumptions regarding future events, many of which are difficult to predict, may ultimately require revision.

Organization

AECL is an agent Crown corporation reporting to Parliament through the Minister of Energy and Natural Resources. AECL's operations are funded through Parliamentary appropriations and third-party revenues which result from commercial work that CNL undertakes, as a contractor of AECL, principally in the areas of nuclear science and technology as well as the sale of heavy water.

AECL operations include activities associated with the management and oversight of the Government-owned, Contractor-operated model, including Environmental Stewardship activities as well as the Nuclear Laboratories. In this respect, AECL sets priorities for CNL, oversees the contract and assesses CNL's performance. AECL also supports the Government of Canada's development of nuclear policy.

Through the Federal Nuclear Science and Technology work plan, AECL also serves the needs of fifteen federal departments and agencies in the area of energy, health, safety and security, and the environment.

Risks and Opportunities

AECL carefully plans for and manages risks as part of sound risk management practices. Due to its oversight role, AECL's risk management approach goes beyond the internal organizational risks and includes oversight of CNL risks. Through ongoing communication between AECL and CNL, plans and activities are monitored to mitigate risks as necessary. This section highlights some risks and opportunities that could ultimately impact financial results.

Re-procurement of the GoCo contract: AECL has launched a competitive procurement process to continue the management and operation of CNL beyond the current contract, which expires in September 2025. Risks being managed include delays to the process that would impact the timing of contract award, risks of a legal challenge to the procurement process, as well as negative impacts on current CNL operations (i.e. delays to existing projects, distracted workforce, etc.) should a new contractor be selected. To mitigate these, a dedicated team made up of some of AECL's most senior and experienced staff has been put in place to manage the procurement and associated contracting responsibilities, and to oversee all transition activities. The team is supported by external legal counsel and expert advisors.

Contractor Performance: As AECL relies on a private-sector contractor to execute scope related to its mandate, an inherent internal risk is the inability of the contractor to consistently execute and perform based on agreed-upon plans. To mitigate this risk and drive the appropriate behavior, the contract with CNL is carefully structured to include several mechanisms for AECL to track CNL's performance. Key amongst these is a performance measurement plan, which is used by AECL to set priorities supported by achievable stretch targets in order to drive value for money for Canada. Ongoing evaluation of the contractor against the plan throughout the year provides AECL the opportunity to highlight strengths and weaknesses and the contractor the opportunity to correct course where needed.

Science and technology potential: As a major opportunity, AECL sees enormous potential in the nuclear science and technology portfolio. From supporting our existing reactor fleet, to enabling the next generation reactor fleet, to advanced reactor designs, to life saving medical science, to driving various federal scientific priorities, to potential around making Canada a world leader in fusion technology, Canada's national nuclear laboratory is at the forefront of a range of vital projects. This is an exciting opportunity across a wide front, demanding creative partnerships with many players, and an overall embrace of an innovative mindset.

Costs to Operate Chalk River Laboratories: The shutdown of the National Research Universal reactor in 2018 has created cost and funding pressures. This is due to the combination of lost revenue from the activities of the reactor (including isotope sales), and diminished funding for the National Research Universal reactor and site operation costs that have not decreased to the same extent as declining funding and revenue. Key mitigation measures include working with CNL to look at all options for lowering costs and increasing revenues. This is actively being pursued and implemented to enable a sustainable and science-focused organization in the long-term, while protecting workers, the public, and the environment.

Human resources: AECL is a small organization that relies on a small complement of national and international experts, some of whom bring experience in the management of similar Government-owned, Contractor-operated arrangements, both from a government and contractor perspective. AECL's goal is to maintain the necessary expertise and capabilities to oversee the Government-owned, Contractor-operated contract and bring value for Canada.

Given AECL's small size, an ongoing challenge is to adapt to fluctuating resourcing requirements across different areas of the organization and backfill those on short-term leave where appropriate. To mitigate this risk, workforce and succession plans have been developed, and AECL regularly reviews its total compensation package to remain competitive amongst similar employers nationally and internationally. AECL strives to be adaptable and flexible, deploying a handful of third-party service contracts to bolster resourcing when and where required and cross-training employees when opportunities arise.

Environmental Assessments: As part of AECL's environmental stewardship responsibilities, three projects are or were undergoing Environmental Assessments through the Canadian Nuclear Safety Commission:

- Construction of a near surface disposal facility at the Chalk River Laboratories.
- *In situ* decommissioning of the WR-1 research reactor at the Whiteshell site.
- *In situ* decommissioning of the Nuclear Power Demonstration facility in Rolphton, Ontario.

All three projects have faced significant delays, which are due to enhanced public and Indigenous engagement requirements, requests from the Canadian Nuclear Safety Commission (CNSC) to provide additional technical studies, and the COVID-19 pandemic which slowed work at its peak. As a result, additional time has been needed to prepare the safety case for each project, which includes: making adjustments based on feedback and comments received from the regulator, other government organizations, the public, and Indigenous Nations and communities; continuing engagement with key stakeholder and Indigenous Nations and communities; and, focusing communications activities with a view to increasing understanding of the rationale behind the projects – protection of the environment – as well as AECL's role specifically. Overall, while these delays have impacted CNL's ability to commence large-scale cleanup and remediation activities at AECL sites, they have allowed for more public and Indigenous engagement, and the development of additional studies in support of the projects' safety cases (which are also facilitating public and Indigenous engagement).

Progress has been made on the Near Surface Disposal Facility project as the CNSC issued its decision, in January 2024, to amend the CNL operating license at Chalk River Laboratories to permit the construction of the proposed near surface disposal facility. This decision comes after a lengthy regulatory process, including a July 2022 CNSC decision to extend the Indigenous consultation period requiring the CNSC staff, CNL and AECL to submit additional evidence and information on the subject of engagement and consultation. A public hearing to deliver final arguments was held in August 2023. CNL is now working to understand and fulfill CNSC conditions associated with the project, as well as collaborating with Indigenous Nations. Pending successful resolution in court, the construction is planned to start in the Fall of 2026. CNL has completed almost all of the pre-construction work.

The in situ decommissioning of the WR-1 research reactor and the Nuclear Power Demonstration reactor is progressing with collaboration and engagement between CNL and Indigenous Nations and communities, with both projects adjusting their approach and documentation to reflect the lessons learned from the regulatory process of the Near Surface Disposal Facility.

Financial Review

	March 31	
($ millions)	**2025**	2024
	$	$
Revenues		
Parliamentary appropriations	**1,434**	1,345
Commercial revenue	**146**	112
Investment income	**25**	28
	1,605	1,485
Expenses		
Cost of sales	**98**	80
Operating expenses	**90**	90
Contractual expenses	**277**	237
Decommissioning, waste management and contaminated sites expenses	**1,602**	734
	2,067	1,141
(Deficit) surplus for the year	**(462)**	344

Parliamentary Appropriations

The Government of Canada provides funding for AECL to advance its priorities and deliver on its mandate. AECL recognized $1,434 million of Parliamentary appropriations in fiscal year 2024-25, an increase of $89 million compared to the prior year. The increase is largely a result of increased activities in decommissioning, waste management and remediation of contaminated sites.

Commercial Revenue

In 2024-25, revenue was $146 million, a $34 million increase from the prior year. Revenue included technology sales and research and development activities performed by CNL for commercial customers as well as heavy water sales. The increase is a result of increased heavy water sales compared to the prior year as well as new revenue associated with targeted alpha therapy.

Investment Income

Investment income is earned on cash and investments. Income earned decreased compared to the prior year primarily due to lower market interest rates.

Cost of Sales

Cost of sales increased due to higher commercial revenue, and decreased as a percentage of revenue due to increased higher margin heavy water sales compared to last year.

Operating Expenses

Operating expenses are largely comprised of AECL's oversight expenses and amortization of tangible capital assets. There were operating expenses of $90 million in 2024-25 compared to $90 million in 2023-24. Operating expenses also include expenses associated with the ongoing Government-owned, Contractor-operated procurement. This unique project represents a significant, time-bound increase in AECL operations as AECL has stood up a dedicated project team for renewal of the Government-owned, Contractor-operated contract. This team involves both senior AECL staff, key advisors, and legal support.

Contractual Expenses

AECL delivers its mandate through a contract with CNL for the operation of its sites. A portion of CNL expenditures is reported by AECL as Contractual expenses. Expenses in this category for 2024-25 total $277 million, higher than the $237 million recorded in 2023-24 due to increased spending on science and technology activities.

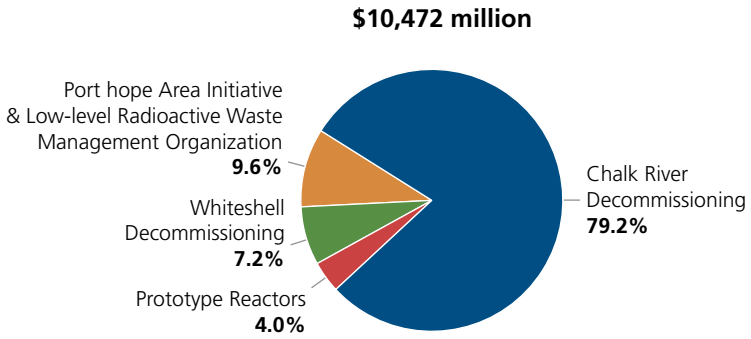
Decommissioning, Waste Management and Contaminated Sites Expenses

Decommissioning, waste management and contaminated sites expenses consist of financial expenses, the impact on the liability of a change in discount rate, and the revaluation (gain) loss on these reported liabilities. Financial expenses reflect the increase in the net present value (accretion of discount) of these reported liabilities. Changes in discount rate will impact the net present value of the reported liabilities. If the discount rate increases during the year, the result would be a decrease in the Decommissioning, waste management and contaminated sites expenses. If the discount rate decreases, the result would be an increase to the reported expenses. Refer to Notes 10 and 11 for a sensitivity of a 1% change in the discount rate.

The $868 million increase in 2024-25 is partly a result of a change in the discount rate this year compared to last year. Last year the rate increased, resulting in a decrease in the liability. This year, it decreased slightly, resulting in a larger impact in the prior year. The rest of the increase is due to changes in project estimates for the year.

The decommissioning and contaminated sites liability is made up of a collection of estimates which provide a projected value of the cost of undertaking decommissioning, remediation and waste management projects, some far into the future. As projects near, they are examined in more detail to plan for execution, which can lead to increases in estimates. This is due to the fact that these projects are related to legacy sites, which brings a high level of uncertainty around sites, waste and contamination levels. As work is planned for and undertaken, risks may materialize which leads to increased costs. This is typical of legacy nuclear research sites, and consistent with what is experienced in other similar sites in other countries such as the United States and United Kingdom.

Decommissioning and Contaminated Sites Liability 2024-25



Surplus (Deficit) for the Year

Consistent with AECL's financial reporting framework, appropriations are recognized as revenue when received in a given year and may be greater or less than the reported expenses for the same year. For instance, amounts received to fund decommissioning, waste management and contaminated sites expenditures are recorded as Parliamentary appropriations revenue in the current year while the related expenditures are drawn down from the associated liabilities previously recorded on the Statement of Financial Position.

With respect to tangible capital assets, Parliamentary appropriations revenue includes amounts received in the year to fund the purchase and construction of these assets while the related expenditures are capitalized; therefore, the reported operating expenses include only the amortization of existing tangible capital assets. The excess of appropriations over the related expenses reported has been decreased by the effect of provision adjustments on decommissioning, waste management and contaminated sites liability.

Outlook

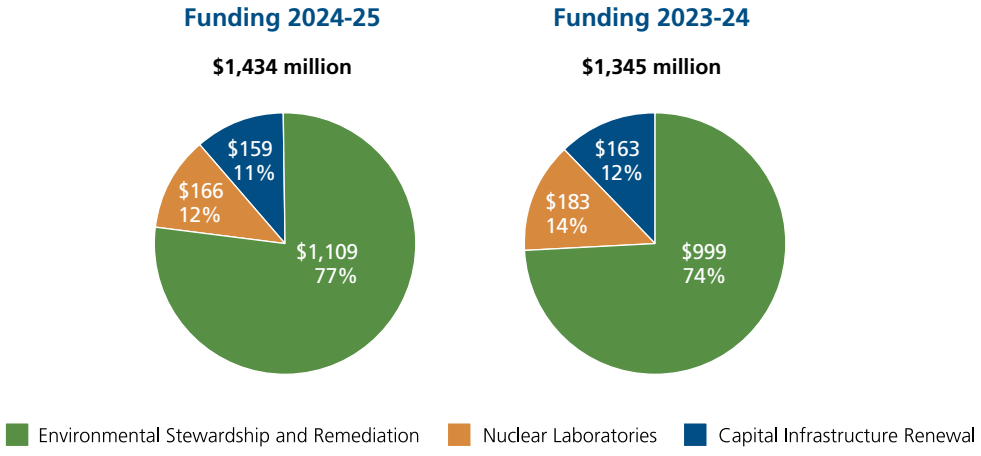
AECL will continue to deliver on its commitments based on its 2025-26 Corporate Plan. As part of the implementation of the Government-owned, Contractor-operated model, AECL has asked CNL to accelerate activities to address AECL's environmental responsibilities. This includes, for example, proposing solutions for AECL's low-level radioactive waste (for which CNL is proposing to build a near surface disposal facility at the Chalk River Laboratories), as well as the acceleration of the decommissioning and closure of the Whiteshell Laboratories and Nuclear Power Demonstration reactor (located in Manitoba and Ontario, respectively). There is also a focus on renewing the site infrastructure at the Chalk River Laboratories, including new and renewed science facilities and conventional (or non-nuclear) support buildings, that will allow CNL to grow its nuclear science and technology mission and serve the needs of the federal government as well as industry.

Funding

Total funding recognized in 2024-25 for operating and capital activities was $1,434 million (2023-24: $1,345 million).

The 2024-25 funding included:

- $166 million (2023-24: $183 million) to support nuclear science and technology activities as well as ongoing safe operations at the Chalk River Laboratories.
- $1,109 million (2023-24: $999 million) for environmental remediation, decommissioning and waste management activities at the Chalk River and Whiteshell sites and environmental remediation programs primarily as part of the Port Hope Area Initiative.
- $159 million (2023-24: $163 million) for capital infrastructure renewal at the Chalk River Laboratories.



Results Compared to 2024-25 Corporate Plan

($ millions)	**2025 Actual**	2025 Corporate Plan
	$	$
Parliamentary appropriations	**1,434**	1,592
Commercial revenue	**146**	129
Operating expenses	**91**	73
Contractual expenses	**277**	258
Decommissioning, waste management and contaminated sites expenses	**1,602**	280
(Deficit) surplus	**(462)**	1,023

AECL reported a deficit of $462 million compared to a planned surplus of $1,023 million. This variance is mostly related to provision adjustments for the decommissioning and waste management provision and contaminated sites liability, as a result of project estimates and changes in discount rates during the year which were not budgeted for in the Corporate Plan due to uncertainty in estimating these figures. This also explains the variance in Decommissioning, waste management and contaminated sites expenses compared to plan. The variance in Parliamentary appropriations is due to lower than planned spending on Decommissioning, waste management and contaminated sites activities.

Cash Flow and Working Capital

	March 31	
($ millions)	**2025**	2024
	$	$
Cash provided by operating transactions	**56**	388
Cash applied to capital transactions	**(183)**	(175)
Cash applied to investing transactions	**(9)**	(133)
(Decrease) increase in cash	**(136)**	80
Balance at beginning of the year	**226**	146
Balance at end of the year	**90**	226

Operating Transactions

Operating transactions resulted in a net cash inflow of $56 million compared to a net inflow of $388 million in 2023-24. This variance is mainly due to receiving the final appropriations for the fourth quarter before the end of year in the prior year. In the current year this is a receivable at year-end.

Capital Transactions

The $183 million cash used in capital transactions in 2024-25 was higher than the $175 million in the prior year. The increase is primarily due to increased spending in the current year toward new Chalk River site infrastructure and new build projects.

Investing Transactions

The $9 million cash used in investing transactions in 2024-25 was lower than the $133 million in the prior year. The decrease is primarily from investing excess cash at the end of the prior year.

Overall, AECL's March 31, 2025 closing cash position decreased by $136 million to $90 million from the previous year's balance of $226 million.

Highlights of the Statement of Financial Position

	March 31, 2025	March 31, 2024	Variance in $	Variance by %
($ millions)				
	$	$	$	%
Financial Assets	**711**	653	58	9
Financial Liabilities	**10,798**	10,168	630	6
Non-Financial Assets	**1,216**	1,097	119	11
Net Liabilities	**(8,870)**	(8,418)	(452)	5

The increase in Financial Assets of $58 million is largely a result of the increased investments balance at the end of the year as well as higher appropriations receivable compared to the prior year, partly offset by a decrease in the ending cash balance.

The increase in Financial Liabilities of $630 million can be attributed primarily to the increase in the decommissioning and waste management provision.

The increase in Non-Financial Assets of $119 million is mainly a result of spending toward tangible capital assets during the year.

Use of Parliamentary Appropriations

AECL receives its funding primarily through Parliamentary appropriations. The appropriations are drawn down based on quarterly cash flow projections and may not necessarily match the timing of expenses reported in the Statement of Operations. Refer to Note 15 of the financial statements for a reporting on how appropriations received were used during the period.

Five-Year Financial Summary

Unaudited

	2025	2024	2023	2022	2021
($ millions)					
	$	$	$	$	$
Parliamentary appropriations					
Operating	**1,275**	1,174	936	893	817
Capital	**159**	171	147	116	119
Statutory	**–**	–	–	–	5
	1,434	1,345	1,083	1,009	941
Operations					
Commercial revenue	**146**	112	137	137	95
Investment income	**25**	28	16	3	4
Other proceeds	**–**	–	7	20	–
Decommissioning, waste management and contaminated sites expenses	**(1,602)**	(734)	27	(1,317)	(678)
Operating, contractual and other expenses	**(465)**	(407)	(409)	(428)	(355)
Surplus (deficit)	**(462)**	344	861	(576)	7
Financial position					
Cash	**90**	226	146	262	145
Investments	**360**	339	199	175	120
Appropriations receivable	**192**	–	161	–	123
Inventories held for resale	**22**	41	61	94	129
Tangible capital assets	**1,216**	1,097	974	857	787
Due to Canadian Nuclear Laboratories	**285**	289	248	190	176
Decommissioning and waste management provision and Contaminated sites liability	**10,472**	9,844	10,057	10,836	8,152
Other					
Number of employees	**56**	59	49	46	45

Financial Statements

Management's Responsibility

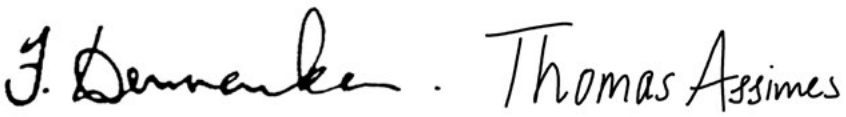
The financial statements, all other information presented in this Annual Report and the financial reporting process are the responsibility of management. These statements have been prepared in accordance with Public Sector Accounting Standards and include estimates based on the assumptions, experience and judgment of management. Financial information presented elsewhere in this Annual Report is consistent with the financial statements.

AECL maintains books of account, financial and management control, and information systems, together with management practices designed to provide reasonable assurance that reliable and accurate financial information is available on a timely basis, that assets are safeguarded and controlled, that resources are managed economically and efficiently in the attainment of corporate objectives, and that operations are carried out effectively.

These systems and practices are also designed to provide reasonable assurance that transactions are in accordance with Part X of the *Financial Administration Act* (FAA) and its regulations, the *Canada Business Corporations Act*, and the articles, by-laws and policies of AECL. AECL has met all reporting requirements established by the FAA including submission of a Corporate Plan, an operating budget, a capital budget and this Annual Report. AECL's internal auditor has the responsibility of assessing the management systems and practices of AECL. AECL's independent auditor, the Auditor General of Canada, conducts an audit of the financial statements of AECL and reports on its audit to the Minister of Energy and Natural Resources.

The Board of Directors is responsible for ensuring that management fulfills its responsibility. To accomplish this, the Board has two standing committees: the Audit Committee and Human Resources and Governance Committee. The Audit Committee, composed of independent directors, has a mandate for overseeing the independent audit, directing the internal audit function and assessing the adequacy of AECL's business systems, practices and financial reporting. The Audit Committee meets with management, the internal auditor and independent auditor on a regular basis to discuss significant issues and findings, in accordance with their mandate.

The independent auditor and internal auditor have unrestricted access to the Audit Committee, including without management's presence. The Audit Committee reviews the financial statements and the Management Discussion and Analysis report with both management and the independent auditor before they are approved by the Board of Directors and submitted to the Minister of Energy and Natural Resources. The Board of Directors, on the recommendation of the Audit Committee, approves the financial statements.



Fred Dermarkar
President and Chief Executive Officer

June 10, 2025

Thomas Assimes
Chief Financial Officer

June 10, 2025

Office of the Auditor General of Canada

Bureau du vérificateur général du Canada

Independent Auditor's Report

To the Minister of Energy and Natural Resources

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Atomic Energy of Canada Limited (AECL), which comprise the statement of financial position and statement of net financial liabilities and change in net financial liabilities as at 31 March 2025, and the statement of operations, statement of changes in net liabilities and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position and net financial liabilities of AECL as at 31 March 2025, and the results of its operations, changes in its net liabilities, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of AECL in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing AECL's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate AECL or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing AECL's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of AECL's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on AECL's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause AECL to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Compliance with Specified Authorities

Opinion

In conjunction with the audit of the financial statements, we have audited transactions of Atomic Energy of Canada Limited coming to our notice for compliance with specified authorities. The specified authorities against which compliance was audited are Part X of the *Financial Administration Act* and regulations, the *Canada Business Corporations Act,* the articles and by-laws of Atomic Energy of Canada Limited, and the directive issued pursuant to section 89 of the *Financial Administration Act*.

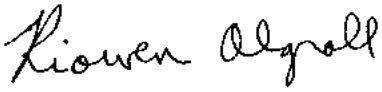
In our opinion, the transactions of Atomic Energy of Canada Limited that came to our notice during the audit of the financial statements have complied, in all material respects, with the specified authorities referred to above. Further, as required by the *Financial Administration Act*, we report that, in our opinion, the accounting principles in Canadian public sector accounting standards have been applied, after giving retroactive effect to the change in financial statement presentation as explained in Note 3 to the financial statements, on a basis consistent with that of the preceding year.

Responsibilities of Management for Compliance with Specified Authorities

Management is responsible for Atomic Energy of Canada Limited's compliance with the specified authorities named above, and for such internal control as management determines is necessary to enable Atomic Energy of Canada Limited to comply with the specified authorities.

Auditor's Responsibilities for the Audit of Compliance with Specified Authorities

Our audit responsibilities include planning and performing procedures to provide an audit opinion and reporting on whether the transactions coming to our notice during the audit of the financial statements are in compliance with the specified authorities referred to above.



Riowen Yves Abgrall, CPA, CA
Principal
for the Auditor General of Canada

Ottawa, Canada
10 June 2025

Statement of Financial Position

As at March 31

	Notes	2025	Restated (Note 3) 2024
(thousands of Canadian dollars)			
		$	$
Assets			
Financial assets			
Cash		**89,985**	225,870
Investments	4	**360,133**	338,522
Trade and other receivables	5	**46,474**	47,492
Appropriations receivable	15	**192,300**	–
Inventories held for resale	6	**22,374**	40,647
		711,266	652,531
Non-financial assets			
Tangible capital assets	7	**1,216,409**	1,097,004
		1,216,409	1,097,004
Total assets		**1,927,675**	1,749,535
Liabilities			
Financial liabilities			
Accounts payable and accrued liabilities	8	**30,001**	22,846
Employee future benefits	9	**10,619**	11,729
Due to Canadian Nuclear Laboratories	17	**284,836**	288,854
Decommissioning and waste management provision	10	**9,471,288**	8,672,132
Contaminated sites liability	11	**1,000,856**	1,172,128
Total liabilities		**10,797,600**	10,167,689
Net liabilities		**(8,869,925)**	(8,418,154)
Net assets (net liabilities) components:			
Accumulated deficit		**(8,894,263)**	(8,431,891)
Accumulated remeasurement gains (losses)		**9,338**	(1,263)
Issued share capital	12	**15,000**	15,000
		(8,869,925)	(8,418,154)
Commitments	13		
Contingent liabilities	14		

The accompanying notes are an integral part of these financial statements

Approved on behalf of the Board

Martha Tory, *Director*

Fred Dermarkar, *President and Chief Executive Officer*

Statement of Net Financial Liabilities and Change in Net Financial Liabilities

For the year ended March 31

	2025	(Note 3) 2024
(thousands of Canadian dollars)		
	$	$
Financial assets	**711,266**	652,531
Financial liabilities	**10,797,600**	10,167,689
Net financial liabilities	**(10,086,334)**	(9,515,158)

Change in Net Financial Liabilities

For the year ended March 31

	Notes	2025 Budget	2025	(Note 3) 2024
(thousands of Canadian dollars)				
		$	**$**	$
(Deficit) surplus for the year		1,022,948	**(462,372)**	344,338
Tangible capital assets				
Acquisition of tangible capital assets	7	(159,000)	**(172,140)**	(175,189)
Amortization of tangible capital assets	7	44,602	**52,074**	49,859
Write-down of tangible capital assets	7	–	**704**	434
Miscellaneous adjustments	7	–	**(43)**	1,429
		(114,398)	**(119,405)**	(123,467)
Non-financial assets				
Changes in prepaid expenses		–	**–**	1,045
Net remeasurement gains for the year		–	**10,601**	1,433
(Increase) decrease in net financial liabilities		908,550	**(571,176)**	223,349
Net financial liabilities, beginning of year		(9,515,158)	**(9,515,158)**	(9,738,507)
Net financial liabilities, end of year		(8,606,608)	**(10,086,334)**	(9,515,158)

The accompanying notes are an integral part of these financial statements

Statement of Operations

For the year ended March 31

	Notes	2025 Budget	**2025**	(Note 3) 2024
(thousands of Canadian dollars)				
		$	**$**	$
Revenues				
Parliamentary appropriations	15	1,591,822	**1,433,600**	1,344,720
Commercial revenue	16	128,850	**146,247**	111,757
Investment income		4,000	**25,192**	28,897
		1,724,672	**1,605,039**	1,485,374
Expenses				
Cost of sales		90,195	**97,747**	80,168
Operating expenses		73,147	**90,694**	89,676
Contractual expenses	17	258,479	**277,116**	237,404
Decommissioning, waste management and contaminated sites expenses		279,903	**1,601,854**	733,788
	18	701,724	**2,067,411**	1,141,036
(Deficit) surplus for the year		1,022,948	**(462,372)**	344,338

The accompanying notes are an integral part of these financial statements

Statement of Changes in Net Liabilities

As at March 31

	2025	(Note 3) 2024
(thousands of Canadian dollars)		
	$	$
Accumulated deficit		
(Deficit) surplus for the year	**(462,372)**	344,338
Accumulated deficit, beginning of year	**(8,431,891)**	(8,776,229)
Accumulated deficit, end of year	**(8,894,263)**	(8,431,891)
Accumulated remeasurement losses		
Remeasurement losses arising during the year		
Realized gains on equity instruments quoted in an active market	**3,553**	421
Realized gains (losses) on investments in other securities	**5,761**	(156)
Reclassifications to the Statement of Operations		
Realized gains on equity instruments quoted in an active market	**(1)**	–
Realized losses on investments in other securities	**1,288**	1,168
Net remeasurement gains for the year	**10,601**	1,433
Accumulated remeasurement losses, beginning of year	**(1,263)**	(2,696)
Accumulated remeasurement gains (losses), end of year	**9,338**	(1,263)
Issued share capital		
Issued share capital, beginning and end of year	**15,000**	15,000
Total net liabilities	**(8,869,925)**	(8,418,154)

The accompanying notes are an integral part of these financial statements

Statement of Cash Flows

For the year ended March 31

	2025	2024
(thousands of Canadian dollars)		
	$	$
Operating transactions		
Cash receipts from Parliamentary appropriations	**1,241,300**	1,505,220
Cash receipts from customers and other sources	**148,024**	106,292
Cash paid to suppliers	**(364,509)**	(285,462)
Cash paid to employees	**(15,879)**	(14,342)
Cash paid for decommissioning, waste management and contaminated sites activities	**(973,970)**	(946,864)
Cash paid for acquisition of Investments held in trust	**(370)**	(404)
Cash paid for acquisition of investments in the Long-term disposal of waste fund	**(18,829)**	(34,840)
Cash receipts from redemption of investments in the Long-term disposal of waste fund	**18,022**	32,698
Investment income received	**21,858**	25,763
Cash provided by operating transactions	**55,647**	388,061
Capital transactions		
Acquisition of tangible capital assets	**(182,617)**	(174,727)
Cash applied to capital transactions	**(182,617)**	(174,727)
Investing transactions		
Cash paid for acquisition of Other investments	**(483,650)**	(470,640)
Cash receipts from redemption of Other investments	**474,735**	337,194
Cash applied to investing transactions	**(8,915)**	(133,446)
(Decrease) increase in cash	**(135,885)**	79,888
Cash, beginning of year	**225,870**	145,982
Cash, end of year	**89,985**	225,870

The accompanying notes are an integral part of these financial statements

Notes to the Financial Statements

For the year ended March 31, 2025

1. General Information

Atomic Energy of Canada Limited (AECL) is a federal Crown corporation whose mandate is to enable nuclear science and technology and manage the Government of Canada's radioactive waste and decommissioning activities. Since 2015, AECL has been delivering its mandate through a Government-owned, Contractor-operated model, whereby Canadian Nuclear Laboratories (CNL), a private-sector organization, operates and manages AECL's sites pursuant to a contractual arrangement.

AECL was incorporated in 1952 under the provisions of the *Canada Corporations Act* (and continued in 1977 under the provisions of the *Canada Business Corporations Act*), pursuant to the authority and powers of the Minister of Energy and Natural Resources under the *Nuclear Energy Act*.

In July 2015, AECL was issued a directive (P.C. 2015-1111) pursuant to section 89 of the *Financial Administration Act* to align its travel, hospitality, conference and event expenditure policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with its legal obligations, and to report on the implementation of this directive in AECL's next Corporate Plan. As at March 31, 2025, AECL remains compliant with the requirements of the directive.

AECL is a Schedule III Part I Crown corporation under the *Financial Administration Act* and an agent of His Majesty in Right of Canada. As a result, AECL's liabilities are ultimately liabilities of His Majesty in Right of Canada. AECL receives funding from the Government of Canada and is exempt from income taxes in Canada.

AECL's 2025-2026 to 2029-2030 Corporate Plan received Governor in Council approval in the third quarter of the 2024-25 fiscal year. The Corporate Plan is aligned with the direction provided by AECL's sole shareholder, the Government of Canada, and reflects AECL's plans and priorities to be delivered under the Government-owned, Contractor-operated model.

2. Significant Accounting Policies

a) Basis of Accounting

These financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards (PSAS) established by the Public Sector Accounting Board (PSAB), and reflect the policies below.

Both financial and non-financial assets are reported on the Statement of Financial Position. A financial asset is an asset that could be used to discharge existing financial liabilities or be spent on future operations and is not for consumption in the normal course of operations. Non-financial assets are assets that do not meet the definition of a financial asset, and are normally employed to provide future services and are charged to expense through amortization or upon utilization. Non-financial assets are not taken into consideration when determining the net financial liabilities (or net financial assets) but rather are added to the net financial liabilities (or net financial assets) to determine the accumulated surplus (deficit).

Measurement Uncertainty

The preparation of the financial statements in accordance with PSAS requires management to make estimates and assumptions that affect the reported amounts of financial assets, financial liabilities and non-financial assets at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Items requiring the use of significant estimates and assumptions include those related to the useful life and write-down of tangible capital assets, employee future benefits, contingent liabilities and provisions including the decommissioning and waste management provision and contaminated sites liability. Estimates and assumptions are based on the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Where actual results differ from these estimates and assumptions, the impact will be recorded in future periods when the difference becomes known.

Budget Figures

The 2024-25 budget is reflected in the Statement of Operations and the Statement of Net Financial Liabilities and Change in Net Financial Liabilities. Budget data for 2024-25 presented in these financial statements is based upon the 2024-25 projections and estimates contained within the 2024-25 to 2028-29 Corporate Plan. Since actual opening balances of the net financial liabilities were not available at the time of preparation of Budget 2025, the corresponding amounts in the budget column have been adjusted to the actual closing balances of the previous year.

b) Foreign Currency Translation

Transactions denominated in a foreign currency are translated into Canadian dollars at the exchange rate in effect at the date of the transaction. Monetary assets and liabilities, not denominated in the functional currency of AECL and outstanding at the Statement of Financial Position date, are adjusted to reflect the exchange rate in effect at that date. Realized exchange gains and losses arising from the translation of foreign currencies, including those arising prior to settlement or derecognition of all financial instruments, are included in the Statement of Operations.

c) Financial Instruments

Financial instruments are classified in one of the following categories: (i) fair value; or (ii) cost or amortized cost. AECL determines the classification of its financial instruments at initial recognition.

Investments include fixed income instruments, equity instruments and investments with short-term maturities of one year or less such as investment accounts with withdrawal notice, guaranteed investment certificates and Government of Canada treasury bills. Investments in equity instruments that are quoted in an active market are measured at fair value. Investments in fixed income instruments and equity instruments not quoted in an active market are managed on a fair value basis and the fair value option is elected. Transaction costs are recognized in the Statement of Operations in the period during which they are incurred. Investments at fair value are remeasured at their fair value at the end of each reporting period. Any remeasurement gains and losses are recognized in the accumulated remeasurement gains and losses component and reported in the Statement of Changes in Net Liabilities, and are cumulatively reclassified to the Statement of Operations upon disposal or settlement.

A write-down is recognized in the Statement of Operations for an investment where there has been a loss in the value of the investment considered as an "other than temporary" loss. Subsequent changes to the remeasurement of Investments are recognized in the accumulated remeasurement gains and losses component and reported in the Statement of Changes in Net Liabilities. If the loss in value of an investment subsequently reverses, the write-down to the Statement of Operations is not reversed until the investment is sold.

Other financial instruments, including Cash, investment accounts with withdrawal notice, guaranteed investment certificates, Trade and other receivables, Accounts payable and accrued liabilities, and Due to Canadian Nuclear Laboratories are initially recorded at their fair value and are subsequently measured at amortized cost, net of any provisions for impairment. Cash comprises cash on hand and demand deposits.

Interest income, dividends and realized gains and losses earned on Cash and Investments are recognized in the Statement of Operations.

d) Inventory

Heavy water and mechanical seals and raw materials are measured at the lower of cost and net realizable value. Cost includes amounts for improvements to prepare the assets for sale. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. Where cost exceeds net realizable value, a write-down is recorded.

e) Employee Future Benefits

AECL provides employee benefits such as pension benefits, voluntary termination compensation benefits and other benefits, including continuation of health and dental benefits during long-term disability, and self-insured workers' compensation.

Pension Benefits

Substantially all AECL employees are covered by the Public Service Pension Plan (PSPP), a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and AECL to cover current service cost.

Pursuant to legislation currently in place, AECL has no legal or constructive obligation to pay further contributions with respect to any past service or funding deficiencies of the PSPP. Consequently, contributions are recognized as an expense in the year when employees have rendered service and represent the total pension obligation of AECL.

Non-pension Post-Employment Benefit Plans

AECL's obligation with respect to its non-pension post-employment defined benefit plans is the amount of future benefit that employees have earned in return for their service in the current and prior periods. The voluntary termination compensation obligation is discounted to determine its present value. The calculation is performed annually by a qualified actuary using the projected benefit method prorated on service and management's best estimate of salary escalation, retirement ages of employees, mortality and expected employee turnover.

The discount rate is based on AECL's cost of borrowing as determined based on long-term Government of Canada bond yields. AECL amortizes any actuarial gains and losses arising from non-pension defined benefit plans into the Statement of Operations over the expected average remaining service life.

Other Long-Term Employee Benefits

AECL's obligation with respect to other long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. These benefits include self-insured workers' compensation benefits and health and dental care benefits during long-term disability.

That obligation is discounted to determine its present value. The discount rate is based on AECL's cost of borrowing as determined based on long-term Government of Canada bond yields. The calculation is performed using a combination of the Projected Unit Credit Method prorated on service and event-driven calculations for workers' compensation. Any actuarial gains and losses are amortized into the Statement of Operations over the expected average remaining service life.

AECL expenses amounts reimbursed to Employment and Social Development Canada for workers' compensation claims in accordance with the *Government Employees Compensation Act* for current payments billed by the provincial compensation boards.

f) Decommissioning and Waste Management Provision and Contaminated Site Liability

AECL has obligations to decommission nuclear facilities and to manage radioactive waste in order to protect the environment and satisfy regulatory requirements. AECL recognizes a provision for decommissioning and waste management when all of the following conditions are met: there is a legal obligation to incur retirement costs in relation to a tangible capital asset; the past transaction or event giving rise to the liability has occurred; it is expected that future economic benefits will be given up; and a reasonable estimate of the amount can be made.

AECL recognizes a provision for contaminated sites when all of the following conditions are met: an environmental standard exists; the level of contamination has been determined to exceed the environmental standard and AECL is directly responsible or accepts responsibility; it is expected that future economic benefits will be given up; and a reasonable estimate of the amount can be made at that time.

The provisions take into account current technological, environmental and regulatory requirements and are determined by discounting the expected future cash flows at a rate that reflects current market assessments of the time value of money and the risks specific to the provisions. The liabilities are discounted using a current rate methodology with the Bank of Canada zero-coupon bond yield curve, in line with the expected weighted average spending profile. The estimated future cash flows are adjusted for inflation using a rate that is derived on the basis of Consensus Economics forecasts and Bank of Canada historical and target inflation rates. The initial estimate of the liabilities includes costs directly attributable to asset retirement and remediation activities, including post-retirement operation, maintenance and monitoring.

As the provisions are recorded based on a discounted value of the projected future cash flows, they are increased quarterly to reflect the passage of time by removing one quarter's discount. The unwinding of the discount is charged to Decommissioning, waste management and contaminated sites expenses in the Statement of Operations. The provisions are reduced by actual expenditures incurred.

The cost estimates are subject to periodic review and any significant changes in the estimated amount or timing of the underlying future cash flows are recorded as an adjustment to the provisions. The provisions include future construction costs associated with certain enabling facilities, such as processing and disposal facilities for nuclear waste.

Decommissioning costs of new assets are added to the carrying amount and amortized over the related assets' useful lives. The effect of subsequent changes in estimating an obligation for which the provision was recognized as part of the cost of the asset is adjusted against the asset. For assets no longer in productive use, all subsequent changes in the estimate of the obligation are recognized as an expense in the period they are incurred.

g) Trade and Other Receivables, Accounts Payable and Accrued Liabilities

Certain contracts may have revenue recognized in excess of billings (unbilled revenues) and other contracts may have billings in excess of revenue recognized (customer advances and obligations). Unbilled revenues are recorded as an asset and included in Trade and other receivables. Billings collected in excess of revenue recognized on contracts and advances for which the related work has not started are recognized as a liability and included in Accounts payable and accrued liabilities.

h) Tangible Capital Assets

Tangible capital assets are recorded at cost less accumulated amortization. Cost includes amounts that are directly related to the acquisition, design, construction, development, improvement or betterment of the assets, overhead directly attributable to the construction and development, as well as the estimated costs of dismantling and removing the items and restoring the site on which they are located.

The cost of tangible capital assets in use is amortized on a straight-line basis over the estimated useful life, as follows:

Asset	Rate
Land Improvements	10-40 years
Buildings	20-40 years
Reactors, Machinery & Equipment	3-40 years

Construction in progress represents assets that are not yet available for use and therefore are not subject to amortization. When complete, the constructed asset is transferred to the appropriate category of tangible capital asset and amortized at the rate applicable to that category. Amortization commences when the asset is put into use and ceases when it no longer provides any further economic benefit to AECL or when it is no longer in service.

When conditions indicate that a tangible capital asset no longer contributes to AECL's ability to provide goods and services, or that the value of future economic benefits associated with the tangible capital asset is less than its net book value, the cost of the tangible capital asset is reduced to reflect the decline in the asset's value. The net write-down is then accounted for as an expense in the Statement of Operations.

Useful lives are assessed annually and revisions to the useful life are made as required.

AECL has unrecognized intangible intellectual property assets since internally generated intangible assets are not recognized in the financial statements.

i) Revenue Recognition

Revenue is derived from sales of services and products, and royalties. Revenue is recognized when a transaction or event has occurred, and when AECL is expected to obtain future economic benefits. Revenue from transactions with performance obligations is recognized when, or as, AECL satisfies a performance obligation by providing the promised goods or services to a payor. Revenues from transactions with performance obligations occur when there is an enforceable promise to transfer goods or services directly to a payor in return for promised consideration. AECL satisfies its performance obligation and recognizes revenue over a period of time when control of the benefits associated with the goods or services passes to the payor over a period of time. If a performance obligation is not satisfied over a period of time, AECL satisfies the performance obligation at a point in time. The performance obligation is satisfied when the payor obtains control of the benefits associated with the promised good or service. Where consideration is received from a payor prior to the provision of goods or services, these amounts are initially included in unearned revenue provided the definition of a liability is met. They are subsequently recognized as revenue as performance obligations are met.

The revenues disclosed are recurring in nature unless otherwise noted.

Services

Service contracts generally consist of a performance obligation that is satisfied over a period of time. These revenues are recognized over a period of time by measuring the progress toward completed satisfaction of the performance obligation.

Sales of goods

Sales of products generally consist of one performance obligation that is satisfied at a point in time. These revenues are recognized when or as the goods are delivered to the customer.

Royalties

Revenue from licensing of intellectual property includes a continuing performance obligation that is satisfied over time since AECL has a continuing obligation to provide access to the intellectual property over the term of the arrangement. In addition, the payor simultaneously receives and consumes the benefits provided by the intellectual property throughout the term of the licence agreement. These revenues are recognized on a straight-line basis over the term of the licence agreement.

j) Parliamentary Appropriations

AECL receives Parliamentary appropriations for operating expenditures and the purchase of tangible capital assets. These Parliamentary appropriations are free of any stipulations limiting their use and are recorded as funding from the Government of Canada in the Statement of Operations, up to the authorized amount, where eligibility criteria have been met.

k) Contingent Liabilities

Contingent liabilities are potential liabilities which may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the obligation can be made by AECL, an estimated liability is accrued and an expense recorded. If the likelihood is not determinable, or an amount cannot be reasonably estimated, the contingency is disclosed in the notes to the financial statements.

3. Adoption of the Conceptual Framework and Change in Accounting Policy

a) Adoption of PS 1202 Financial Statement Presentation

Effective April 1, 2024, AECL early adopted PS 1202 Financial statement presentation. This standard replaces the previous PS 1201 and introduces significant changes to the presentation of financial statements. Prior period amounts have been restated to conform to the presentation requirements for comparative financial information. The impact of the adoption of PS 1202 on the financial statements is as follows:

- Changes the Statement of Financial Position by:
  - Relocating the indicator "Net financial liabilities," formerly known as "Net debt," to its own statement. The calculation was also revised to be financial assets minus financial liabilities. For AECL, the resulting calculation was the same.
  - Introducing two categories of liabilities: Financial and Non-financial. A financial liability is a liability that is expected to be settled using existing or future financial assets. A non-financial liability is a liability that does not meet the definition of a financial liability. AECL has not currently identified any non-financial liabilities.
  - Updating the definition of Non-financial assets. A financial asset is an asset that could be used to discharge existing financial liabilities or be spent on future operations and is not for consumption in the normal course of operations. A non-financial asset is an asset that does not meet the definition of a financial asset.
  - Restructuring the statement to present Assets, followed by Liabilities, followed by Net liabilities, with subtotals.
  - What was previously reported as "Accumulated operating deficit" has been split into two components, "Accumulated deficit" and "Issued share capital." Issued share capital was previously included in Accumulated operating deficit.
- The addition of the Statement of Net Financial Liabilities and Change in Net Financial Liabilities that presents the revised "Net financial liabilities" calculation. This replaces the "Net Debt" calculation prepared using the superseded section PS 1201.
- AECL adopted the optional presentation of the Change in Net Financial Liabilities on the Statement of Net Financial Liabilities and Change in Net Financial Liabilities.
- The change in Accumulated operating deficit, which was previously presented on the Statement of Operations, is now presented on the Statement of Changes in Net Liabilities.
- The addition of the Statement of Changes in Net Liabilities that includes a reconciliation of each component of Net liabilities and incorporates what was previously included in the Statement of Remeasurement Gains and Losses.
- No significant impact on the Statement of Operations or the Statement of Cash Flows.
- Additional financial disclosures were added for issued share capital.

There was no impact on recognition or measurement of assets, liabilities, revenues or expenses as a result of this adoption.

b) Adoption of the Conceptual Framework

Concurrent with the adoption of PS 1202, AECL has also early adopted the revised Conceptual Framework for Financial Reporting. The Conceptual Framework provides the foundation for the development of accounting policies, the preparation of financial statements, and the application of professional judgment. Key elements of the Conceptual Framework include:

- Characteristics of public sector entities
- Financial reporting objectives and the role of financial statements
- Financial statement foundations, objectives and information
- Elements of financial statements
- Recognition, measurement and presentation concepts for financial statements

The Conceptual Framework does not override specific standards, but can assist in accounting for items not covered by standards and for developing future standards. The adoption of the Conceptual Framework has not resulted in any significant changes to the AECL's accounting policies or financial statement presentation. No changes were made to entity developed accounting policies as a result of the adoption, and no changes will be required in the future to conform entity developed accounting policies to the revised Conceptual Framework.

4. Investments

	March 31, 2025			
(thousands of Canadian dollars)	**Long-term Disposal of Waste Fund**	**Investments Held in Trust**	**Other Investments**	**Total**
	$	$	$	$
Short-term investments	**–**	**–**	**110,140**	**110,140**
Canadian government bonds*	**–**	**–**	**80,918**	**80,918**
Corporate bonds	**13,850**	**33,337**	**47,476**	**94,663**
Canadian equities**	**6,267**	**13,409**	**–**	**19,676**
Global equities**	**17,654**	**37,082**	**–**	**54,736**
	37,771	**83,828**	**238,534**	**360,133**

	March 31, 2024			
(thousands of Canadian dollars)	**Long-term Disposal of Waste Fund**	**Investments Held in Trust**	**Other Investments**	**Total**
	$	$	$	$
Short-term investments	18,000	6,014	127,702	151,716
Canadian government bonds*	–	57,084	53,233	110,317
Corporate bonds	6,456	13,973	45,219	65,648
Canadian equities**	2,760	–	–	2,760
Global equities**	8,081	–	–	8,081
	35,297	77,071	226,154	338,522

** Canadian government bonds include federal, provincial and municipal bonds.*
*** All Canadian and global equities are quoted in an active market.*

Short-term investments have maturities ranging from April 2025 to June 2025 and include accounts with withdrawal notice and Government of Canada treasury bills. Bonds have maturities ranging from April 2025 to December 2030, with yields ranging from 1.25% to 5.475%. Equities are invested in pooled funds holding a diversified portfolio.

a) Long-term Disposal of Waste Fund

AECL is required to invest cash in a fund to cover the costs related to the future disposal of radioactive waste arising from ongoing operations at its sites. This fund is intended to cover the future disposal costs associated with low- and intermediate-level radioactive waste generated starting in 2015. Investment income earned on fund assets accrues to the fund.

b) Investments Held in Trust

The *Nuclear Fuel Waste Act* requires Canadian nuclear utilities to form a waste management organization, the Nuclear Waste Management Organization (NWMO), to provide recommendations to the Government of Canada on the long-term management of nuclear fuel waste and to implement the approach selected. The legislation also requires that each nuclear fuel waste owner establish a trust fund to finance the implementation of the approach proposed by the NWMO. The liability for AECL's nuclear fuel waste is recorded in the Decommissioning and waste management provision (Note 10).

Each individual trust fund is held in order to meet the requirements of the *Nuclear Fuel Waste Act* and only the NWMO may withdraw monies from it in accordance with the provisions of the *Nuclear Fuel Waste Act*, Section II. As required by the Nuclear Fuel Waste Act, AECL's initial deposit to its Trust Fund was $10 million on November 25, 2002. Subsequent annual deposits have been made as required, and will continue until the full lifecycle costs of managing the nuclear fuel waste over the long-term are set aside.

AECL's trust fund has been incorporated in these financial statements. Investment income earned on trust assets accrues to the Trust Fund.

c) Other Investments

Other investments are held for operating activities and to fund historic liabilities and business priorities in science and technology and related capital expenditures.

5. Trade and Other Receivables

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Trade receivables	**20,497**	16,330
Unbilled revenue	**10,217**	16,845
Consumption taxes receivable	**15,760**	14,317
	46,474	47,492

AECL maintains allowances for specific potential credit losses, if required. Outstanding trade receivables are collected in accordance with the terms of the sales contracts.

AECL's exposure to credit risks related to Trade and other receivables, including unbilled revenue, is disclosed in Note 19.

6. Inventories Held for Resale

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Mechanical seals and raw materials	**2,566**	2,916
Heavy water inventory	**19,808**	37,731
	22,374	40,647

The cost of inventory for mechanical seals and raw materials recognized as an expense and included in Cost of sales was $0.3 million (2024 – $0.1 million).

The cost of inventory for heavy water recognized as an expense and included in Cost of sales was $17.9 million (2024 – $20.5 million).

7. Tangible Capital Assets

	Construction in progress	Land and land improvements	Buildings	Reactors, Machinery and Equipment	Total
(thousands of Canadian dollars)					
	$	$	$	$	$
Cost at March 31, 2024	**364,085**	**167,740**	**705,098**	**549,451**	**1,786,374**
Additions and transfers	172,140	9,731	16,363	30,672	228,906
Disposals and transfers	(56,795)	(42)	(3,388)	(26,964)	(87,189)
Write-downs	(704)	–	–	–	(704)
Other charges	–	–	886	–	886
Cost at March 31, 2025	**478,726**	**177,429**	**718,959**	**553,159**	**1,928,273**
Accumulated amortization at March 31, 2024	–	**68,772**	**278,777**	**341,821**	**689,370**
Increase in amortization	–	5,885	20,711	25,478	52,074
Disposals and transfers	–	(42)	(2,670)	(26,868)	(29,580)
Accumulated amortization at March 31, 2025	**–**	**74,615**	**296,818**	**340,431**	**711,864**
Net carrying amount at March 31, 2024	**364,085**	**98,968**	**426,321**	**207,630**	**1,097,004**
Net carrying amount at March 31, 2025	**478,726**	**102,814**	**422,141**	**212,728**	**1,216,409**

	Construction in progress	Land and land improvements	Buildings	Reactors, Machinery and Equipment	Total
(thousands of Canadian dollars)					
	$	$	$	$	$
Cost at March 31, 2023	343,180	154,471	607,248	521,110	1,626,009
Additions and transfers	175,189	13,269	102,619	40,520	331,597
Disposals and transfers	(153,850)	–	(2,965)	(12,179)	(168,994)
Write-downs	(434)	–	–	–	(434)
Other charges	–	–	(1,804)	–	(1,804)
Cost at March 31, 2024	364,085	167,740	705,098	549,451	1,786,374
Accumulated amortization at March 31, 2023	–	63,439	263,058	325,975	652,472
Increase in amortization	–	5,333	17,718	26,808	49,859
Disposals and transfers	–	–	(1,999)	(10,962)	(12,961)
Accumulated amortization at March 31, 2024	–	68,772	278,777	341,821	689,370
Net carrying amount at March 31, 2023	343,180	91,032	344,190	195,135	973,537
Net carrying amount at March 31, 2024	364,085	98,968	426,321	207,630	1,097,004

The amortization and write-downs of Tangible capital assets are recognized in Operating expenses in the Statement of Operations.

8. Accounts Payable and Accrued Liabilities

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Trade payables	**628**	4,159
Other payables and accrued expenses	**16,856**	10,800
Accrued payroll liabilities	**5,869**	2,694
Amounts due to related parties	**1,521**	825
Provisions	**165**	165
Customer advances and obligations	**4,962**	4,203
	30,001	22,846

Amounts due to related parties represent royalty revenues payable to the Government of Canada. Provisions are short-term in nature and are not discounted and include estimated costs related to lawsuits and legal claims and disputes with suppliers.

9. Employee Future Benefits

a) Pension Plan

As described in Note 2(e), AECL's employees participate in the PSPP.

The President of the Treasury Board of Canada sets the required employer contributions based on a multiple of the employees' required contribution. The contributions made by AECL to the PSPP are 5.09 times (2024 – 4.63 times) the employees' contribution on salaries in excess of $210,200 (2024 – $202,000). For salaries below $210,200 (2024 – $202,000), AECL's contribution rate is approximately 1.0 times the employees' contributions.

The Government of Canada holds a statutory obligation for the payment of benefits relating to the PSPP. Pension benefits generally accrue up to a maximum period of 35 years at an annual rate of two per cent of pensionable service, times the average of the best five consecutive years of earnings. The benefits are coordinated with Canada/Québec Pension Plan benefits, and they are indexed to inflation.

Total contributions made on account of current service are as follows:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Payments by employees	**1,073**	945
Payments by employer	**1,891**	2,058

b) Other Employee Future Benefits

AECL provides certain voluntary termination compensation (VTC) and other post-employment benefits as described in Note 2(e). The defined benefit obligation is not funded, as funding is provided when benefits are paid. Accordingly, there are no plan assets and the defined plan deficit is equal to the defined benefit obligation.

The VTC is payable in instances of future voluntary resignations and retirements. Consistent with Government of Canada expectations of federal agencies and Crown corporations, AECL began eliminating this benefit in fiscal year 2012-13.

The VTC included in the 2025 Employee future benefits liability is $4.2 million (2024 – $4.4 million). This balance includes the amounts for employees who have chosen to defer payment to the time of the termination of their employment.

The measurement date of the Employee future benefits liability is March 31, 2025, and the latest actuarial valuation of these benefits was performed at that date. The weighted average duration of the defined benefit obligation at the end of the reporting period is 6.7 years (2024 – 6.9 years). The amortization period for post-employment benefits is 6 years. The amortization period for other long-term benefits is 11 years.

The following summarizes the activity in the post-employment and other long-term benefit plans:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Accrued benefit obligation, beginning of year	**12,927**	13,736
Benefits earned	**3**	3
Interest on Accrued benefit obligation	**414**	389
Benefits paid	**(1,514)**	(1,505)
Actuarial loss	**591**	304
Accrued benefit obligation, end of year	**12,421**	12,927
Less: Unamortized actuarial gain	**1,802**	1,198
Employee future benefits liability	**10,619**	11,729

The following summarizes expenses arising from AECL's post-employment and other long-term benefit plans recognized in Operating expenses in the Statement of Operations:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Benefit and interest expense		
Benefits earned	**3**	3
Amortization of actuarial gain recognized	**(13)**	(38)
Total benefit income	**(10)**	(35)
Interest on Accrued benefit obligation	**414**	389
Total benefit and interest expense	**404**	354

The significant actuarial assumptions adopted in measuring AECL's Employee future benefits are summarized as follows:

	March 31	
	2025	2024
	%	%
Discount rate at year-end	**3.00**	3.45
Rate of increase in salaries	**3.00**	3.00
Health care cost trend	**4.00 - 4.50**	4.00 - 5.60

The mortality rates are those used by the Canadian Pensioners' Mortality for 2014. The disabled mortality rates are those used for the valuation of the benefit liabilities of the schedule 1 insurance fund of the Workplace Safety and Insurance Board of Ontario as of December 31, 2023.

The Employee future benefits liability and costs are subject to measurement uncertainty due to the use of actuarial assumptions. The impact of these factors on the remeasurement of the Employee future benefits liability can be significant and volatile at times. Detailed sensitivity analysis disclosures have not been provided as the impacts of the sensitivity analyses performed did not result in material changes to the recognized balances.

10. Decommissioning and Waste Management Provision

AECL has an obligation to decommission its nuclear facilities and other assets in order to address its liabilities, reduce risk, protect the environment and meet applicable regulatory requirements. These facilities include prototype reactors, nuclear research and development laboratories, waste management and other facilities. Due to the variety of facilities, the decommissioning process may differ in each case. In some situations, decommissioning activities are carried out in stages, with intervals of several decades between them, to allow radioactivity to decay before moving on to the next stage. These activities include surveillance and monitoring, decontamination, demolition and the management of the associated waste. A portion of the liabilities relate to obligations that existed prior to the creation of AECL in 1952.

The Decommissioning and waste management provision is as follows:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Carrying amount – Beginning of year	**8,672,132**	8,723,480
Liabilities settled	**(596,999)**	(595,264)
Unwinding of discount	**284,585**	267,465
Effect of change in discount rate	**33,622**	(383,756)
Revision in estimate and timing of expenditures	**1,075,075**	658,238
Estimates affecting Property, plant and equipment and future disposal costs for waste from ongoing operations	**2,873**	1,969
Carrying amount – End of year	**9,471,288**	8,672,132

The undiscounted future expenditures, adjusted for inflation, for the planned projects comprising the liability are $18,500.9 million (March 31, 2024 – $17,546.7 million). The provision is re-valued at the discount rate in effect at each Statement of Financial Position date. The provision is discounted using a 30-year rate from the Bank of Canada zero-coupon bond yield curve. Refer to Note 2(f) for detail on the current rate methodology.

Key assumptions used in determining the provision:

	March 31	
	2025	2024
Discount period	**160 years**	161 years
Discount rate	**3.27%**	3.29%
Short-term inflation rate	**2.21%**	2.21%
Long-term inflation rate	**2.00%**	2.00%

The provision is highly sensitive to the interest rate used to discount the future expenditures. The following table outlines the sensitivity of a 1% change in the discount rate used to estimate the provision:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
1% increase	**(1,276,760)**	(1,213,782)
1% decrease	**1,729,598**	1,657,585

The provision is also sensitive to the inflation rate used to calculate future expenditures. The following table outlines the sensitivity of a 1% change in the inflation rate used to estimate the provision:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
1% increase	**1,590,788**	1,518,407
1% decrease	**(1,218,927)**	(1,153,671)

11. Contaminated Sites Liability

AECL has responsibility for the implementation of the Government of Canada's commitments with respect to the Port Hope Area Initiative and other historic low-level waste liabilities. The nature of the Port Hope Area Initiative liability is the cleanup and safe long-term management of historic low-level radioactive waste in the Ontario municipalities of Port Hope and Clarington. This waste consists mainly of past process residues containing uranium and radium, and associated contaminated soils, the result of activities of a former federal Crown corporation and its private sector predecessors. One project to address this liability, the Port Granby Project, has now transitioned into long-term monitoring and maintenance which is expected to continue for 100 years. The other large project, the Port Hope Project, is forecasted to be complete in 2030-31, with long-term monitoring and maintenance expected to continue for 100 years after implementation.

AECL also has responsibility for the Low-Level Radioactive Waste Management Office which includes all activities to address and manage historic low-level waste at sites in Canada for which the Government has assumed responsibility (excluding the Port Hope Area Initiative). Historic low-level radioactive waste is material contaminated with radioactivity resulting from the processing and shipment of uranium and radium. This cleanup is forecast to be complete by 2031-32.

The Contaminated sites liability is as follows:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Carrying amount – Beginning of year	**1,172,128**	1,333,856
Liabilities settled	**(379,843)**	(353,570)
Unwinding of discount	**33,901**	40,907
Effect of change in discount rate	**28,171**	(21,214)
Revision in estimate and timing of expenditures	**146,499**	172,149
Carrying amount – End of year	**1,000,856**	1,172,128

The estimated total undiscounted expenditures are $1,099.0 million (March 31, 2024 – $1,331.6 million). The liability for the Port Hope Area Initiative and the Low-Level Radioactive Waste Management Office is discounted using present value techniques. The liability is discounted using a 4-year rate from the Bank of Canada zero-coupon yield curve. Refer to Note 2(f) for detail on the current rate methodology.

Key assumptions used in determining the provision:

	March 31	
	2025	2024
Discount period	**45 years**	46 years
Discount rate	**2.54%**	3.50%
Short-term inflation rate	**2.21%**	2.21%
Long-term inflation rate	**2.00%**	2.00%

The liability is sensitive to the interest rate used to discount the future expenditures. The following table outlines the sensitivity of a 1% change in the discount rate used to estimate the liability:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
1% increase	**(32,075)**	(36,915)
1% decrease	**35,398**	40,160

The liability is also sensitive to the inflation rate used to calculate future expenditures. The following table outlines the sensitivity of a 1% change in the inflation rate used to estimate the liability:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
1% increase	**35,418**	40,321
1% decrease	**(32,720)**	(37,752)

12. Issued Share Capital

The authorized share capital of AECL is comprised of 75,000 common shares with no par value. As at March 31, 2025 and March 31, 2024, 54,000 shares were issued for $15 million. As a Schedule III Part I Crown corporation under the *Financial Administration Act*, His Majesty in Right of Canada owns the shares of AECL. Any procurement or disposition of shares can only be undertaken after Parliamentary authorization.

13. Commitments

a) Operating Leases:

Non-cancellable office space operating lease rental is payable as follows:

	Leases
(thousands of Canadian dollars)	
	$
2025-2026	111
2026-2027	112
2027-2028	112
2028-2029	9
	344

During the year ended March 31, 2025, an amount of $0.3 million (2024 – $0.3 million) was recognized for leases as an Operating expense in the Statement of Operations.

b) Operating and Capital Commitments:

The nature of AECL's activities can result in multiyear contracts and obligations whereby AECL is committed to make future payments. As at March 31, 2025, AECL has contractual arrangements with third party suppliers, including contracts that allow for termination with penalties, approximating $701.4 million. Most of these commitments are held by CNL in accordance with the Government-owned, Contractor-operated model. Included in this amount are contracts related to the purchase of Tangible capital assets of approximately $96.9 million. The details of the Government-owned, Contractor-operated model are discussed in Note 17.

14. Contingent Liabilities

AECL is engaged in various legal proceedings and claims that have arisen in the ordinary course of business. Where the potential liability is likely and able to be estimated, management has recorded its best estimate of the potential liability in Accounts payable and accrued liabilities (Note 8).

15. Funding

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Parliamentary appropriations for operating, capital and statutory expenditures		
Amount received during the year for operating, capital and statutory expenditures	**1,241,300**	1,505,220
Amount receivable at the end of the year	**192,300**	–
Amount receivable from a previous year	**–**	(160,500)
Total Parliamentary appropriations recognized	**1,433,600**	1,344,720

During the year, the above funding was received to support AECL and CNL planned activities. This funding was used in the following manner:

- Support the activities of the nuclear laboratories, including ongoing science and technology activities at the Chalk River site, capital infrastructure renewal, as well as the ongoing operations of the site in order to meet regulatory, health, safety and environmental needs and requirements.
- Decommissioning and waste management activities primarily at the Chalk River and Whiteshell sites and environmental remediation programs primarily in Port Hope.

The amounts approved for operating and capital expenditures for the year ending March 31, 2025 totalled $1,591.3 million.

16. Commercial Revenue

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Services	**63,874**	54,193
Sales of goods	**77,097**	55,136
Royalties	**5,276**	2,428
	146,247	111,757

17. Contractual Arrangement

Since 2015, AECL has been delivering its mandate through a Government-owned, Contractor-operated model whereby CNL operates and manages AECL's sites. Under this model, the assets, sites and facilities continue to be owned by AECL, but are being managed and operated by a private-sector company. As such, AECL makes payments to CNL and its parent company, Canadian National Energy Alliance ("Contractual amounts paid or payable"), as per the terms of the contractual arrangement. This contract will expire in September of 2025.

The following contractual expenditures were incurred:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Contractual amounts paid or payable	**1,497,243**	1,415,588
Less: Costs charged to Decommissioning and waste management provision and Contaminated sites liability	**(973,756)**	(945,803)
Less: Costs charged to Construction in progress	**(172,140)**	(175,189)
Less: Costs classified as Cost of sales	**(74,231)**	(57,192)
Contractual expenses	**277,116**	237,404

Contractual amounts paid or payable include fees paid to Canadian National Energy Alliance, in accordance with the long-term contractual arrangement between AECL, Canadian National Energy Alliance and CNL. The balance due to CNL at March 31, 2025 represents funding owing for allowable costs incurred by CNL.

18. Additional Information by Type of Expense

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Payroll expenses	**17,956**	13,475
General and administrative expenses	**3,664**	3,202
Site and program operating costs	**39,230**	44,948
Amortization of tangible capital assets (Note 7)	**52,074**	49,859
Realized losses on Investments	**1,287**	1,168
Contractual amounts paid or payable less costs charged to Construction in progress (Notes 7 and 17) and less liabilities settled for Decommissioning and waste management provision and Contaminated sites liability (Notes 10, 11 and 17)	**351,347**	294,595
Finance expenses	**318,486**	308,372
Loss on revision in estimate and timing of expenditures on Decommissioning and waste management provision (Note 10)	**1,108,697**	274,482
Loss on revision in estimate and timing of expenditures on Contaminated sites liability (Note 11)	**174,670**	150,935
	2,067,411	1,141,036

19. Financial Instruments

AECL has exposure to the following risks from its use of financial instruments: credit risk, market risk, regulatory risk and liquidity risk.

Investment policies and regular monitoring of assets ensure there is no concentration of risk. The policies require a diversified portfolio, and asset allocations are reviewed quarterly.

The Board of Directors ensures that AECL has identified its major risks and ensures that management effectively monitors and mitigates them.

a) Credit Risk

Credit risk is the risk of financial loss to AECL if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Such risks arise principally from certain financial assets held by AECL consisting of Cash, Investments and Trade and other receivables. The maximum exposure to credit risk of AECL at March 31, 2025 is the carrying value of Cash, short-term investments, fixed income instruments and Trade and other receivables.

AECL manages its credit risk surrounding its Trade and other receivables of $46.5 million (2024 - $47.5 million) by dealing solely with reputable customers and evaluating customer creditworthiness before credit is extended. The risk is reduced by monitoring at the appropriate levels of management. The credit risk for Cash, short-term investments and fixed income instruments is minimized by ensuring cash instruments are held with well-established financial institutions, and through AECL's investment policy that limits investments to high credit quality securities. All the investments are managed by professional investment managers. All bond investments are rated at an A level or higher using Standard & Poors as at March 31, 2025.

Details of trade receivables are as follows:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Current	**15,005**	8,031
1 to 30 days past due	**1,060**	7,129
31 to 60 days past due	**1,845**	311
61 to 90 days past due	**1,675**	311
More than 90 days past due	**912**	548
	20,497	16,330

With respect to accounts receivable past due, based on credit history, there are no indications that customers will not be able to meet their obligations. No receivables are currently impaired.

b) Market Risk

Market risk is the risk that changes in market prices, such as those caused by changes in currency, interest rates and price, will affect AECL's income or the value of its holdings of financial instruments. The objective of market risk management is to control market risk exposures within acceptable parameters while optimizing the return on risk.

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. AECL's financial statements are presented in Canadian dollars, but a portion of its business is conducted in other currencies, with the exposure to foreign currency transactions primarily related to the U.S. dollar. AECL is also exposed to currency risk through its equity investments. The objective of AECL's foreign exchange risk management activities is to minimize transaction exposure and the resulting volatility of AECL's earnings and commitments. As of March 31, 2025 and March 31, 2024, had the exchange rate (CAN$/US$) been 5% higher or lower, the impact on the Statement of Operations for the year would have been insignificant. AECL's exposure to currency risk is not significant.

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the market interest rates. The objective of AECL's interest rate risk management activities is to minimize the volatility of AECL's earnings and expenses. AECL's exposure to interest rate risk is limited to changes in interest rates associated with its investments in bonds and discount rates associated with the Decommissioning and waste management provision and Contaminated sites liability (Notes 10 and 11).

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market. AECL is exposed to price risk through its investment in equity instruments. AECL manages price risk through asset allocation as outlined in its investment policy. The value of each investment is influenced by the performance of the security's issuer and general economic, political, tax and market conditions. The impact of this on the Statement of Operations would not be material.

c) Regulatory Risk

Regulatory risk is the risk that changes in government policy may have an adverse impact on AECL's financial position. AECL's sites are operated in a highly regulated environment. Changes in government policy may have an adverse impact on AECL's financial position. AECL's objective in managing regulatory risk is to actively monitor and implement changes on a timely basis to enable operations. In 2025, AECL's regulatory risk management objectives were unchanged from those in 2024.

d) Liquidity Risk

Liquidity risk is the risk that AECL will not be able to meet its financial obligations as they become due. AECL is economically dependent on Parliamentary appropriations that are received from the Government of Canada.

AECL manages liquidity risk by cross-functional participation in project and business reviews, frequent communication with its shareholder to manage ongoing cash requirements and secure appropriate funding, and maintaining a portfolio of highly liquid investments or instruments readily convertible into cash with high-quality counterparties. The liquidity available in AECL's investments ensure that AECL is able to meet its obligations and commitments.

Details of trade payables are as follows:

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Current	**248**	1,796
1 to 30 days past due	**380**	528
31 to 60 days past due	**–**	1,807
61 to 90 days past due	**–**	–
More than 90 days past due	**–**	28
	628	4,159

All other financial instrument liabilities, including Due to Canadian Nuclear Laboratories, are due within the year and are settled as part of the normal course of funding to Canadian Nuclear Laboratories throughout the year.

e) Fair Value of Financial Instruments

Accounting standard guidance establishes a framework for measuring fair value and provides disclosure about fair value measurements. That framework provides a fair value hierarchy that gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The carrying amounts of Cash, short-term investments, Trade and other receivables, and Accounts payable and accrued liabilities approximate fair value because of the short-term nature of these items.

The following table analyzes financial instruments measured at fair value by valuation method. AECL uses the following hierarchy to classify fair value measurements:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Changes in valuation methods may result in transfers into or out of levels 1, 2, and 3. For the reporting periods ended March 31, 2025 and March 31, 2024, there were no transfers between levels.

	March 31, 2025			
(thousands of Canadian dollars)	**Level 1**	**Level 2**	**Level 3**	**Total**
	$	**$**	**$**	**$**
Assets measured at fair value				
Short-term investments	**55,409**	**-**	**–**	**55,409**
Bonds	**42,211**	**133,370**	**–**	**175,581**
Equities	**–**	**74,411**	**–**	**74,411**
	97,620	**207,781**	**–**	**305,401**

	March 31, 2024			
(thousands of Canadian dollars)	**Level 1**	**Level 2**	**Level 3**	**Total**
	$	**$**	**$**	**$**
Assets measured at fair value				
Short-term investments	81,413	–	–	81,413
Bonds	101,819	74,146	–	175,965
Equities	–	10,841	–	10,841
	183,232	84,987	–	268,219

20. Related Party Transactions

AECL is related, in terms of common ownership, to all Government of Canada departments, agencies and Crown corporations. AECL enters into transactions with government entities in the normal course of business and on normal trade terms applicable to all individuals and enterprises. The transactions are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

In addition to the transactions disclosed in Notes 8, 9 and 15, AECL, in the normal course of business, also entered into various transactions with the Government, its agencies and other Crown corporations.

AECL also has transactions with its key management personnel. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of AECL, including AECL's directors and executive officers. The table below summarizes the amounts paid or payable to key management personnel on a comparative basis.

	March 31	
(thousands of Canadian dollars)	**2025**	2024
	$	$
Salaries and other short-term benefits	**4,804**	4,397
Post-employment benefits	**1,135**	1,134
	5,939	5,531

With the implementation of the Government-owned, Contractor-operated model in 2015, AECL transitioned from being a large Crown corporation to a small Crown corporation. As a result, AECL has, with the help of external compensation consultants, developed a compensation philosophy to align with its new role. The objective is to attract and retain the skills and expertise needed to fulfill its mandate and deliver value for money for Canada, including seeking international experts with experience in similar Government-owned, Contractor-operated models in the United Kingdom and the United States.

AECL's compensation philosophy is to align its total compensation with a comparator group, while recognizing that specific differentiation may be needed for hard-to-hire and/or specialized skills. It considers factors such as appropriate market comparators, the geographical location of AECL employees and the internationally limited availability of the specialized personnel needed to provide effective oversight of this complex model and the activities that are required to deliver on AECL's mandate. As part of its approach to compensation, AECL will periodically review its compensation philosophy, including the appropriateness of its comparator group and employee compensation relative to market median.

Corporate Governance

The corporate governance structure of AECL is similar to that of other corporations incorporated pursuant to the *Canada Business Corporations Act* with the following important exceptions:

i. AECL is an agent and a parent Crown corporation and is subject to the provisions of Part X of the *Financial Administration Act* of Canada;

ii. The sole shareholder of AECL is the Government of Canada as represented by the Minister of Energy and Natural Resources; and,

iii. AECL's Board of Directors, the Board Chair and the President and Chief Executive Officer are appointed by the Government of Canada by Order-in-Council.

AECL's President and CEO was appointed by the Governor-in-Council to serve a term of three years, starting in February 2021, and since then has been extended to 2027. The President and CEO leads AECL in achieving its mandate. All direct reports to the President and CEO are appointed by the Board of Directors through the Human Resources and Governance Committee on the recommendation of the President and CEO. Each of these direct reports is accountable for specific areas of business and operations.

Board of Directors / Officers

AECL is governed by a Board of Directors, which provides strategic direction and advice to the President and CEO.

The Board, through its Chair, receives direction from AECL's single shareholder, the Government of Canada, as represented by the Minister of Energy and Natural Resources. It is accountable to Parliament through the Minister of Energy and Natural Resources.

AECL's Board has two committees, the Audit Committee and the Human Resources and Governance Committee, each having specific charters that set out their responsibilities. The Board consists of seven Directors (the Chair, appointed Board members and the President and CEO).

James Burpee, Chair

Mr. Burpee has been serving as Chair of the Board of Directors since July 2019, and previously served as a director and Chair of the Board's Human Resources and Governance Committee from 2017 to 2019. He is currently serving a term ending in July 2029.

Mr. Burpee brings almost four decades of experience as a senior strategist in the electricity industry, having worked in a variety of senior management roles for Ontario Hydro and Ontario Power Generation. Mr. Burpee has also served as Chief Executive Officer at Bridge Renewable Energy Technologies Inc., a company which marketed Biomass Gasification Electricity Systems primarily in the developing world. Most recently, Mr. Burpee served as President and Chief Executive Officer of the Canadian Electricity Association.

Mr. Burpee also sat on the Board of the Energy Council of Canada and the Canadian Electricity Association, including one year as Chairperson.

Mr. Burpee holds a Bachelor of Applied Science in Mechanical Engineering from the University of Toronto and is a member of Professional Engineers Ontario and the Institute for Corporate Directors and holds the ICD.D designation. Mr. Burpee is also a Fellow of the Canadian Academy of Engineering.

AECL Committees: Audit, Human Resources & Governance

Fred Dermarkar, President and CEO

Fred Dermarkar was appointed AECL's President and CEO in 2021 for a term of three years and subsequently reappointed to 2027.

Prior to joining AECL, Fred was President and CEO of the CANDU Owners Group, where he led the not-for-profit organization to advance collaboration between CANDU nuclear reactor operators worldwide.

Fred has been working in the Canadian nuclear industry for close to 40 years. Throughout his career, he has occupied a variety of key technical and senior leadership positions at Ontario Power Generation in support of the design, commissioning, operation and refurbishment of its CANDU reactors.

Fred has received the Canadian Nuclear Association's Ian McRae award in recognition of his substantive engineering contributions, leadership and positive influence on the Canadian nuclear industry and the advancement of nuclear energy in Canada, and the Nuclear Excellence Award from the World Association of Nuclear Operators (WANO) in recognition of his contributions to Ontario Power Generation's overall post-Fukushima response.

As President and CEO of AECL, Fred is leading the organization in its oversight role, seeing that the priorities of government are delivered safely and efficiently under the Government-owned, Contractor-operated model.

Fred holds a bachelor's degree in mechanical engineering from the University of Toronto and is a registered professional engineer in the Province of Ontario.

Martha Tory, Board Member

Ms. Tory has been serving on the AECL Board of Directors since 2016 and is currently serving a term ending in 2028.

Ms. Tory retired in 2015 from Ernst & Young LLP where she was an audit partner with responsibility for clients in a variety of industries. She is currently involved as a Board member with a number of organizations: her current positions include being a Board member and Chair of the Audit Committee of University of Toronto Press and Soulpepper Theatre.

Ms. Tory is a Chartered Professional Accountant and a Fellow of the Institute of Chartered Professional Accountants of Ontario. She holds the ICD.D designation from the Institute of Corporate Directors and a Bachelor of Commerce from the University of Toronto, Trinity College.

AECL committees: Audit (Chair), Human Resources & Governance

Carmen Abela, Board Member

Ms. Abela has been serving on the AECL Board of Directors since 2017 and is currently serving a term ending in 2028. Ms. Abela is the founder and Managing Director of WindReach Consulting Services Inc., an Ottawa-based consultancy specializing in public sector accountability. For over twenty-five years, Carmen has been advising senior government leaders on public sector oversight and operational excellence. Her areas of specialty include governance, risk management and internal audit.

She is deeply committed to building public trust, which she does through her professional practice and her board work. Beyond serving on the AECL Board of Directors, she is the Chair of the Board for the Royal Ottawa Hospital Foundation where she also chairs the Strategy and Governance Committee. Her past governance services include being a Public Director of the Board for Colleges and Institutes Canada (CICan) where she was the Chair of the Audit Committee, a former member of the Board for Immigrant Women Services Ottawa (IWSO), where she chaired the Governance Committee, and the Chair of the National Board for the Institute of Internal Auditors Canada. Carmen is a Chartered Director (C.Dir.), a Certified Internal Auditor (CIA) and holds an Honours Bachelor of Arts Degree from McGill as well as a Master of Arts Degree in Public Administration from Carleton University.

AECL Committees: Audit, Human Resources and Governance (Chair)

Kamilia Sofia, Board Member

Dr. Sofia has been serving on the AECL Board of Directors since 2019 and is currently serving a term ending in 2027.

Dr. Sofia has been a strategic leader for 30 years, with technical and management experience locally and internationally. Dr. Sofia has held CEO level positions internationally in the last ten years with global organizations in multiple industries: high technology, aerospace, nuclear, and oil & gas, including CEO of Methanex Egypt, Executive Vice President of Rolls Royce Nuclear, CEO Services at Dubai Aerospace Enterprise, and Vice President of Strategy at CAE Inc. She has been a Director and Audit committee member of NorthStar Earth & Space, an information services platform that works to ensure the sustainability of the environment on earth and in space, since 2018. Dr. Sofia is also a Corporate Director of Infinity Q.

Dr. Sofia received her Ph.D. degree in Nuclear Physics from McGill University and has also completed the Directors Education Program from the Institute of Corporate Directors at McGill University. In 2005, she was voted as one of Canada's top 100 women from the Women's Executive Network.

AECL Committees: Audit, Human Resources & Governance

Virendra Jha, Board Member

Dr. Jha has been serving on the AECL Board of Directors since 2019 and is currently serving a term ending in 2027.

Dr. Jha has over 42 years of experience in the Canadian Space Program ranging from in-depth engineering work to senior management positions in both the private and the public sectors, including that of Vice- President and acting President of the Canadian Space Agency.

As Vice-President responsible for science, technology and programs at the Canadian Space Agency, Dr. Jha provided strategic direction, vision and leadership to all core technical programs of the Canadian Space Agency. Dr. Jha published and presented more than twenty papers on space related subjects and has served as a Board member for five technology related not for profit organizations.

Dr. Jha received his B. Tech. degree in Mechanical Engineering from the Indian Institute of Technology Delhi India, his Master's degree in Mechanical Engineering from McMaster University, and his Ph.D. degree in Mechanical Engineering from Concordia University. He also has a Chartered Director Degree from McMaster University.

Dr. Jha has received many awards in recognition of his contribution to space activities in Canada and internationally, including the Order of Canada.

AECL Committees: Audit, Human Resources & Governance

Dana Soonias, Board Member

Mr. Soonias was appointed to AECL's Board of Directors in 2023, for a term of four years.

Mr. Soonias is a member of Red Pheasant First Nation. Over the past 20 years, he has held senior positions with financial, Indigenous, and government institutions with lead roles in retail, finance, business, and economic development.

In previous roles, Dana was the Director of Economic Development and Employment Training Services at the Saskatoon Tribal Council, Mr. Soonias serves over 33,000 First Nations people, urban and rural, in and around the City of Saskatoon. He was also the CEO of Wanuskewin Heritage Park Authority.

Mr. Soonias has served on various boards and committees across the country, including as Past Chair of the National Board of AFOA Canada, First Nations Financial Management Board, National Aboriginal Capital Corporations Association, Saskatchewan Indian Equity Foundation, STC Industrial Contracting and several other profit and non-profit organizations.

Currently the Senior Indigenous Advisor, Ministry of Energy and Resources for the Province of Saskatchewan, he works on engagement and participation in the energy, mining and forestry sectors between Indigenous communities and the provincial government.

Mr. Soonias holds a Certified Aboriginal Financial Manager designation through the Aboriginal Financial Officers Association Canada. He has also received an Institute of Corporate Directors designation from the Rotman School of Management at the University of Toronto.

AECL Committees: Audit, Human Resources & Governance

Director Attendance at Board Committee Meetings, 2024-25

Director	Audit (9 meetings)	Human Resources and Governance (6 meetings)	Board of Directors (11 meetings)
Carmen Abela	8/9	6/6	10/11
Jim Burpee	9/9	6/6	11/11
Fred Dermarkar	n/a	n/a	10/11
Virendra Jha	8/9	6/6	10/11
Kamilia Sofia	9/9	6/6	11/11
Dana Soonias	8/9	6/6	10/11
Martha Tory	9/9	6/6	11/11

Notes:
Fred Dermarkar is not a member of either committee.

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