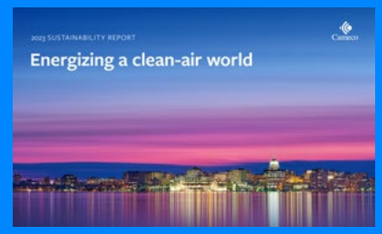
2023 SUSTAINABILITY REPORT

Cameco

Energizing a clean-air world

Contents



Nuclear energy around the world

At Cameco, we believe that nuclear energy must be part of the solution to meet global climate goals. Throughout the report, we are highlighting countries that already produce a high proportion of their electricity from nuclear power to showcase what is possible. This data was sourced from the World Nuclear Association. We are advocating, along with others in the Net Zero Nuclear Initiative, to triple global nuclear capacity by 2050.

Letter from our CEO

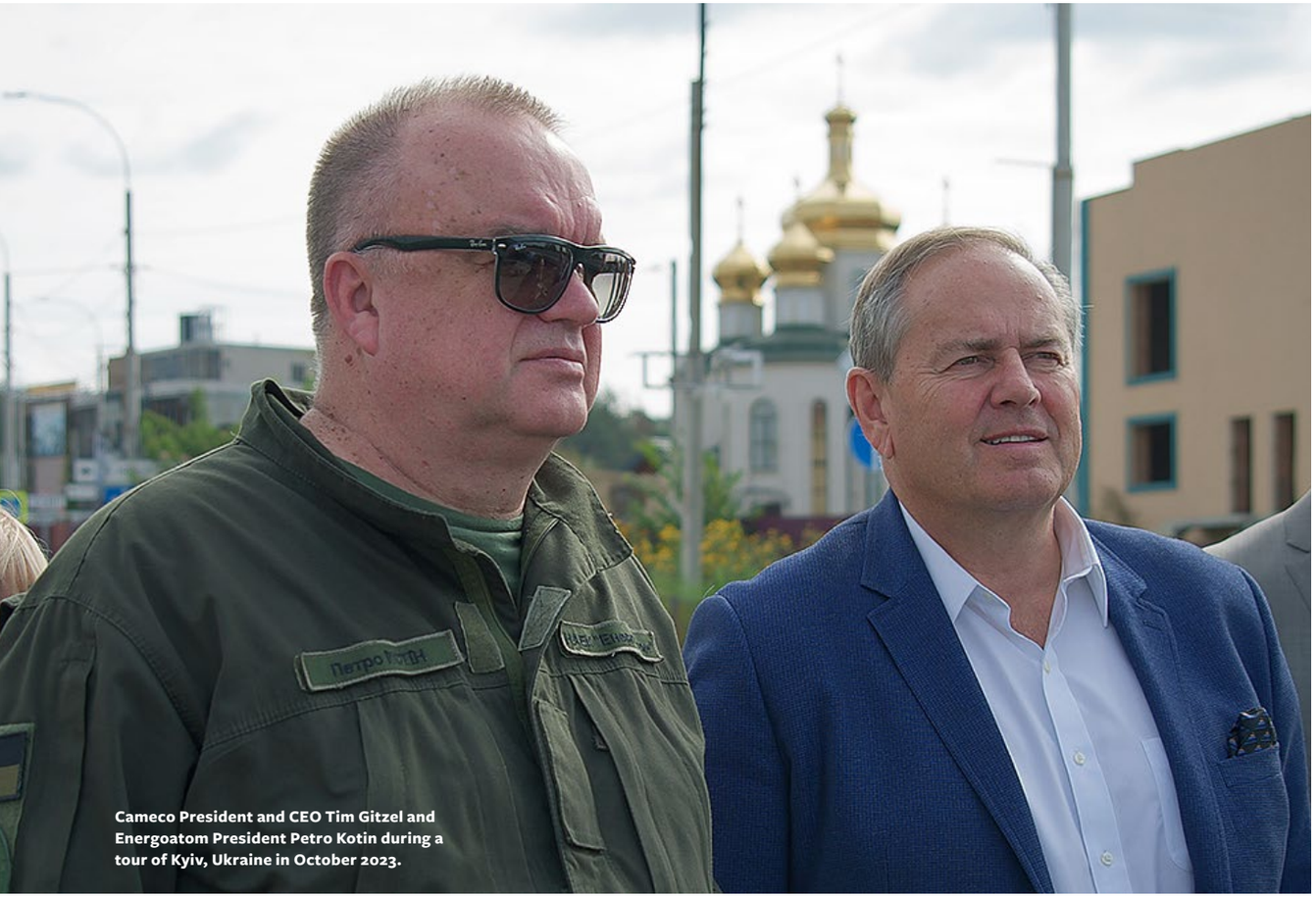
I am pleased to share our 2023 Sustainability Report during an exciting time for our company and the nuclear industry. Each year, we take the opportunity to reflect on our activities and communicate our forward-looking targets. I hope you learn more about Cameco and our people as you read these pages.

Looking back, the defining theme of the year 2023 was momentum. The combination of societal commitments around climate change and energy security concerns driven by geopolitics created a resurgence of positive support for nuclear energy as zero-carbon baseload power. Twenty-two countries committed to tripling their nuclear energy capacity by 2050 during the United Nations Climate Change Conference (COP28) as part of their plans to decarbonize their economies. Today, there are more than 30 countries committed to tripling nuclear energy and about 60 reactors are being constructed across the world, with a further 110 planned. At Cameco, we firmly believe nuclear energy must be part of the solution to meet growing energy demand while achieving climate and energy security goals. To show our strong support, we joined others in the Net Zero Nuclear initiative to advocate for the critical role nuclear must play in achieving net zero.

As part of our efforts to capitalize on this positive momentum, we continue to explore new opportunities to expand our presence and increase our uranium production. In November 2023, we completed the acquisition of Westinghouse, a global provider of specialized technologies, products, and services across most phases of the nuclear power sector. We now own a 49% interest in Westinghouse and Brookfield owns the remaining 51%, which augments our core business and expands our reach across the nuclear fuel cycle. Since first announcing this deal over a year ago, I believe the prospects for Westinghouse have significantly improved.

We also continued to ramp up production at our McArthur River mine and Key Lake mill and we aim to produce 18 million pounds in 2024. Finally, among several long-term uranium contracts, I am proud to share that we signed a deal to supply Ukraine with uranium for nuclear fuel until 2035. For Ukraine, this contract will help them gain energy independence in extraordinarily challenging times, and for us, it has the potential to be the single largest supply contract in Cameco's history. These announcements position us as a major player in our industry as the global demand for nuclear energy and the fuel products and services needed to operate reactors increases.

As the world seeks to decarbonize, we also want to do our part and be an active partner in the fight against climate change. We have set a target to reduce our Scope 1 and 2 GHG emissions by 30 per cent by 2030, compared to our 2015 baseline. At Cameco, we know it's not enough to set a target: we need an actionable plan to achieve our goal. This year we completed tailored decarbonization pathways for all operationally controlled sites. To develop those pathways, we reviewed more than 160 decarbonization project ideas from employees. This is a sample of the talent and engagement we have across our company.



Cameco President and CEO Tim Gitzel and Energoatom President Petro Kotin during a tour of Kyiv, Ukraine in October 2023.

We continue to foster talent and build connections outside of our company as well. Having worked at Cameco for almost 20 years, I am humbled by the community support and positive relationships we have built with Indigenous and local communities. We have been able to maintain these relationships through challenging and prosperous times. Our focus has always been in creating opportunities and building capacity in Indigenous and local communities.

At the end of 2023, in our northern Saskatchewan operations, 50% of our workforce were Indigenous individuals, and 74% of services were procured from northern-owned local businesses. To help create capacity, we provided 18 three-month paid work experience placements for Indigenous individuals (13 were women). Additionally, to provide cultural supports while employees are working in our mines and away from home, we renewed our Elder Advisor/Knowledge Keeper program. I am proud of the steps we have taken to make our workplace more supportive and reflective of the communities where we live and work.

Just as we reflect on the year's highlights, I believe we need to take stock and share with you the areas where we fell short of our own expectations. In 2023, we missed our total recordable injury rate safety target for a second year in a row. I am deeply disappointed by this result. Since nearly half of all injuries were related to sprains and strains, we hired an expert to conduct 100 ergonomic assessments to identify ergonomic risks and potential workplace improvements to reduce injuries. We also recognize that front-line supervisors play a key role in verifying that new or experienced workers are working safely, so we required supervisors to perform job task observations. At the end of the year, they had completed more than 4,600 observations. I know we need to do more, so in late 2023, we developed a safety improvement plan focused on training and coaching for supervisors and developed a safety campaign that we have rolled out in 2024.

Looking forward, I am highly optimistic because I know Cameco is well-positioned to supply the nuclear fuel the world needs. I am excited about the momentum lifting the whole nuclear industry, and looking forward to seeing even more global cooperation and technology developments that will make meeting the goals of the Paris Agreement possible. In closing, I want to thank our employees, who have been with us through ups and downs. In addition, more than 200 new employees opted to join us in 2023, and I want to extend a heartfelt welcome to these new additions to our team. I'm grateful for their choice to grow their careers at Cameco. I am also appreciative of the support of my fellow executives as we make decisions for the future of the company and for the benefit of our stakeholders. Finally, I want to thank Catherine Gignac who was appointed chair of our board in late 2023, and the entire board, as well as welcome our two new directors. I am more confident than ever about our ability to work together towards our vision of energizing a clean-air world.

Tim Gitzel
President and Chief Executive Officer

2023

Sustainability highlights

50%
of our workforce at our northern Saskatchewan operations were Indigenous

7
climate risk assessments were completed for seven northern Saskatchewan and Ontario operations over the last two years

74%
of services at our northern Saskatchewan operations were procured from northern-owned local businesses

16%
reduction in water withdrawals, compared to 2022

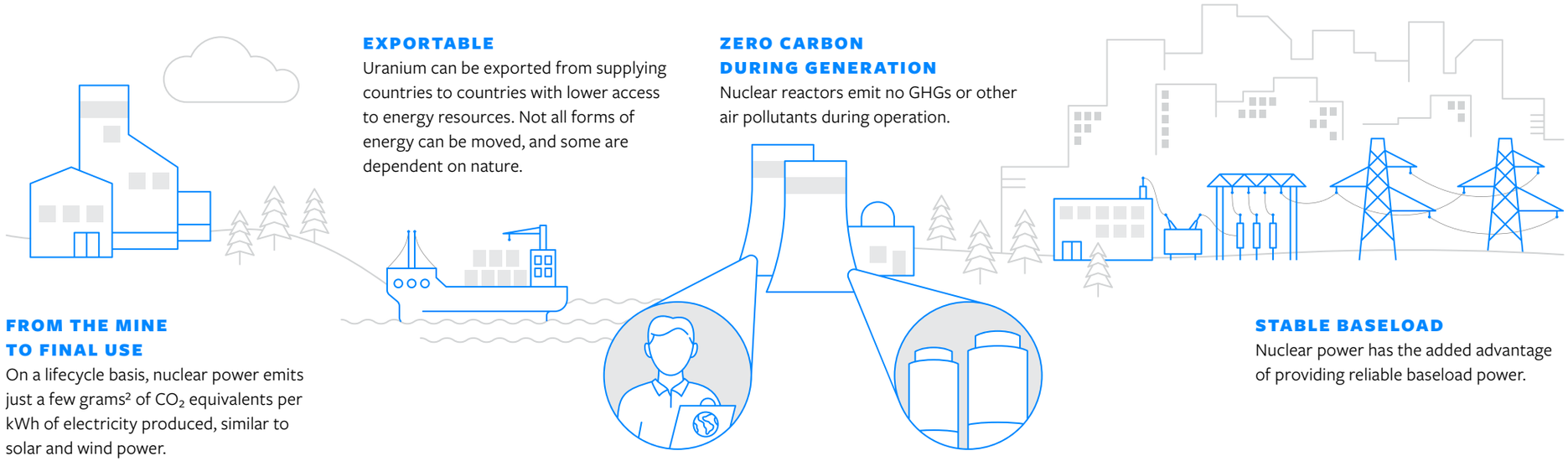
100
ergonomic assessments completed in 2023

Nuclear power – a central part of the clean energy transition

Cameco has been in the business of providing uranium fuel for 35 years and is poised to be an important part of the energy transition. Backed by decades of safe performance, we continue to operate under stringent regulatory standards.

At Cameco, we believe our tier-one reserves and fuel services business can safely provide the uranium fuel the world needs to generate zero-carbon nuclear power. We are committed to reducing our own low GHG emissions in our ambition to reach net-zero.

Nuclear power provides about 10% of global electricity generation[1]. We believe nuclear energy must continue to be a central part of the solution to the world's shift to a low-carbon, climate resilient economy. It is an option that can provide the necessary power in a reliable and affordable manner, and in a way that could help avoid some of the worst consequences of climate change. A few of the benefits that make nuclear energy an important element of the energy transition are:



FROM THE MINE TO FINAL USE

On a lifecycle basis, nuclear power emits just a few grams[2] of CO_2 equivalents per kWh of electricity produced, similar to solar and wind power.

EXPORTABLE

Uranium can be exported from supplying countries to countries with lower access to energy resources. Not all forms of energy can be moved, and some are dependent on nature.

ZERO CARBON DURING GENERATION

Nuclear reactors emit no GHGs or other air pollutants during operation.

STABLE BASELOAD

Nuclear power has the added advantage of providing reliable baseload power.

INTERNATIONAL OVERSIGHT

Nuclear power is the only energy technology for which there is international oversight at the United Nations (by the International Atomic Energy Agency). The stringent monitoring and regulation at the national level, along with international oversight, make nuclear power generation one of the safest energy technologies.

SMALL AMOUNT OF WASTE

The volume of high-level radioactive waste produced by the civil nuclear industry is small. The IAEA estimates that the disposal volume of the current solid high level radioactive waste inventory is approximately 29,000 m³. For context, this is a volume roughly equivalent to a three metre tall building covering an area the size of a soccer pitch[3].

[1] https://www.iea.org/reports/nuclear-electricity

[2] United Nations Economic Commission for Europe (2021). Lifecycle Assessment of Electricity Generating Options. Document

[3] https://world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-waste/radioactive-waste-management#References

OVERVIEW

Providing the uranium fuel the world needs

13%
of Canada's electricity came from nuclear power in 2022

Toronto, Canada
43.6532° N, 79.3832° W

2023

Overview highlights

Cameco is one of the largest global providers of the uranium fuel needed to energize a clean-air world. Backed by decades of safe performance, we continue to operate under stringent regulatory standards.

$2.59 billion
in 2023 revenue

~32 million pounds/year
our potential share of tier-one uranium supply if we took advantage of all expansion opportunities

2,638
employees

13
countries acquired uranium or fuel for power generation from Cameco

About Cameco

Cameco is one of the largest global providers of the uranium fuel needed to **energize a clean-air world**. If we took advantage of all the tier-one expansion opportunities, our annual share[4] of tier-one supply could be about 32 million pounds of uranium concentrates, backed by 485 million pounds of proven and probable mineral reserves (our share[5]). See Cameco's Proven and Probable Reserves webpage for more information about reserves and resources. We are also a leading supplier of uranium refining, UO_2 and UF_6 conversion services, and CANDU fuel manufacturing for heavy water reactors.

Our competitive position is based on our controlling ownership of the world's largest high-grade uranium reserves and low-cost mining operations. Utilities around the world rely on our nuclear fuel products to generate safe, reliable, zero-carbon nuclear power. Together, we are meeting the ever-increasing demand for clean, baseload electricity while delivering safe, reliable solutions to today's clean-air crisis. Our shares trade on the Toronto Stock Exchange (TSX: CCO) and on the New York Stock Exchange (NYSE: CCJ). Our head office is located in Saskatoon, Saskatchewan.

Vision

Energizing a clean-air world.

Values

At Cameco, we are guided by four key values that establish a framework for everything we do:

- Safety and Environment
- People
- Integrity
- Excellence

As the foundation of our culture, these values, and their aligning value statements, define who we are as a company and are at the core of everything we do, helping to embed sustainability principles and practices as we execute on our strategy in pursuit of our vision. We strive to create an environment where our employees live our values every day.

Cameco's corporate headquarters in Saskatoon, Saskatchewan.

Significant changes to our company or operations

On November 7, 2023, Cameco completed the acquisition of Westinghouse Electric Company (Westinghouse) in a strategic partnership with Brookfield Asset Management alongside its publicly listed affiliate Brookfield Renewable Partners (Brookfield) and its institutional partners. Cameco now owns a 49% interest and Brookfield owns the remaining 51% in Westinghouse, a global provider of specialized technologies, products and services across most phases of the nuclear power sector. Read more on page 12.

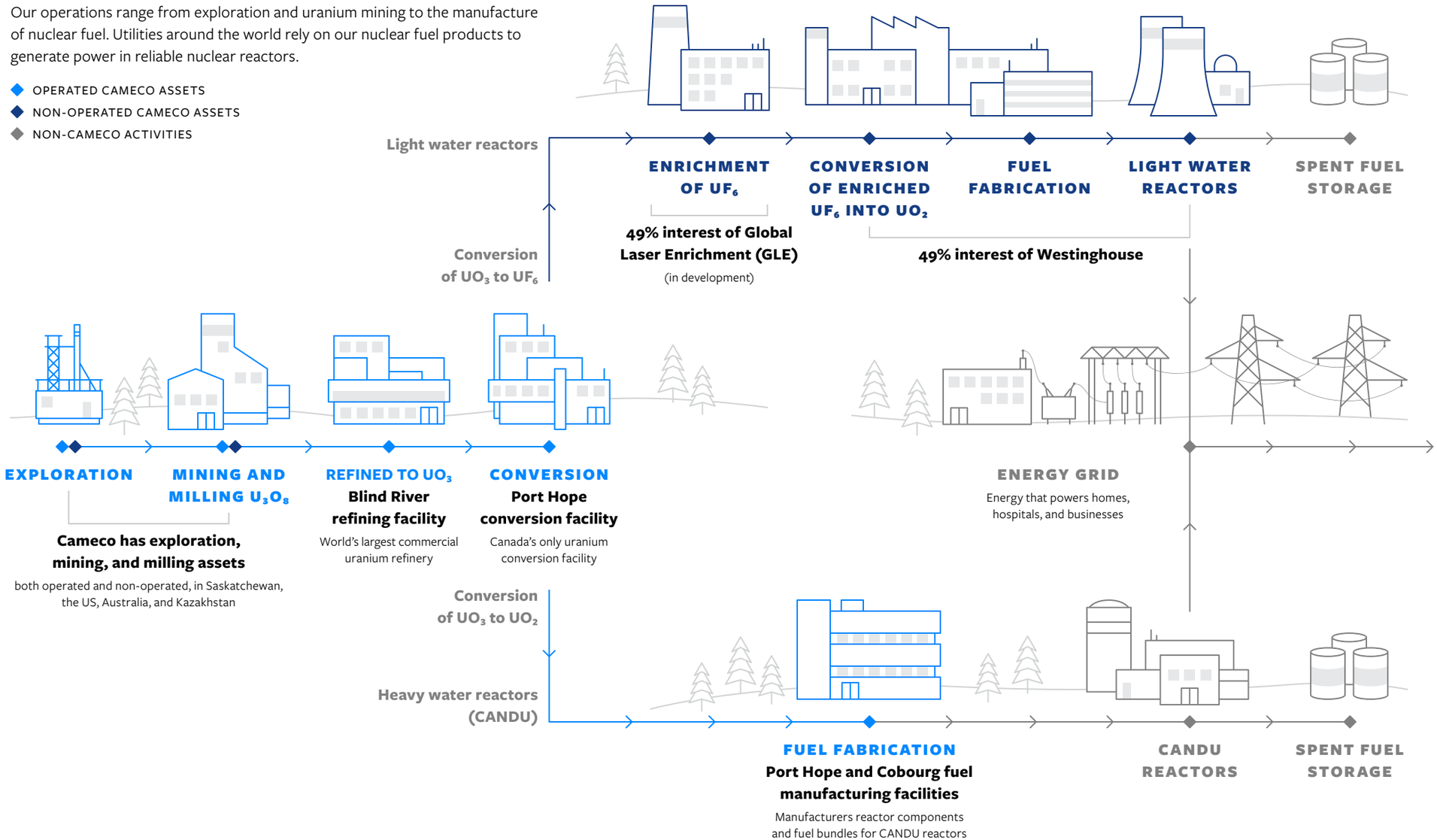
[4] More than 55 million pounds on 100% basis.

[5] 851.5 million pounds on 100% basis.

Operations within the nuclear fuel cycle

Our operations range from exploration and uranium mining to the manufacture of nuclear fuel. Utilities around the world rely on our nuclear fuel products to generate power in reliable nuclear reactors.

- OPERATED CAMECO ASSETS
- NON-OPERATED CAMECO ASSETS
- NON-CAMECO ACTIVITIES



Our locations

Our nuclear fuel cycle assets are located on three continents – North America, Asia, and Australia – and include a large portfolio of low-cost mining operations, extensive mineral reserves and resources, as well as exploration and development projects.

- OPERATED/CONTROLLING INTEREST
- NON-OPERATED/MINORITY INTEREST

OFFICE

FUEL SERVICES DIVISION FACILITIES

EXPLORATION

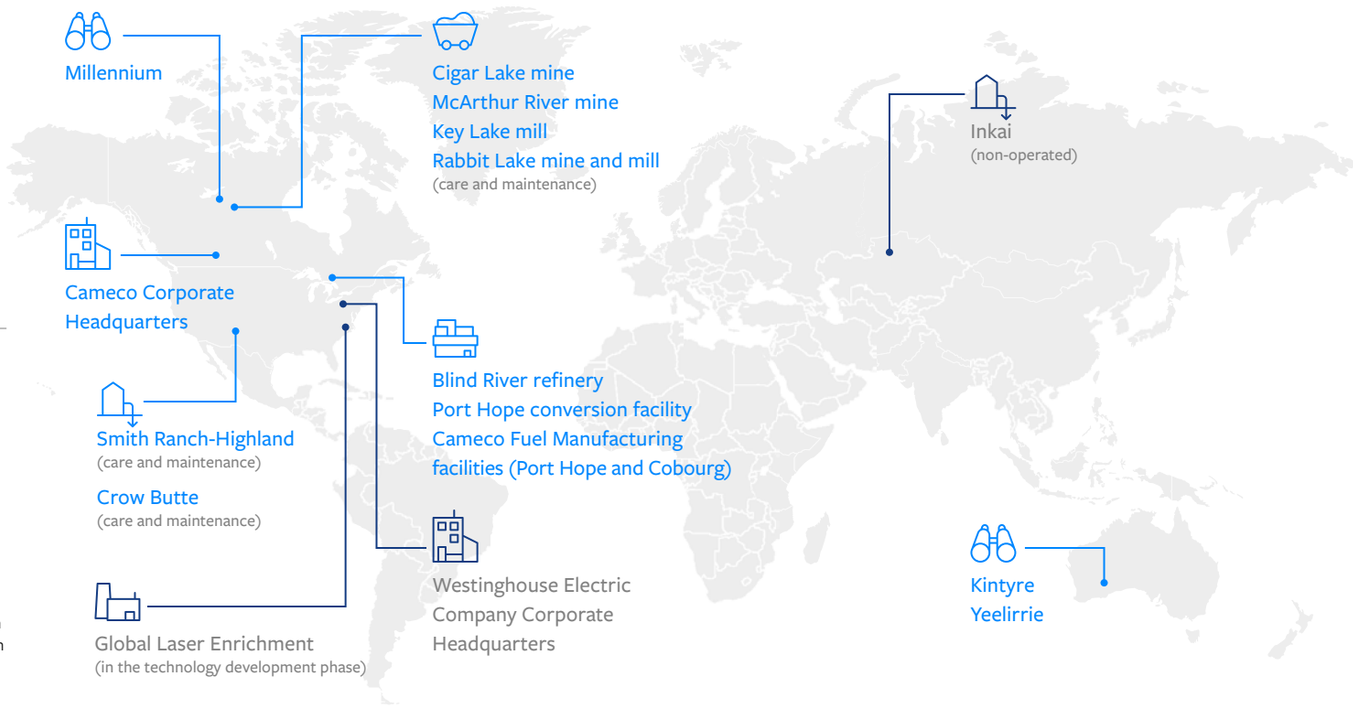
ENRICHMENT

MILLS AND UNDERGROUND MINES

We mine high-grade deep in the ground using a variety of methods such as jet boring, blasthole stoping, and raisebore mining.

IN SITU RECOVERY MINES

We mine uranium deposits from the surface by pumping a mining solution underground to dissolve the uranium and collect it using a system of wells.



Land acknowledgments

We respectfully acknowledge the lands where Cameco operates. We offer these land acknowledgments to reaffirm our commitment and responsibility to building meaningful relationships and to improving our own understanding of local Indigenous Peoples and their cultures.

Saskatchewan, Canada

Our Saskatoon corporate office is in Treaty 6 territory, the traditional territory of Cree Peoples, and the homeland of the Métis. Cigar Lake, Key Lake, Rabbit Lake, and McArthur River operations are in Treaty 10 territory, the traditional territory of the Dene and Cree Peoples, and the homeland of the Métis.

Ontario, Canada

Our Cobourg and Port Hope fuel services facilities are in the traditional territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations, which include: Curve Lake, Hiawatha, Alderville, Scugog Island, Rama, Beausoleil, and Georgina Island First Nations. Blind River operation is in the traditional lands of the Mississaugas and we recognize the Robinson-Huron Treaty of 1850.

South Dakota, US

Our Crow Butte operation is located in Nebraska about 48 kilometres from the southern boundary of the Oglala Sioux Tribe Pine Ridge reservation in South Dakota, the closest Indigenous community to the mine.

Wyoming, US

Our Smith Ranch-Highland operation is located about 242 kilometres from the Wind River reservation, home to Eastern Shoshone and Northern Arapaho Tribes, the closest Indigenous community to the mine.

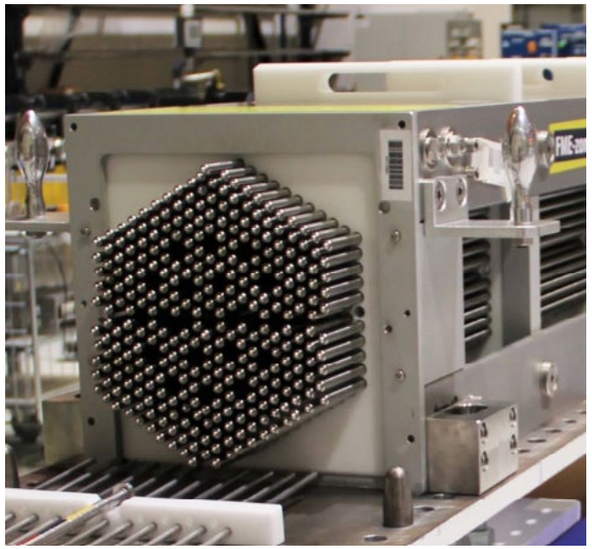
Western Australia

Our Kintyre exploration project is in the East Pilbara region in a registered native title claim of the Martu People. Yeelirrie exploration project is in the native title claim of the Tjiwarl People.

SPOTLIGHT

Westinghouse: a strategic fit for Cameco

On November 7, 2023, Cameco completed the acquisition of Westinghouse in a strategic partnership with Brookfield. Cameco now owns a 49% interest and Brookfield owns the remaining 51% in Westinghouse, a global provider of specialized technologies, products, and services across most phases of the nuclear power sector. Through this acquisition, we are:



Augmenting our core business

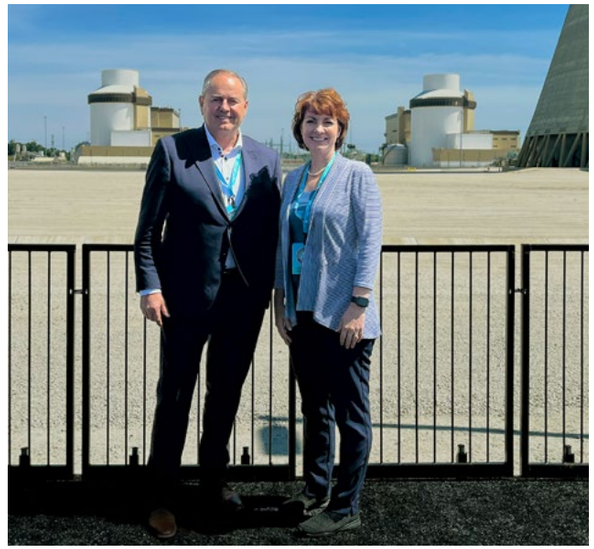
Westinghouse provides nuclear fuel products, operating plant services, support for light water reactors, and designs, develops and procures equipment for new light water reactor plants for customers across the globe. It is the original equipment manufacturer or technology provider to approximately 50% of the global nuclear reactor fleet.

We expect this acquisition to augment Cameco's core business and offer additional solutions to our customers across the full nuclear fuel cycle.

Expanding our scale

While Cameco's Fuel Services Division manufactures nuclear fuel for heavy water reactors, Westinghouse specializes in light water reactors, which makes up 85% of the nuclear reactors currently in operation.

Cameco's 35 years of experience in uranium mining and nuclear fuel production combined with Brookfield's expertise in clean energy is expected to provide a solid foundation for Westinghouse's continued success in the provision of nuclear plant technologies, products, and services, creating a powerful platform for strategic growth across the nuclear sector.



Expanding our geographical reach

Cameco with its over 2,600 employees sells nuclear fuel products and services to power-generating customers in 13 countries. With more than 10,000 employees in 90 facilities across 21 countries, Westinghouse's core business serves customers in 46 countries.

Our sustainability targets

● MET ◐ MADE PROGRESS ○ DID NOT MEET

(→) Short-term incentive program (STIP) target. 50% of our STIP targets for employees, including executives, are tied to sustainability performance measures.

All targets refer to year-end of the stated year.

Looking back: 2023 scorecard

We set sustainability targets to demonstrate our commitment to continual advancement. To provide transparency around our sustainability performance and activities, we have developed the below scorecard (see the next two pages).

	2023 TARGETS	STATUS	2023 PROGRESS	READ MORE
ENVIRONMENT				
Net-zero ambition	→ Develop tailored decarbonization pathways for operationally controlled sites.	●	– We completed tailored decarbonization pathways for all operationally controlled sites.	Page 53
Climate-related	– Refine the calculations necessary to quantify our Scope 3 GHG emissions profile.	●	– Refined the calculations necessary to quantify our Scope 3 GHG emissions profile. We are now working towards refining at a category level.	Page 51
	– Engage a third-party expert to conduct physical risk assessments of our Fuel Services Division's operations.	●	– We completed a third-party physical risk assessment of our Fuel Services Division's operations.	
Environmental performance[6]	→ Improve effluent discharge management at our Saskatchewan and Ontario operations by maintaining quality within regulatory limits and action levels, predicted environmental effects, and achieving historic benchmarks.	◐	– Performance on our environmental targets was below the targeted range for some of our Ontario sites, but we met the targeted range for our Saskatchewan sites.	Page 41
	→ Progress groundwater restoration at our US operations by:			
	– Advancing two specified mine units into the stability monitoring stage.	●	– Based on recommendations from a third-party expert, Cameco determined that a combined ACL would be most efficient for both the creation of the application and the review by the US Nuclear Regulatory Commission.	
	– Developing and submitting to regulatory authorities Alternate Concentration Limits (ACL) for one mine unit.	●		
	– Achieving clean evaluations for 134 production wells.	◐	– Achieved clean evaluations for 132 production wells.	
Tailings management	– Achieve Level A for all our tailings facilities[7] in all indicators of the Mining Association of Canada's Towards Sustainable Mining Tailings Management Protocol by the end of 2023.	●	– Level A was achieved across all Tailings Management Protocol indicators at Cameco operations with tailings facilities, and results were reported to the Mining Association of Canada's Toward Sustainable Mining.	Page 44

[6] For STIP purposes, there is an overriding modifier: no payout on this measure if there is any incident that results in a moderate or significant environmental impact, current and future remediation costs of ≥ $10 million, a significant environmental fine, or that has a reasonable potential to result in significant negative impact on the company's reputation with our major stakeholders.

[7] All facilities include active and inactive tailings facilities to reflect the changes in the TSM's Tailings Management Protocol.

	2023 TARGETS	STATUS	2023 PROGRESS	READ MORE
SOCIAL				
Workplace safety[8]	→ Achieve a total recordable injury rate (TRIR) of 0.99 or less.	○	– Although there were no incidents causing a fatality or permanent disability, we did not meet our TRIR target of 0.99 (our TRIR was 2.30).	Page 65
	→ Achieve a 100% completion rate of job task observations (2 per supervisor per month).	●	– We achieved 100% completion of job task observations.	Page 67
	→ Complete 100% of the target of 66 ergonomic assessments for workplaces that impact multiple individuals across the organization.	●	– We completed 100 ergonomic assessments.	
	– Maintain radiation doses as low as reasonably achievable, social and economic factors taken into account (ALARA).	●	– Radiation doses to all workers were maintained well below regulatory limits.	
Indigenous and community relations	→ Provide 18 paid temporary work-placements for RSN, at least nine of which are women, at our mining/milling operations.	●	– 18 RSNs, 13 of whom were women, participated in our work placement program at our mining/milling operations.	Page 63
	→ Provide 10 apprentice positions, the majority of which are filled by residents from the Athabasca Basin, with a minimum of five RSN women.	◐	– Nine apprentices, seven of whom were Athabasca Basin residents were provided apprenticeship positions. Five of these apprentices were women.	
	– Procure at least 80% of our services for our northern Saskatchewan operations from northern-owned local businesses.	○	– 74% of services at northern Saskatchewan operations were procured from northern-owned local businesses.	
	– Implement a rotational Elder program at our northern Saskatchewan operations.	●	– Hired four Elder/Knowledge Keeper rotational positions at our northern Saskatchewan mining/milling operations from the local communities of English River First Nation, Pinehouse Lake, Lac La Ronge Indian Band, and Fond du Lac First Nation.	
Inclusion and diversity	– Each year, strive for a complement of senior management (officers and VPs) that reflects or surpasses the proportion of women in our workforce.	●	– In 2023, 35% of senior management were women while 25% of the workforce were women.	Page 75
GOVERNANCE				
Board diversity	– At least 30% of Board members are women (maintain annually).	●	– At the end of 2023, women held 40% of director positions on our board.	Page 82
	– At least one director with Indigenous heritage (maintain annually).	●	– At the end of 2023, two of our directors were Indigenous (20% of the total number of directors). Cameco has had Indigenous directors on our board since 1992.	
Conduct and ethics	– 100% of new employees and employees in certain functional areas to complete Code of Conduct and Ethics online training in 2023.	●	– All employees completed our Code of Conduct and Ethics e-learning course in 2023.	Page 88
Cybersecurity	– 100% of all employees to complete the information security course (annually).	●	– 100% of employees completed the information security course.	Page 92
	– Complete at least one internal audit on cybersecurity-related topics (annually).	●	– Cameco completed one internal audit on a cybersecurity-related topic.	

[8] For STIP purposes, there is an overriding modifier: no payout on the safety measure if there is any fatality or permanent disability.

Looking forward: 2024 targets

Environment

Net-Zero ambition and 30 by 30 target

- As a milestone towards our long-term net-zero ambition, achieve a 30% absolute reduction in Cameco's combined Scope 1 and 2 GHG emissions by 2030, from 2015 levels. This corporate target replaces our previous site-specific targets.

Scope 3

→ Publish Cameco's total Scope 3 GHG emissions value and method for quantification.

Physical risks

- In 2024, we plan to start the physical risk assessment work at our US sites and begin development of initial site specific adaption plans for Key Lake, McArthur River, and our Port Hope Conversion Facility. We expect this work to be completed in 2025. Our overall target is to complete physical climate risk assessments for all our majority-owned and operated facilities by the end of 2026.

Environmental performance[9]

→ Improve effluent discharge management at our Saskatchewan and Ontario operations by maintaining quality within regulatory limits and action levels, predicted environmental effects, and achieving historic benchmarks.

→ Improve groundwater restoration at our US operations by applying best practicable technology to improve the quality, rate, and efficiency of groundwater restoration.

Social

Workplace safety[10]

→ Achieve a total recordable injury rate (TRIR) of 1.8 or less.

→ Achieve a 100% completion rate of job task observations (2 per supervisor per month).

→ Complete 100% of the target of 33 ergonomic assessments for workplaces that impact multiple individuals across the organization and the corrective actions resulting from the 2023 assessments.

→ Complete 100% of safety critical training.

- Maintain radiation doses as low as reasonably achievable, social and economic factors taken into account (ALARA).

Indigenous and community relations

→ Further RSN development and progression with a specific focus on two streams: internal development for progression and external trades training. Implement an internal RSN development program for future progression with 10 employees (50% female representation) from the primary impact communities and a pilot post-secondary trades program with a minimum of 10 first-year students (50% female representation).

- Procure at least the same percentage of our services for our northern Saskatchewan operations from northern-owned local businesses as the previous year.

Inclusion and diversity

- Each year, strive for a complement of senior management (officers and VPs) that reflects or surpasses the proportion of women in our workforce.
- Develop and implement a pay equity plan.
- Implement additional top-up payments for employees who take maternity leave and implement top-up payments for employees who take parental leave.

Governance

Board diversity

- At least 30% of board members are women (maintain annually).
- At least one director with Indigenous heritage (maintain annually).

Conduct and ethics

- 100% of employees in certain functional areas and new employees to complete Code of Conduct and Ethics online training in 2024.

Cybersecurity

- 100% of all employees to complete the information security course (annually).
- Complete at least one internal audit on a cybersecurity-related topic (annually).

Targets marked with this icon are climate-related.

All targets refer to year-end of 2024 with the exception of our 30 by 30 target that refers to year-end 2030.

(→) Short-term incentive program (STIP) target. 50% of our STIP targets for employees, including executives, are tied to sustainability performance measures.

[9] For STIP purposes, there is an overriding modifier: no payout on this measure if there is any incident that results in a moderate or significant environmental impact, current and future remediation costs of ≥ $10 million, a significant environmental fine, or that has a reasonable potential to result in significant negative impact on the company's reputation with our major stakeholders.

[10] Overriding modifier: no payout on the safety measure if there is any fatality or permanent disability.

About this report

At Cameco, we are committed to transparency and hold ourselves accountable for quality reporting on sustainability matters to our providers of capital, customers, employees, regulators, local Indigenous Peoples, communities around our operations, and other stakeholders. For over 15 years, we have disclosed our sustainability performance through an extensive range of environment, safety, social, economic, and governance indicators.

As part of our effort to continually evolve the robustness of our sustainability commitments and communications, generally we align our sustainability performance indicators with those recommended by the Sustainability Accounting Standards Board (SASB). We have also included a section in this report that addresses our response to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Sustainability materiality assessment

Materiality for the purposes of this report is different than how we address materiality for disclosure requirements under securities laws. The three steps of our materiality assessment are illustrated in the graphic below.

The first step in our materiality assessment process consists of reviewing stakeholder requests, examining our previous sustainability materiality assessments as well as the sustainability topics of our peer companies, considering SASB and TCFD recommendations, cross checking with our identified company risks, and excluding non-relevant topics based on location, sector, or specific business model. The second step is a workshop where the list of sustainability-related topics relevant to Cameco were prioritized according to their importance to our stakeholders and the potential impact to Cameco's business and strategy. The final step is a review and validation exercise by our executive team and board of directors. We conducted the first step in 2020 and we conduct the second and third step annually. The latest review by executives in early 2024 resulted in adding responsible supply chain into our list of priority sustainability topics. Although this is not expected to have a material impact on Cameco's performance, we recognize the importance of addressing this topic due to the increased regulatory focus.

Cameco's sustainability topics are listed at right (in alphabetical order). The list continues to evolve every year. In addition to our priority topics, we have included throughout this report other sustainability topics of interest to our investors and stakeholders.

Identification
- Research and benchmarking
- Impact mapping

Prioritization
- Internal and external engagement
- Analysis

Validation
- Senior management engagement
- Board of Directors

Priority sustainability topics

Environment
- Air quality
- Biodiversity/land
- Decommissioning/closure
- GHG emissions and energy use
- Physical impacts of climate
- Tailings management
- Transition to a low-carbon economy
- Waste
- Water

Social
- Inclusion and diversity
- Occupational safety and health
- Product and transportation safety
- Public safety
- Relationships with Indigenous Peoples and local communities

Governance
- Business ethics and integrity
- Corporate governance
- Cybersecurity
- Responsible supply chain
- Tax transparency

This report includes other sustainability topics of interest to us, our investors, and stakeholders.

Scope of this report

This report communicates the sustainability initiatives and key metrics that demonstrate Cameco's progress to date and our commitment to continual advancement.

- The terms Cameco, our, we, us, the company, and the organization, refer to Cameco Corporation and its wholly-owned subsidiaries.
- The term executives refers to Cameco's CEO and officers of the company.
- The term senior management refers to Cameco's executives and vice-presidents.
- The term management includes select professional and supervisory positions, and all manager positions and above.
- Unless otherwise indicated, this report covers data and qualitative information for the year-ended December 31, 2023. When available, historical data is provided for 2021-2022.
- For all of our targets, the date stated indicates by year-end of the stated year. For example, completing an activity "by 2023", means completion "by the end of 2023".
- Information on our websites is not incorporated into this report.
- Our reported environmental and social performance covers all Cameco operated facilities and is reported on an operational control basis (100% of operated facilities) with the following exceptions:
  - Indicators that report the percentage of proven and probable reserves with a specific attribute are based on Cameco's share of proven and probable reserves, which includes JV Inkai, although not operationally controlled.
  - Production of U_3O_8 is reported as Cameco's share of production with the exclusion of our joint venture (JV) in Kazakhstan (Inkai mine), unless otherwise indicated.
  - Direct economic value is reported based on revenue generated by Cameco.
  - Air emissions are reported for operated facilities in Canada only.
- Scope 1 and 2 GHG emissions are reported using two methods: operational control approach and equity share approach. Under the equity share approach, we have adjusted the GHG emissions reported to align with our financial ownership: specifically, 69.805% of McArthur River mine, 83.333% of Key Lake mill, 54.547% of Cigar Lake mine, and we have included 40% of GHG emissions from JV Inkai. We plan to include 49% of Westinghouse's emissions in our GHG emissions under the equity approach in our 2024 Sustainability Report to allow time for data quantification and reporting process development. We are also reporting Scope 3 emissions using the operational control approach which captures emissions that result as a consequence of Cameco's activities but occur from sources not owned or controlled by the company. Our GHG emissions reduction targets refer to reducing Scope 1 and 2 emissions calculated using the operational approach.
- Unless noted, financial data is in Canadian dollars, and environmental and production data are in metric units.
- The accuracy and transparency of this report is important to our company. Report content and performance indicators have been reviewed by executives and relevant technical authorities within Cameco. PricewaterhouseCoopers LLP (PwC) has performed a limited assurance engagement for a select number of Cameco Corporation's performance indicators disclosed within this report. You can read more about the scope of PwC's work, including the select performance indicators and data in scope of the assurance, on page 110.

Aligning with sustainability reporting standards

We cross-reference our disclosures in this report to the following recognized standards:

SASB — Page 107

TCFD — Pages 18-37

Read our caution regarding forward-looking statements on page 113 of this report.

Learn more about our sustainability performance

In addition to this sustainability report, Cameco publishes operation-specific environmental and social performance on local websites.

Please visit these websites for more information on specific operations:

Cameco Northern Saskatchewan
cameconorth.com

Cameco Fuel Services
camecofuel.com

Cameco Resources
camecoresources.com

Cameco Australia
camecoaustralia.com

Supporting global climate action

14.2%
of the U.K.'s electricity was generated from nuclear in 2022

London, United Kingdom
51.5072° N, 0.1276° W

2023

Climate highlights

At Cameco, we recognize the critical nature of the fight against climate change, and want our workers, customers, investors, and community partners near our operations to know we are committed to being an active and constructive partner in addressing this challenge.

>70

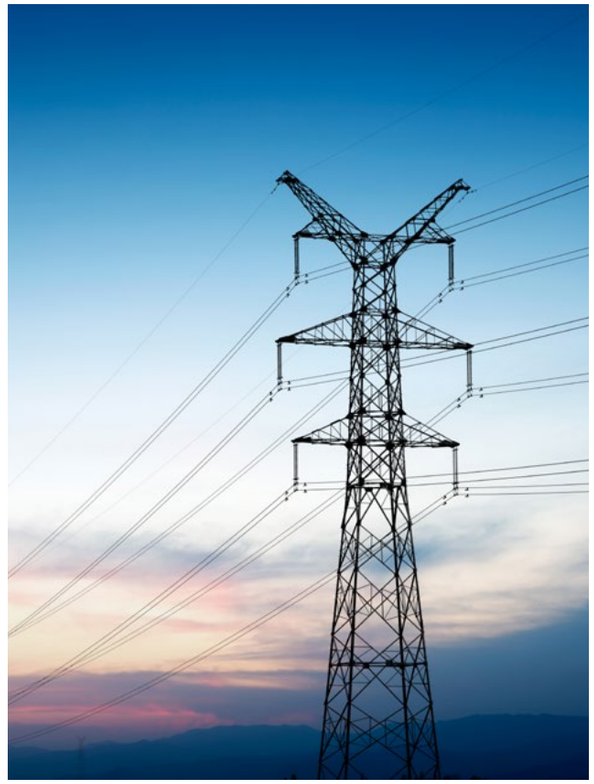
individuals across the company have participated in the physical risk assessment process for our Saskatchewan and Ontario operations

11

site-specific decarbonization pathways were developed in 2023, representing all our operationally controlled sites

30%

is our target to reduce our combined Scope 1 and Scope 2 GHG emissions by 2030, from 2015 levels



3x

nuclear energy capacity targeted by 2050 under the Net Zero Nuclear initiative, which Cameco joined in 2023

Our approach to climate disclosures

This section is intended to help investors and other stakeholders understand how we integrate climate-related risks and opportunities into our governance, strategy, risk management, and metric and target-setting processes in alignment with the Task Force on Climate-Related Disclosures (TCFD).

This is the fourth time we have reported in alignment with the TCFD recommendations. Climate-related disclosures have been integrated throughout this report and other disclosure documents, such as our management's discussion and analysis (MD&A), and annual information form(AIF).

For a summary of material risks to our business operations, revenue, or expenditures, please see our annual MD&A and AIF.

The Financial Stability Board has asked that the IFRS Foundation take responsibility for climate-related disclosures, the timing of and extent to which Canada may adopt these standards remains unclear. Therefore, we continue to align our disclosure with the TCFD recommendations.

I. Governance

We believe that sound governance is the foundation for strong corporate performance in all areas of our business. Within Cameco, our board of directors holds the highest level of oversight for our business strategy and strategic risks and opportunities, including climate-related risks and transition-related opportunities. Read more about our governance for sustainability matters and climate-related risks and opportunities on page 84.

II. Risk management

Our risk program involves a broad, systematic approach to identifying, assessing, reporting and managing the significant risks we face in our business and operations. Our corporate risk register tracks enterprise-level risks, which are risks that have the potential to significantly affect our ability to achieve our corporate objectives or strategic plan. Once risks are identified and assessed, we consider the risk mitigation plan. Senior management is responsible for verifying that key risks, as well as emerging risks, are identified, are managed to an acceptable level and are reported on regularly to the appropriate level within the organization. The enterprise risk register is reviewed and provided to the executive team and the board each quarter.

Cameco is aware of the increasing risk changing climate conditions can create for our operations and value chain. We have, currently and historically, identified and managed risks posed by acute physical climate events (e.g., wildfire and flooding) and chronic changes in climate patterns (e.g., temperature and precipitation), as well as risks posed by changes in regulations or policy. Some of the elements of our risk management processes that focus on climate-related risks are:

Climate risk identification

Each year, as part of our Risk Management Program (RMP), we identify a variety of risks to our business and our assets, including risks related to changes in applicable laws and regulations, and changes to the environment that affect our activities. To complement our mature and long-standing RMP, we developed a formal process to identify physical climate risks in 2022. The process was informed by Cameco's RMP, and two external resources: the Mining Association of Canada (MAC) Guide on Climate Change Adaptation for the Mining Sector and the International Council on Mining and Metals (ICMM) Adapting to a Changing Climate: Building Resilience in the Mining and Metals Industry.

In 2022, we applied the process to all our northern Saskatchewan operations and in 2023 to our Fuel Services Division operations in Ontario (see page 34 for details). Cameco has set a target to invest annually in projects that continue to enhance our understanding of climate-related physical risks and we plan to complete a climate scenario-based risk assessment at all our majority-owned and operated facilities by the of end 2026[11].

Risk assessment

We use a common risk matrix throughout the company to assess all risks to our business. Using the risk matrix, risk owners determine the likelihood and consequences of the identified risk by examining the effect that the risk may have on our four corporate measures of success: safe, healthy, and rewarding workplace; clean environment; supportive communities; and outstanding financial performance. Once assessed, risks are then prioritized based on their likelihood, anticipated severity, anticipated time horizon of the risk, and the level of strategic impact. Risks at the enterprise level are categorized as follows:

Functional risks: Risks that are considered preventable, and are identifiable and quantifiable, with little to no direct strategic impact or effect.

Tactical risks: Risks that could threaten Cameco's medium-term objectives. They may be external, and outcomes are identifiable, but uncertainty makes them difficult to assess. Climate-related risks are considered a tactical enterprise risk at Cameco.

Strategic risks: Risks that threaten the key assumptions of our strategy. They are almost always external, and outcomes can vary and are difficult to quantify.

Monitoring and reporting

We continually update our risk profile by performing regular monitoring of risks across the organization. Regular monitoring helps us to properly manage risks and identify new risks. Detailed risk reporting is provided on a quarterly basis to executives and the board on the status of the mitigating and/or monitoring plans for all enterprise risks. Management also reviews monthly updates on the company's progress in managing these risks. In 2024, we remain focused on defining and documenting a process for appropriate long-term monitoring and management of climate-related physical risks.

Risk management

On an annual basis, we complete an organization-wide risk review, which includes an evaluation of the effectiveness of mitigating controls and action plans, and the identification of new or emerging risks. Any risk that has the potential to significantly affect our ability to achieve our corporate objectives or strategic plan is considered an enterprise risk, is brought to the attention of executives and the board and is documented on our enterprise risk register. In 2023, we added an education session to our annual organization-wide risk review meetings on the approach to and importance of identifying climate-related risks and their potential impacts on our business. Approximately 50 individuals across Cameco attended this session. We describe our risk management activities, specific to each transition-related or physical risk on pages 33 to 34.

[11] Majority owned and operated facilities include Cigar Lake mine, McArthur River mine, Key Lake mill, Rabbit Lake mine and mill, Blind River refinery, Port Hope conversion facility, Cameco Fuel Manufacturing facilities (Port Hope and Coburg), Smith Ranch-Highland, and Crow Butte sites.

Climate risk integration

Our formal RMP applies to all risks facing the company, including climate-related risks. The RMP is designed to identify and monitor significant risks that may impact our business, strategic goals, and objectives. Our RMP is based on the ISO 31000 Risk Management guidelines. ISO 31000 provides guidance on risk management activities with internationally recognized practices and provides sound principles for effective management and governance of risks.

Examples of some of the activities that integrate a climate change lens into existing business practices:

Accountability: Climate change – physical and transitional risks impacting our financial performance or our reputation – is one of our enterprise risks and is owned by the Senior Vice-President and Chief Corporate Officer.

Physical risks as part of our RMP: Findings from the 2022 and 2023 climate physical risk assessments of our northern Saskatchewan and Ontario operations are included within the risk assessment and reporting processes of our overarching RMP as outlined above and also inform decision making regarding additional risk management practice implementation and climate adaptation actions where necessary.

Capital allocation: We integrated a climate action factor into the prioritization criteria and review method used by Cameco's internal Capital Allocation Committee to evaluate improvement projects. The climate action factor is a scaled score for projects that demonstrate GHG emission reduction potential. This enhancement ensures potential projects put forward to support the achievement of Cameco's climate targets receive appropriate funding consideration.

Carbon compliance costs: We updated our Life of Asset (LOA) plans to include projected carbon compliance costs for operations subject to an output-based performance system. Carbon pricing liabilities within LOA plans will be reviewed and revised during the regular LOA update cycle to increase the accuracy of the projections included as part of long-term strategic and financial performance planning.

Integrating decarbonization projects into our budgets: The site-by-site decarbonization pathways developed in 2023 (read more on page 53) were evaluated using the climate action factors within our Capital Allocation Committee process and also included the development of implementation timelines considering LOA plans for each operation. Our operational strategic plans, budgets, and business planning integrate decarbonization projects identified in the site-by-site decarbonization pathways.

III. Strategy

Our strategy: transition aligned and resilient

Cameco is a pure-play investment in the growing demand for nuclear energy, focused on taking advantage of the near-, medium-, and long-term growth occurring in our industry. We provide nuclear fuel products, services, and technologies across the fuel cycle, augmented by our investment in Westinghouse, supporting the generation of zero-carbon nuclear power.

Cameco's business strategy is to capture full-cycle value by:

- remaining disciplined in our contracting activity,
- building a balanced portfolio in accordance with our contracting framework,
- profitably producing from our tier-one assets and aligning our production decisions in all segments of the fuel cycle with contracted demand and customer needs,
- exploring other emerging opportunities within the nuclear power value chain, which align with our commitment to manage our business responsibly and sustainably, contribute to decarbonization, and help to provide secure and affordable energy, and
- being financially disciplined to allow us to execute our strategy, invest in new opportunities that are expected to add long-term value, and to self-manage risk.

We expect our strategy will allow us to increase long-term value for our stakeholders, and we plan to execute it with an emphasis on safety, people, and the environment. 2023 was another positive year for the nuclear energy industry. Demand for nuclear power, including support for existing reactors, continues to grow, catalyzed by the increasing recognition by policy makers and major industries that nuclear energy must play an important role in achieving the objectives of providing clean, secure, reliable, and affordable energy.

We recently announced our commitment to the Net Zero Nuclear initiative (read more on the sidebar), which is calling for collaboration among government, industry leaders and civil society to triple global nuclear capacity to help achieve carbon neutrality by 2050.

Evaluating resilience under different transition scenarios

There are multiple initiatives underway globally, including in Canada, that recognize the need to advance nuclear power as part of the transition to decarbonize the energy sector. We completed an initial qualitative transition scenario analysis in 2022 and updated our analysis in 2023 to reflect updates to the scenarios. Both analyses used the World Energy Outlook developed by the International Energy Agency (IEA). Nuclear energy is put forward in all three evaluated transition scenarios as a growing source of supply for electricity. Read more about work related to transition scenarios on the next page.

Advocating for nuclear energy

In 2023, we joined the Net Zero Nuclear initiative, a consortium of industry leaders and advocates that are building awareness of the importance of tripling nuclear capacity by 2050 as a way to help meet net zero goals.

The initiative focuses on solutions-based dialogue with governments to accelerate nuclear funding, research, and technology adoption to meet climate goals.

Through Net Zero Nuclear, we will work to build a broader understanding of the value of nuclear energy in providing global, zero-carbon energy.

Transition scenarios

At Cameco, we believe that maintaining and growing zero-carbon nuclear power generation must remain a central part of many countries', including Canada's, credible plans to achieving their commitments under the Paris Agreement. In 2022, we completed an initial qualitative transition scenario analysis, using the IEA World Energy Outlook 2022. In 2023, we updated our analysis with information from *World Energy Outlook 2023*. We examined three scenarios:

- **The Stated Policies Scenario (STEPS)** explores how the energy system may evolve if current policies are maintained without assuming aspirational or economy-wide targets are met unless they are backed up with sufficiently credible action plans. The scenario is designed based on a detailed review of the current policy landscape and a sector-by-sector review of measures that are adopted as of the end of August 2023.
- **The Announced Pledges Scenario (APS)** illustrates what could occur within the energy system if all existing targets made by governments worldwide are achieved in full and on time (e.g., Nationally Determined Contributions under the Paris Agreement and longer-term net zero). This scenario also includes pledges made by businesses and other stakeholders by the end of August 2023 where they support the ambitions set out by governments.
- **The Net Zero by 2050 (NZE)** describes changes required in the energy system to limit global warming to 1.5°C above pre-industrial levels in 2100, with at least 50% probability. Additionally, the scenario is designed to consider the achievement of key energy-related UN Sustainable Development Goals.

Learnings from transition scenarios

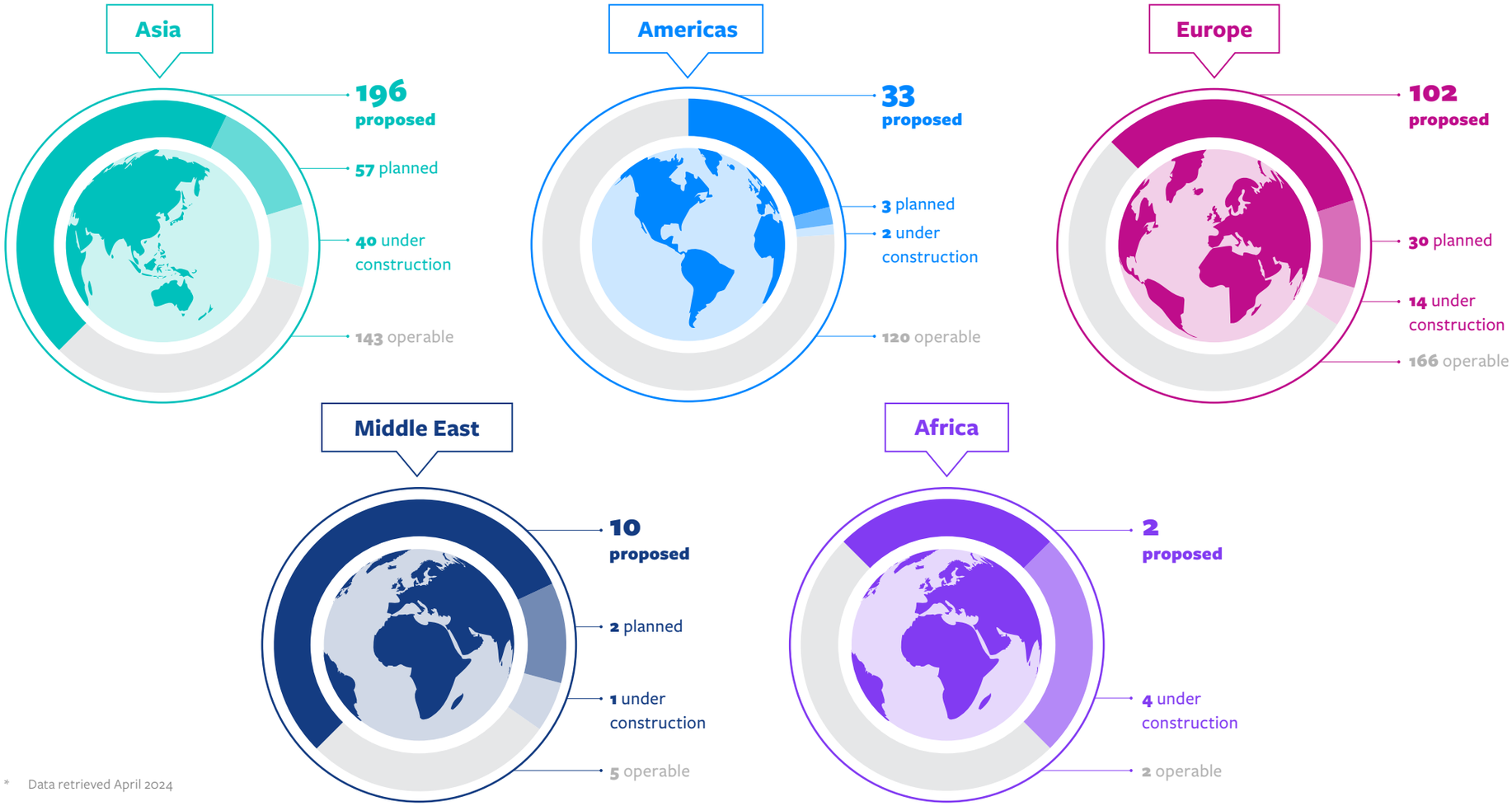
All scenarios examined projected demand growth for low-emissions electricity as part of the transition to a low carbon economy. All scenarios project an increase in nuclear power supply as part of the low-emissions electricity mix. Findings from the analysis highlighted growth in demand for zero-carbon baseload nuclear power generation as part of global shifts to decarbonizing energy, growing electrification, and energy security. These findings are consistent with the trends we are seeing unfold currently across our industry. Cameco has taken action to seize opportunities (read more on page 26) we see coming for the nuclear industry while acting in alignment with our vision and core values.

IEA SCENARIOS[12]	STEPS	APS	NZE
Increase in temperature by 2100	2.4 degrees	1.7 degrees	1.4 degrees
Increase demand for electricity by 2050	↑80% compared to 2022	↑120% compared to 2022	↑150% compared to 2022
Growth in electricity production from low-emissions sources by 2050 (from 2022 output levels)	4×	5.5×	7×
Key considerations around electricity	Significant growth in electricity demand across all scenarios is driven by: – Electrification of transportation, building heating and cooling, industrial processes, and increasing use of electrolysis to produce hydrogen – Increasing electrical demand in emerging markets and developing economies via growing populations, economic development, and rising incomes – 2035 advanced economies reach net-zero GHG emissions in the electricity sector, 2045 global net-zero emissions in the electricity sector reached		
Projected nuclear power capacity by 2050 (from 417 giga-watts [GW] in 2022)	620 GW	770 GW	>900 GW
Important considerations around nuclear within the scenarios	– Second largest source of low-emissions power worldwide currently – A changing policy landscape is creating opportunities for a nuclear comeback. China and other emerging market and developing economies represent opportunities for nuclear growth, whereas advanced economies are largely carrying out lifetime extensions and building new projects to offset unit retirements – Large-scale reactors remain the dominant form of nuclear power in all scenarios, including advanced reactor designs, but the development of and growing interest in small modular reactors increases the potential for nuclear long term		

[12] Content within the graphic is from the IEA World Energy Outlook 2023 unless otherwise referenced

Growing momentum for nuclear energy

There is growing recognition of the role nuclear must play in providing safe, affordable, zero-carbon baseload electricity generation to help achieve a low-carbon economy while being a reliable and secure energy source. According to the World Nuclear Association,* there are currently about 440 operable reactors, 61 reactors under construction, and a rapidly growing number of projects recently approved with many more planned. The demand for nuclear fuel products and services continues to improve, creating opportunities for Cameco.



* Data retrieved April 2024

Transition-related opportunities

As a nuclear fuel provider, we believe that increasing demand for low-emissions electricity driven by transportation, heating and industrial electrification, increasingly ambitious climate goals, and a growing focus on energy security will bring significant opportunities for our company. We believe Cameco is well positioned to take advantage of the opportunities outlined below.

We have defined time horizons for identified transition-related opportunities as follows: short-term (1-3 years), medium-term (3-10 years), and long-term (beyond 10 years). For the time horizon, the darkest blue highlights when we expect the impact to begin, and lighter blue is the "continuation of impact."

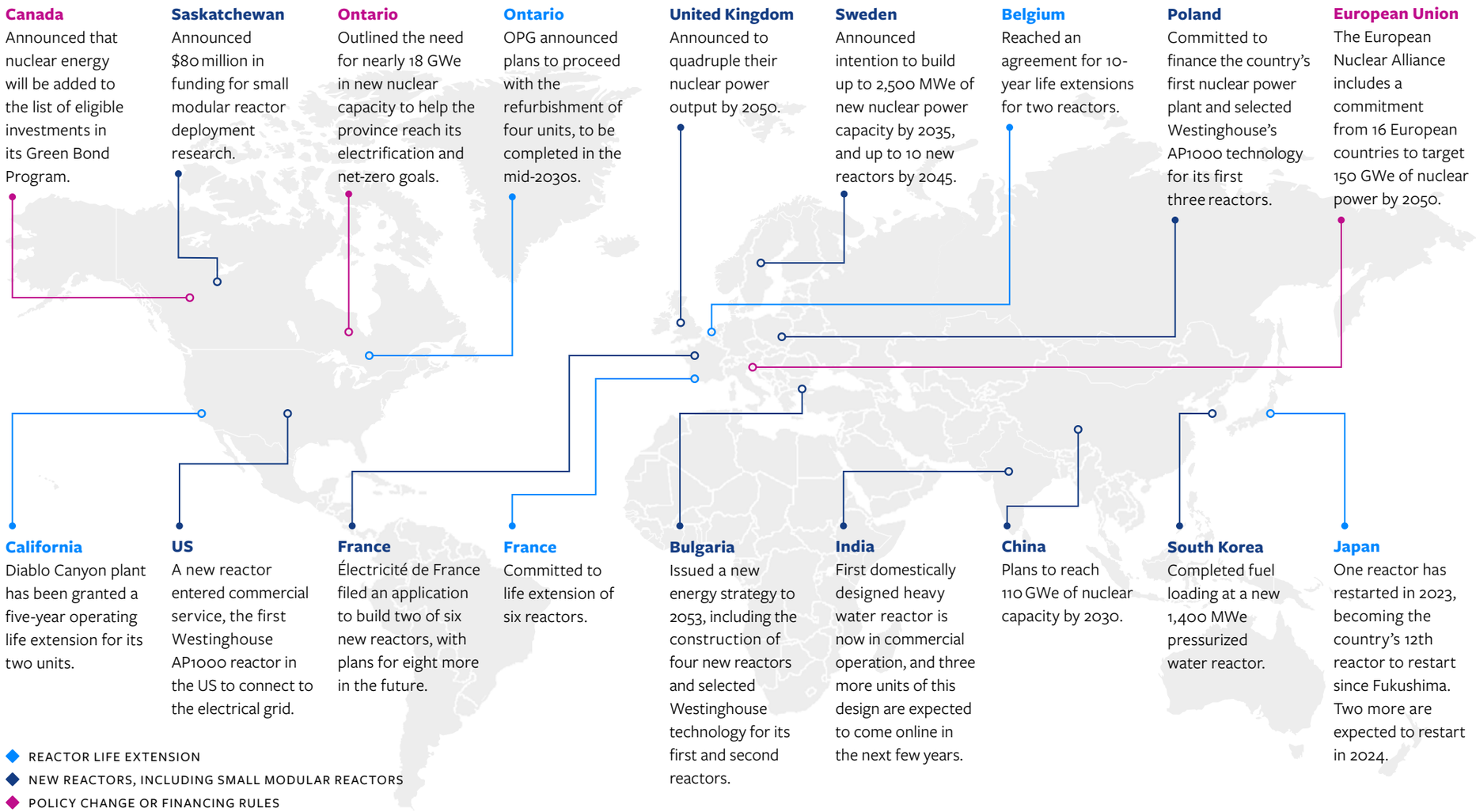
TREND	POTENTIAL IMPACT ON CAMECO	TIME HORIZON FOR THE IMPACT	HOW IS CAMECO POSITIONED TO TAKE ADVANTAGE OF IT?
Rising demand for electricity We are seeing buildings, transportation, and industry sectors replace technologies and processes that use fossil fuels with electrically powered equivalents. Rapid adoption of technologies that support electrification (including electric vehicles) creates increased demand for electricity, causing the share of electricity in global energy consumption to increase.	**↑ demand** Nuclear power is recognized as an option that can help satisfy growing electricity demand, which could increase demand for nuclear fuel products and services.		**Increasing uranium production** We are one of the largest global providers of uranium. To align with our contract portfolio and customer needs, we have restarted production at our McArthur River mine and Key Lake mill and are aiming to produce 18 million pounds in 2024. Additionally, in early 2024, we announced that we had demonstrated the economic feasibility of extracting the resources contained in an extension of the Cigar Lake orebody and thereby extended the estimated mine life to 2036.
Increased uptake of net-zero goals More than 140 countries have set net-zero targets and more than 9,000 businesses worldwide have committed to taking rigorous and immediate GHG emissions reduction action by 2030. Replacing fossil fuels with zero-carbon electricity is a key lever in meeting net-zero goals.	**↑ demand** Nuclear power is recognized by many countries and companies as an option to help achieve decarbonization goals, and which, if adopted, could increase demand for nuclear fuel products and services.		**Expanding our reach in the nuclear fuel cycle** Cameco provides nuclear fuel products, services and technologies across the fuel cycle, augmented by our investment in Westinghouse. We expect these activities to continue to support the expanding role of nuclear power as demand for zero-carbon baseload electricity continues in the years to come.
Support for nuclear energy as part of the energy transition We are seeing an increasing number of government and corporate announcements indicating growing support for nuclear energy, including: – A renewed commitment to nuclear energy (see recent announcements on page 28) driven by energy security concerns arising from ongoing energy crises being experienced in some parts of the world and amplified by geopolitical uncertainty. – Power producers and countries are considering life extensions for existing nuclear reactors. – Increasing support for small modular reactor (SMR) technology, especially in Canada. – Inclusion of nuclear energy as part of some recently published green taxonomies and Green Bond programs (for example, in Europe and in Canada).	**↑ demand** With this support, nuclear power is expected to play an increasing role in the global energy mix, which could increase global demand for nuclear fuel products and services.		**Participate in SMR growth** The size of the market opportunity will depend on which specific SMR designs achieve commercialization, how many units are deployed, and other factors. **Advocating for nuclear power** We joined the Net Zero Nuclear initiative, partnering with others to advocate tripling nuclear capacity to help achieve carbon neutrality by 2050. **Supporting electrification** To provide our perspective and incentivize electrification, we are a member of Electrifying Canada, a multi-year initiative of The Transition Accelerator, which aims to advance Canada's transition to a future energy system where net-zero electricity meets a much higher percentage of Canada's total energy needs in 2050 than it does today.

TREND	POTENTIAL IMPACT ON CAMECO	TIME HORIZON FOR THE IMPACT	HOW IS CAMECO POSITIONED TO TAKE ADVANTAGE OF IT?
Uranium considered a critical mineral for the energy transition Canada's, Ontario's, and Saskatchewan's Critical Minerals Strategies are aimed at increasing the supply of responsibly sourced critical minerals, including uranium. Some of the objectives of these strategies are to improve regulatory frameworks, accelerate project development, and to grow a labour force that can support this development.	**↑ demand** These strategies help create a favorable regulatory and policy environment for uranium mining and processing in Canada.		**Positioned for expansion** We welcome the development of these strategies and have provided input and feedback in their development. Cameco has a long history of positive relationships with local and Indigenous communities as well as local and federal governments that can further enhance our ability to execute expansion or develop new projects that align with our strategy.
Clean electricity regulation Canada's proposed Clean Electricity Regulations mandates reductions of GHG intensity of electricity generation across the country.	**↑ demand** If the proposed regulation is adopted, the shift to lower-emissions electricity across Canada can support or accelerate our ability to achieve our GHG reduction target.		**Supporting decarbonization** Our Low Carbon Transition Plan and site-by-site decarbonization pathways take into account the impact of a grid with lower GHG intensity.
Emerging interest in mineral reuse and recycling Critical mineral strategies in Canada and the US include enhanced mineral reuse and recycling efforts to ease supply-side constraints.	**↑ demand** The desire to recycle and reuse nuclear fuel can increase the demand for enriching services and other recycling technologies.		**Partnering for upgrading** Cameco is the commercial lead for the GLE project with a 49% interest. GLE has an agreement with the US Department of Energy (DOE) to upgrade depleted uranium tails leftover from the DOE's historic enrichment operations, which may help address the growing supply gap for Western nuclear fuel supplies and services.

SPOTLIGHT

Increasing global support for nuclear energy

In 2023, geopolitical events continued to deepen concerns about energy security. These concerns, coupled with the ongoing focus on climate goals, has generated what we believe is a transformative and durable momentum for the nuclear industry from both a demand and supply perspective. The graphic below highlights a selection of the policy and market developments that illustrate the growing support for nuclear energy.



Transition-related risks

We identify and assess climate-related transition risks through our annual risk management, strategic planning, and annual market review processes, as well as through meetings of the climate transition working group. We have identified the ways that the transition to a low-carbon economy could potentially impact our company and the risks in the table below were determined as the most significant. We report on these risks on a quarterly basis to executives and the board as part of the climate change enterprise risk review. Management also reviews monthly updates on the company's progress in managing these risks.

We disclose material risks to our company, including any applicable risks that could be characterized as climate-related risks, in our quarterly and annual reports, and in our AIF. The next section of this report describes the significant climate-related transition risks we have assessed to date. We have defined time horizons for identified transition-related risks to potentially impact Cameco as follows: short-term (1-3 years), medium-term (3-10 years), and long-term (beyond 10 years). For the time horizon, the darkest blue highlights when we expect the impact to begin, and lighter blue is the "continuation of impact."

TREND	POTENTIAL IMPACT ON CAMECO	TIME HORIZON FOR THE IMPACT	WHAT DO WE DO TO MITIGATE?
POLICY AND LEGAL			
More stringent GHG regulations Regulations for large emitters are set to become more stringent to align with Canada's commitment to net-zero by 2050.	**↑ cost (direct)** Carbon pricing exposure is expected to increase regulatory compliance costs and require increased capital expenditures for GHG emissions reduction projects.		– For all of our operations, we expect to manage some of the direct risk of increased operating costs through energy and GHG emissions reduction projects outlined in our Low Carbon Transition Plan and site-by-site decarbonization pathways.
Clean electricity regulation Canada published its proposed Clean Electricity Regulations (CER). With a relatively high-emitting electricity grid today, Saskatchewan is likely to be disproportionately impacted by the changes necessary to comply with the CER.	**↑ cost (indirect)** Cameco will likely experience indirect cost increases as electricity prices rise to support grid upgrades and changes required to meet this regulation.		– Across our operations, our energy efficiency projects (read more on page 54) help reduce our electricity consumption and therefore reduce our exposure to increased costs. – In Saskatchewan, we are regularly in contact with our electricity provider to understand how changing regulation will impact electricity costs in the short and long term.

TREND	POTENTIAL IMPACT ON CAMECO	TIME HORIZON FOR THE IMPACT	WHAT DO WE DO TO MITIGATE?
MARKET AND REPUTATION			
Trade-offs between increasing production and meeting GHG reduction targets Companies are facing trade-offs between their commitments to reduce GHG emissions and their need to increase activity to take advantage of favourable market conditions.	**↓ reputation** Increases in production beyond scenarios already considered may impact our ability to meet our GHG reduction targets which could negativity impact our reputation.		– Our targets were developed in the context of ongoing favourable market conditions and in alignment with our strategy to take advantage of transition-related opportunities. – We continue to evaluate opportunities to extend the life of our mines and to increase production. For example, we are currently undertaking work to extend the mine life at Cigar Lake. We plan to undertake the evaluation of the work and investment necessary to expand production at McArthur River/Key Lake. – We plan to review our GHG emissions reductions targets and key contributing assumptions in alignment with our business strategy as part of our planned Low Carbon Transition Plan three-year review cycle.
Investor and society expectations around climate Increasing expectations of investors, customers, employees, and stakeholders that companies are transparent and committed to ambitious climate action.	**↓ reputation** Lack of sufficient transparency and action on climate issues could result in reputational damage with local stakeholders and the investment community.		– When we set climate-related targets, we strive to do so only after giving ourselves appropriate time to do our due diligence to research and understand our options, relevant trends, and likely impacts to our business strategy, regulations, workers, customers, investors, and other stakeholders. – We report on climate action and emissions performance directly to federal and provincial governments as required by regulation, through this report, and through various third-party rating organizations (e.g., CDP, MSCI, and MAC TSM Climate Change Protocol).
TECHNOLOGY			
Pace of development and access to technology Access to appropriate technologies at suitable commercial deployment readiness levels and prices will be critical for industrial decarbonization target achievement.	**↑ cost** The failure of emerging technologies to reach commercialization or an appropriate price could delay or negatively impact our ability to achieve our GHG emissions reductions goals.		– Our site-by-site decarbonization pathways contain specific actions to help reach our 2030 target. – Beyond 2030, we will likely require transformational projects that will require currently emerging technologies, such as hydrogen feedstock retrofits and/or nuclear microreactors, to be commercially available at suitable price points. Without sufficient technology availability, we will likely be more reliant on the carbon economy (i.e., carbon offsets and/or credit purchases) to help reach our net-zero ambition.

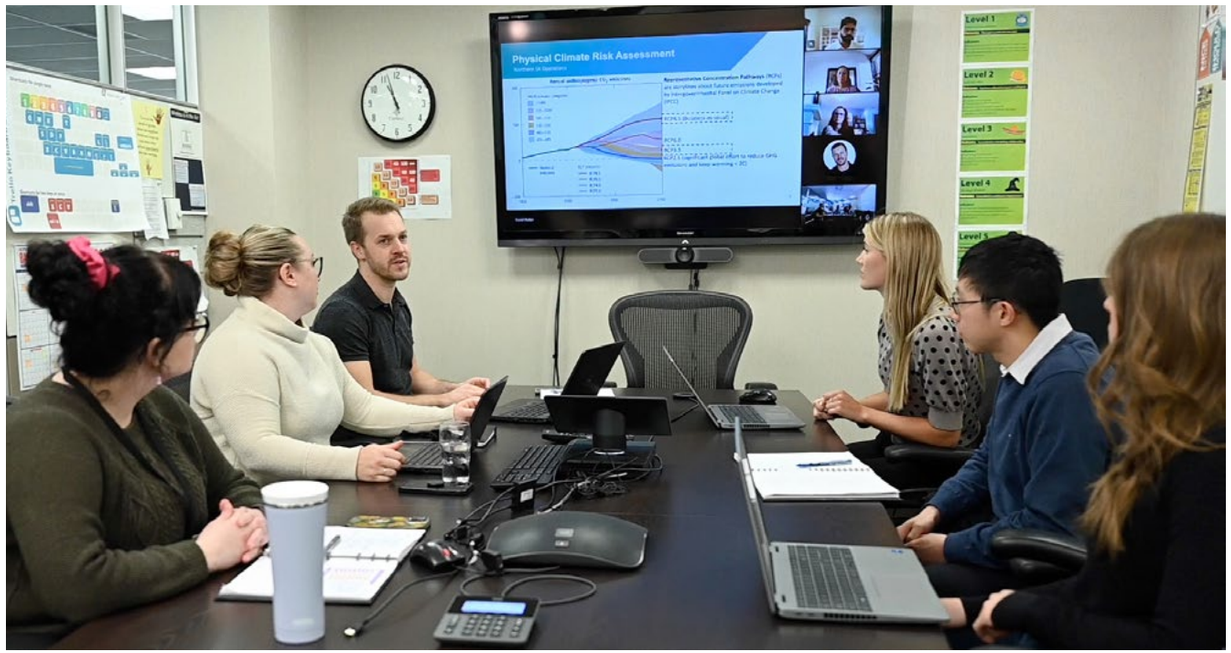
Physical scenarios and physical risks

Physical scenarios

At Cameco, we use climate scenarios to better understand the physical risks impacting us today and those that could impact us in the future. Climate scenarios are not forecasts or projections, but instead offer a plausible description of a possible future state of the world. Scenarios provide alternative views of future conditions and are commonly used to understand climate change impacts given the number of variables and the high level of uncertainty involved.

In order to provide comparable climate information, we use globally recognized climate scenarios developed by the Intergovernmental Panel on Climate Change (IPCC). The IPCC scenarios and models combine findings from thousands of peer-reviewed studies and require the collaboration of hundreds of authors. The IPCC publishes new information every six to seven years.

We want to use the most up-to-date and relevant climate information available. In 2022, we used Representative Concentration Pathways (RCPs)[15] from the IPCC Fifth Assessment Report (AR5) and, in 2023, we used similar Shared Socio-economic Pathways (SSPs) projections from the recently published IPCC Sixth Assessment Report (AR6). Both RCPs and SSPs are designed to help us understand what the state of the climate in the future could look like depending on a range of factors, including global levels of GHGs, population growth, and land use. SSPs, as their name suggests, have improved on climate modeling processes used in RCPs by further integrating social and economic considerations, such as rates of economic development, climate policy, and societal choices regarding GHG emissions reductions.



Scope of the assessment

In 2023, we assessed physical risks to our Fuel Services Division (Blind River Refinery, Port Hope Conversion Facility, and Cameco Fuel Manufacturing [Cobourg and Port Hope]) in Ontario. This project builds on our initial effort completed for our northern Saskatchewan operations (Cigar Lake, McArthur River, Key Lake and Rabbit Lake) in 2022. We plan to complete physical risk assessments at all our majority-owned and operated sites by 2026.

Time horizon

For both projects, we analyzed projected changes in relevant climate variables using two different emissions scenarios and two-time horizons: 2040s (2036-2055) and 2080s (2076-2095). Climate variables are the factors that can exacerbate existing or new climate hazards (e.g., extreme rainfall increases flood hazard, heatwave duration increases heat stress, and drought increases wildfire risk).

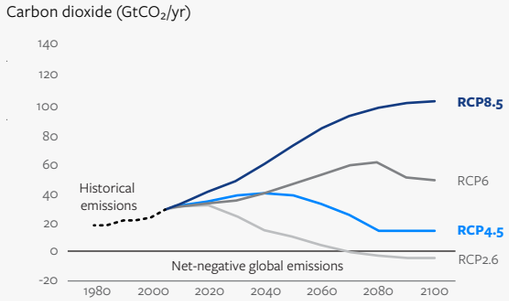
Focus

Risk identification, assessment, and management discussions resulting from these projects are initially focused on preparing for impacts that could be experienced in the short-term (i.e., today – 2035) and medium-term (i.e., 2040s). Long-term (i.e., 2080s) projected potential impacts are considered more uncertain given the influence global GHG emissions reductions up to 2050 could have on temperature change and other climate hazards. Cameco considers potential long-term physical climate change as part of our routine updates to strategic operational plans and site decommissioning requirements. Time-horizons for physical climate risks are distinct from time-horizons for transition-related risks and opportunities to align with the timelines for projected climate change, the useable life of our infrastructure assets, and our site decommissioning requirements. See a list of detailed physical climate risks for our northern Saskatchewan and Ontario operations on pages 33-34.

Physical scenarios chosen

To consider the highest range of projected climate change as part of our risk assessment, in both cases, we chose to include the highest emission scenario (RCP 8.5 and SSP5-8.5). We continue to focus our risk management discussions on these scenarios to verify our assets and activities are prepared for broader range of possible impacts.

Future annual emissions of CO_2 across illustrative scenarios in IPCC AR5



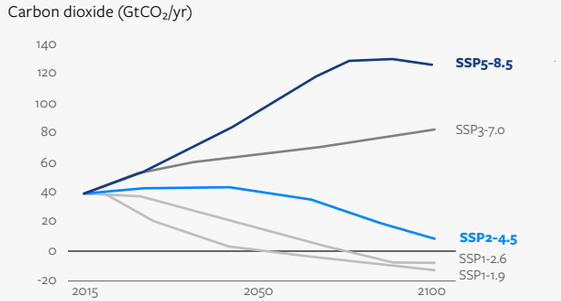
Dark blue (8.5) High emissions scenario chosen by Cameco
Light blue (4.5) Moderate emissions scenario chosen by Cameco

To evaluate impacts on our northern Saskatchewan operations, we used the following RCPs:

RCP 4.5, which is viewed as a moderate climate change scenario and a potential ~2°C pathway, in-line with the Paris Agreement.

RCP 8.5, which is often used to represent a higher emissions or business-as-usual climate change scenario where no additional emissions reductions policies are enacted.

Future annual emissions of CO_2 across illustrative scenarios in IPCC AR6



Dark blue (8.5) High emissions scenario chosen by Cameco
Light blue (4.5) Moderate emissions scenario chosen by Cameco

To evaluate impacts on our Ontario operations, we used the following (similar) SSPs:

SSP2-4.5, called "middle of the road", is characterized by moderate emissions and the continuation of current climate policies and development patterns. Global surface temperature change in this scenario is likely to be above the 2°C limit targeted by the Paris Agreement.

SSP5-8.5, called "fossil-fueled development", is characterized by high emissions levels, similar to RCP 8.5. Global surface temperature rise in this scenario in 2100 is likely to be more than 4°C, compared to the pre-industrial era.[13]

Learnings from scenarios

Studying the impacts of physical climate change scenarios on our northern Saskatchewan and Ontario operations allowed us to refine our understanding of current and future physical risks (table on next page). We have developed a four-step process to conduct climate-related physical risk assessments. We intend to use this process across all our majority-owned and operated sites by the end of 2026. We will use findings from these studies to identify where our existing climate-related acute and chronic risk management practices are expected to remain sufficient in the years to come and where adaptation and other enhancements may be required.

[13] Lee, J.-Y., J. Marotzke, G. Bala, L. Cao, S. Corti, J.P. Dunne, F. Engelbrecht, E. Fischer, J.C. Fyfe, C. Jones, A. Maycock, J. Mutemi, O. Ndiaye, S. Panickal, and T. Zhou, 2021: Future Global Climate: Scenario-Based Projections and Near-Term Information. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA.

Physical risks

To support business continuity and protect our assets, operations, and workers, we consider physical risks resulting from climate change that are acute (event driven) or chronic (longer-term shifts in climate patterns). We disclose material risks to our company, including any applicable risks that could be characterized as climate-related risks, in our quarterly and annual MD&A, and in our AIF. Climate scenario analysis has been an important tool in refining our understanding of the impacts changing climate conditions could have for Cameco in the future. However, it is important to note that managing risks posed by climate hazards is not new to our operations. We have historically considered relevant climate hazards as part of our operational risk management plans and continue to do so.

We have defined time horizons for identified physical-related risks to potentially impact Cameco as follows: short-term (today – 2035), medium-term (2040s, 2036-2055), and long-term (2080s, 2076-2095). For the time horizon, the darkest blue highlights when we expect the impact to begin, and lighter blue is the "continuation of impact."

The table below describes the most significant climate-related physical risks we have assessed to date:

Mining operations in northern Saskatchewan

Increased precipitation and heavy rainfall

PHYSICAL RISK TYPE
- Chronic
- Acute

POTENTIAL TIME-HORIZON FOR IMPACT

POTENTIAL IMPACT

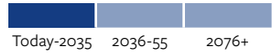
An increase in average summer precipitation or winter snowfall, and/or heavy rainfall events could result in:
- Changes in ground conditions such as erosion or temporary flooding of low-lying areas, causing damage to buried infrastructure, which could impact production or increase site maintenance requirements and costs.
- Capacity exceedance of water and tailings management infrastructure, which could result in environmental damage, increased costs, and/or regulatory action.

MITIGATION
- Our northern Saskatchewan sites include a combination of gravel and paved surfaces. We design the slope of both surface types with water management, including rainfall and snow accumulation and melt, in mind. Surface water is directed toward water catchment systems to support safe collection, treatment, and release.
- We maintain the capacity to contain a 24-hour probable maximum precipitation event in all of our tailing facilities. This exceeds the design storm recommended by the Canadian Dam Association based on the rated consequence of failure for our facilities.
- Our active tailings management facilities are below ground (in-pit) and therefore are not susceptible to catastrophic failures that could release tailings solids or liquids to the surrounding environment (see page 45 for further details).

Wildfires

PHYSICAL RISK TYPE
- Acute

POTENTIAL TIME-HORIZON FOR IMPACT



POTENTIAL IMPACT

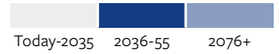
More frequent and severe fires can:
- Directly impact our sites or personnel.
- Indirectly impact key supply corridors (e.g., power supply, supply of materials).
- Indirectly impact the ability of workers to reach our sites (if wildfires are impacting their communities).

MITIGATION
- We maintain buffer zones (by removing vegetation) around our facility infrastructure.
- We have on-site fire detection and suppression capabilities (e.g., fire water lines, firefighter equipment, water sources, fire extinguishers, facility fire suppression systems, and fire paneling).
- Our emergency response includes personnel training for wildfire fighting, and use of off-site resources from the province and other neighbouring facilities.

Higher average temperatures, more extreme heat and longer heatwaves

PHYSICAL RISK TYPE
- Chronic
- Acute

POTENTIAL TIME-HORIZON FOR IMPACT



POTENTIAL IMPACT

More extreme heat, longer heatwaves, and higher summer temperatures can:
- Lead to heat stress or injury/illness in workers.
- Increase operating and capital costs to manage stress in existing cooling systems and/or from the addition of new cooling requirements to support continued worker safety and/or operational reliability.

MITIGATION
- We provide access to climate-controlled environments (permanent facilities and temporary facilities such as jobsite trailers) for project work and/or vehicles for workers exposed to extreme temperatures (heat or cold).
- We have procedures and instructions on how to mitigate the potential impact of heat and cold stress on workers.

Fuel services facilities in Ontario

Increased seasonal precipitation and increased heavy precipitation events

PHYSICAL RISK TYPE

- Chronic
- Acute

POTENTIAL TIME-HORIZON FOR IMPACT

POTENTIAL IMPACT

An increase in average seasonal precipitation (e.g., rainfall in summer, snow in winter) and/or heavy precipitation events could result in:

- Potential interruptions to production at affected facilities.
- Damage to site infrastructure and/or stored materials.
- Changes in ground conditions, damaging buried infrastructure.
- Capacity exceedance of water infrastructure, which could result in environmental damage, increased costs, and/or regulatory action.
- Increased site maintenance requirements and costs.

MITIGATION

For all facilities in Ontario

- Stormwater management is often a shared responsibility combining both Cameco's privately owned and operated assets and municipal assets. Generally, our approach includes graded surfaces that move surface water or snowmelt to catch basins then to underground piping for collection, treatment, testing, and safe discharge.
- We have private snow management contractors who add support when a snow or ice event is beyond the management capacity of routine site clearing and salting practices performed by our grounds teams.

Port Hope conversion facility

- We completed inspections of the stormwater system identifying improvements, which are planned and scheduled through on-going annual maintenance programs and/or capital programs.
- We can quickly deploy temporary flood barriers using fillable bladders to help prevent surface water from reaching our buildings in high water scenarios from nearby rivers and Lake Ontario.
- As a further layer of protection, a barrier is being constructed to protect from flooding of the Ganaraska River.

Cameco Fuel Manufacturing – Cobourg facility

- The municipality recently upgraded underground stormwater piping, catch basins, and site grading to better prepare the location for heavy rain events.

Blind River refinery

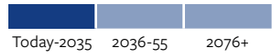
- We have installed a berm outside the refinery perimeter to mitigate the impact in the unlikely event of a worst-case Mississagi river flood scenario.

Higher average temperatures and more extreme heat and high humidex[14] days

PHYSICAL RISK TYPE

- Chronic
- Acute

POTENTIAL TIME-HORIZON FOR IMPACT



POTENTIAL IMPACT

Higher average temperatures, more extreme heat (e.g., days above 30°C), and more high humidex days (e.g., > 30) could:

- Lead to heat stress or injury/illness in workers and/or lost productivity.
- Increase operating and capital costs to reduce stress in existing cooling systems and/or from the addition of new cooling requirements to support continued worker safety and/or operational reliability and productivity levels.
- Increase demand on regional power supply infrastructure via increasing cooling-related loads, creating the risk of future power reliability challenges.

MITIGATION

- We provide access to climate-controlled environments (permanent facilities or temporary facilities such as jobsite trailers) for project work and/or vehicles for workers exposed to extreme temperatures (heat or cold).
- Our heat stress prevention program includes a series of site-specific procedures and work instructions based on occupational heath and safety regulations and best practices.
- Workplace temperature monitoring and heat stress prevention activities occur at minimum May 1 to October 1, annually.

[14] The Humidex was developed by the Meteorological Service of Canada to describe how hot and humid weather feels to the average person. It is derived by combining temperature and humidity values into one number.

SPOTLIGHT

Understanding the potential impacts of climate change on our operational locations in Canada

In 2022 and 2023, we completed physical risk assessments across Cameco's mining and milling operations in northern Saskatchewan and our fuel services operations in Ontario to not only evaluate where our workforce and infrastructure could be vulnerable to changes in climate, but also to evaluate climate risk adaptation options. The assessments involved approximately 70 individuals across our sites. Through both projects we gathered an initial understanding of the potential impacts of climate change on our operational locations. Given the success of the process and outcomes, we plan to continue to use this approach to complete a climate-related physical risk assessment at our remaining majority-owned and operated facilities by the end of 2026.

STEP 1

Climate vulnerability assessment

Cameco subject matter experts:

- ✓ Created a list of facility infrastructure components (e.g., buildings, processing equipment, pipelines, pumping stations, tailings facilities).
- ✓ Qualitatively assessed climate vulnerability for each component, based on how significantly a climate variable (e.g., extreme heat, precipitation) interacts with each of them.

STEP 2

Climate summaries

A third-party expert:

- ✓ Used a 20-year period of observed climate data to model likely climatic changes for 2040s and 2080s under two scenarios: RCP 4.5 and RCP 8.5 (northern Saskatchewan) and SSP2-4.5 or SSP5-8.5 (Ontario). Read more on page 32.

STEP 3

Risk assessment

~70 internal subject matter experts worked with a third-party expert team to:

- ✓ Combine information from step 1 and step 2 to define potential risks to our assets and workforce along with their triggers.
- ✓ Identify existing controls and evaluate for adequacy under projected future climate conditions.
- ✓ Assess inherent and residual risk levels, in accordance with our Risk Management Program.

STEP 4

Risk management and adaptation pathways

We plan to:

- → Identify adaptation measures to address significant risks.
- → Develop a decision-making process for prioritizing adaptation measures.

Adaptation measures may include gathering more information, developing or adjusting policies, assessing insurance needs, or investing in operational processes or modifications to our physical assets.

RESULTS 5

Northern Saskatchewan operations

We have completed assessments for:

- ✓ Cigar Lake mine
- ✓ McArthur River mine
- ✓ Key Lake mill
- ✓ Rabbit Lake mill and mine

Ontario operations

We have completed assessments for:

- ✓ Blind River Refinery
- ✓ Port Hope Conversion Facility
- ✓ Cameco Fuel Manufacturing (Cobourg and Port Hope)

Initial findings indicate that changes to precipitation, average annual and seasonal high temperatures, and wildfire patterns are the most prominent risk triggers. Read details about each of the physical risks on pages 33-34.

6

Next steps

We plan to:

- → Refine the assessments for the highest-scoring risks.
- → Develop and implement site-specific adaptation action plans for assessed operations.
- → Complete physical risk assessments for all our majority owned and operated facilities.
- → Define and document a process for appropriate long-term monitoring and management of these physical risks.

IV. Metrics and targets

Metrics and targets are important tools to measure and monitor progress. We are focused on better understanding the impact of climate-related risks and opportunities and reducing our GHG emissions.

Climate-related metrics

We have tracked and reported GHG emissions for more than two decades. Our performance on Scope 1 and Scope 2 emissions is on page 50.

In 2023, we continued to work to better understand our total Scope 3 emissions, our most significant Scope 3 categories and to identify the companies in our value chain that make the largest contribution. We have included our estimated total Scope 3 emissions value and quantification method in this report (see page 51 for details). Where practical, we also started to engage with key value chain partners and suppliers on understanding their energy and emissions management capabilities and identifying Scope 3 emissions reduction opportunities.

Climate-related targets

We have a suite of ESG targets that focus on our priority sustainability topics on page 15.

Net-zero ambition and 30 by 30

We have set a target to reduce our Scope 1 and Scope 2 GHG emissions by 30% by 2030, from 2015 levels, demonstrates our commitment to doing our part to help achieve the ambitions of the Paris Agreement to, "limit global temperature rise to well below 2 degrees Celsius (°C), above pre-industrial levels, and to pursue efforts to limit global temperature rise even further to 1.5°C" in addition to the Government of Canada's commitments to the Agreement.

Scope 3 emissions

We have set a target to publish our total Scope 3 GHG emissions value and method for quantification in 2024. Read more about our Scope 3 emissions work on page 51. Publishing our Scope 3 emission value is tied to executive and employee compensation for 2024.

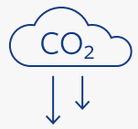
Physical risks

We plan to complete physical climate risk assessments for all our majority-owned and operated facilities by the end of 2026.

We are engaging our suppliers and value chain partners to identify potential Scope 3 **GHG emissions reduction opportunities.**

Avoided emissions

Over our 35 years of operations, we have sold more than 954 million pounds uranium (U_3O_8), enabling our customers to generate over 15,000 TWh[15] of zero-carbon nuclear power. Based on calculations using IPCC and ECCC data and methodologies, we estimate generating that amount of electricity from nuclear power instead of fossil fuels has avoided:



7-13 billion tonnes of CO_2e, up to 20 times Canada's annual GHG emissions[16].

[15] Based on 1 TWh per 24,000kg/53,000 lbs. natural U, from https://world-nuclear.org/information-library/nuclear-fuel-cycle/introduction/nuclear-fuel-cycle-overview and 0.848 lb U/lb U_3O_8.

[16] CO_2e calculation based on 490-820g CO_2e/kWh, from IPCC AR5 Table A.III.2 for natural gas and coal power available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf and national annual emissions based on 0.7-0.8 billion tonnes per year since 2005, from https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html.

How we plan to achieve our targets

30 by 30: Site-by-site decarbonization pathways

In 2023, we created tailored decarbonization pathways for each of our operationally controlled sites as part of our climate targets suite and our compensable targets package for executive and employees. These site-by-site decarbonization pathways support the integration of high-impact decarbonization projects into operational strategic plans, budgets, and business planning to help achieve our 30 by 30 target on schedule (see page 53 for details).

Beyond 2030

Cameco recognizes the increasing urgency surrounding achieving a net-zero economy by 2050 or earlier in developed countries given climate change projections. Although we are looking at options towards the achievement of our longer-term net-zero ambition, we have not yet fixed a timeline for that ambition. In our 2021 ESG Report, we had noted that our Low Carbon Transition Plan would determine appropriate timing for Cameco to target achieving net-zero. Through our work to develop this plan, we identified two key challenges to setting a credible timeline for our net-zero ambition: technology availability and uncertainty surrounding drivers of future GHG emissions-related activities.

Our corporate-wide Scope 1 and Scope 2 GHG emissions are largely related to our mining and milling operations in northern Saskatchewan. Within these operations, Scope 1 emissions primarily relate to the use of propane for heating buildings and our underground mines. Our identified decarbonization themes of efficiency, electrification, and waste to value have a role to play in reducing these emissions. Cameco's Scope 2 emissions totals are sensitive to the annual emissions intensity of the electricity provider for our province, SaskPower. Currently, SaskPower's electrical grid is powered by fossil-based generation (78%).

SaskPower has set public targets to reduce GHG emissions by 50% by 2030, from a 2005 baseline, and to reach net-zero by 2050. However, the infrastructure and technology to support deep decarbonization of our remote industrial heating and electrical needs in a cost competitive manner and with the required reliability of traditional fossil-based heating and electricity does not yet exist. Recent rapid development of fuel switching opportunities for industrial heating through SMRs and hydrogen, for example, are promising and we are currently investigating these options, but the time-horizons for commercial use are uncertain. We plan to continue with our due diligence and investigate these and other low-carbon fuel switching opportunities.

Setting a credible timeline for Cameco to achieve net-zero is also complicated by the nature of our business. The current mineral reserve life of our operating mines ranges from 2036 to 2045. However, we expect our business to evolve beyond the current mineral reserve life of our operating mines alongside forecasted market demand and as we pursue other emerging opportunities aligned with our strategy, which makes it difficult to determine the drivers of our future GHG emissions-related activities.

We expect to add a timeline to our longer-term net-zero ambition when our immediate decarbonization plans to achieve our 30 by 30 target are sufficiently underway and we better understand what decarbonization options could be available to support the expected evolution of our business on our journey to net-zero beyond 2030.

ENVIRONMENT

Demonstrating environmental stewardship

29.4%
of Sweden's electricity was generated from nuclear in 2022

Stockholm, Sweden
59.3293° N, 18.0686° E

2023

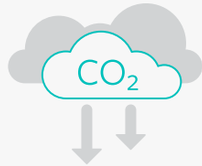
Environment highlights

We recognize and embrace our responsibility to manage our activities with care for the protection of environmental resources. At Cameco, our stewardship is guided by established policies and programs designed to minimize our impacts on air, land, and water, and to safeguard the biodiversity of surrounding ecosystems.

16%
reduction in water withdrawal, compared to 2022

>250
lights converted to LED fixtures at our McArthur River/Key Lake operations

3,200
unique species have been observed within the vicinity of our operations in Canada, the US, and Kazakhstan as part of a biodiversity inventory assessment conducted in 2023



160
decarbonization project ideas were received from across the organization and used to inform our site-by-site decarbonization pathways

Water

WHY IT MATTERS TO CAMECO

Responsible water management is critical to our business. We recognize the importance of preserving this resource for the Indigenous Peoples and local communities we share it with today.

Our approach

We work with regulators, governments, researchers, and communities to understand possible impacts, develop best practices, and make changes that mitigate potential impacts on the environment. At our sites and facilities, we have water management and monitoring programs that apply to all withdrawals and discharges, and we tailor our water management practices to local uses and conditions. As an organization, water security is not a significant risk since we only withdraw freshwater in areas of low baseline water stress[17].

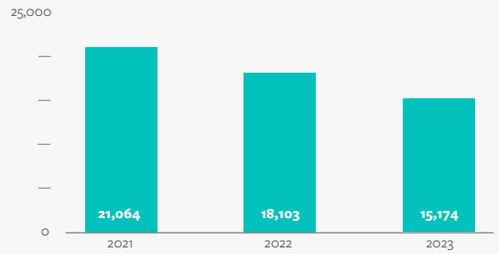
Water management in Saskatchewan

Although northern Saskatchewan is considered a region of low baseline water stress[17], and our uranium mining and milling processes in the area do not require large volumes of freshwater withdrawal, we must still manage water to operate our facilities safely and efficiently. We focus on monitoring and managing our water intakes and water discharges, and on developing practices that support the continued protection of the environment.

OUR PERFORMANCE

Water withdrawal

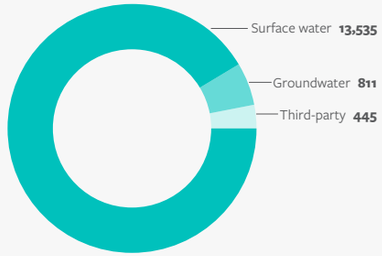
(includes water intercepted) thousand m³



Total water withdrawal decreased by 16% in 2023, compared to 2022. This reduction is partially due to commissioning a new closed-loop cooling water system at our Port Hope conversion facility (details on page 42). Note: Water withdrawn includes water we intercept and manage. The vast majority of water managed by our Saskatchewan facilities is intercepted as part of our mining operations through mine dewatering or from the operation of our tailings management facilities.

2023 water discharges

thousand m³



Note: Discharges to third-party includes municipal water treatment plants, public or private utilities, and other organizations involved in the provision, transport, treatment, disposal, or use of water effluent. Water withdrawn includes water we intercept and manage.

Water sources and uses

The vast majority of water (groundwater, surface water, or precipitation) managed by our Saskatchewan facilities is not intentionally withdrawn for mining use but instead intercepted as part of our mining operations through mine dewatering or from the operation of our tailings management facilities. Wherever possible, we use this intercepted water to support our operational water requirements. For example, at our McArthur River mine, we collect clean groundwater that comes into the mine and use this water for industrial purposes both underground and on-surface at the mine.

Where necessary, additional water is withdrawn from local surface water bodies or groundwater sources for specific purposes, such as for potable water and industrial uses like jet boring. Water withdrawn for these purposes is a very small proportion (<10%) of the total water we manage in northern Saskatchewan. We are currently studying how even more of the water needed for the jet boring mining method at our Cigar Lake mine could be recycled and re-used.

We only withdraw freshwater in areas of **low baseline water stress**.

[17] Cameco uses World Resources Institute's Aqueduct Water Risk Atlas to in defining areas of water stress: https://www.wri.org/aqueduct

Water discharges

At Cameco, we carefully manage our treated water discharges to keep potential risks to human health and the environment as low as reasonably achievable and to comply with all legal and regulatory requirements. To protect people and the environment, we have implemented management tools consistent with our overall management approach, which include:

Inflow reduction

In our underground mines in northern Saskatchewan, we need to actively collect water that flows into the underground mines from the surrounding rock structures and pump it out to maintain safe mining conditions. Some techniques we use to minimize the amount of water that flows into the mines include ground freezing (circulating a brine that helps to freeze the ground around the ore), pressure grouting (injecting grout into the voids of the rock), and shotcrete (spraying concrete on the walls of the mine). These techniques also reduce the risk of an uncontrolled inflow of groundwater. By reducing the amount of water that comes into the mine, we reduce the amount of water we need to manage, treat, and subsequently, release.

Water segregation and diversion

The best way to keep water clean is to keep it segregated from our processes. Where practical, we divert water or otherwise keep it from coming into contact with radioactive materials or mineralized rock. By doing this, we reduce the amount of water we handle and ultimately need to treat and release.

Water treatment

Water is treated and released in accordance with our operating approvals. We use conventional water treatment processes to make sure water is safe before it is released to the environment. We have made significant investments to improve the quality of water released from our Saskatchewan mining and milling operations to surface water bodies.

Discharge monitoring

We have monitoring programs to verify that human health and the environment remain protected in the vicinity of our operations. We adhere to regulatory requirements from the Canadian Nuclear Safety Commission, Saskatchewan Ministry of Environment, and Environment and Climate Change Canada. These authorities set the levels for a variety of substances that are allowed in the treated water that is released. To meet these requirements, we use either an automatic interval sampling system or a batch pond release method.

The automatic interval sampling system involves collecting samples and monitoring the continuous discharge of treated water, which is subject to strict and routine testing. The batch pond release method involves storing treated water in a holding pond and testing the water quality. If it meets the required quality, it is released; if it does not, then we can send the batch of water for treatment again. In 2023, Cameco facilities did not report any non-compliance incidents associated with water quality permits, standards, and regulations.

IN FOCUS

Improving cooling water management

In 2023, we completed the installation of a new closed-loop cooling water system at our Port Hope conversion facility to replace the existing open loop system. Rather than using harbour water for process cooling and then discharging it back to the harbour, the new system circulates water in a closed cycle and eliminates the need to use surface water for once-through cooling purposes.[17.1] After two years of construction, the system became operational in August 2023.

Watershed stewardship

As part of our environmental monitoring programs, we take more than 22,000 samples related to water quality each year. We collect water samples at or immediately downstream of our operations (near-field), in close proximities to our operations (mid-field), and at locations at a further distance (five to ten kilometres) from our operations (far-field). These samples are sent for testing for different chemicals and other indicators of quality to both internal laboratories and an accredited third-party facility.

Each year, we take more than **22,000** samples related to water quality.

The laboratories use a variety of analytical techniques, including inductively coupled plasma-mass spectroscopy, known for its ability to detect very low concentrations of most elements in the periodic table in either a liquid or solid sample.

We also maintain a groundwater monitoring program. We collect groundwater samples in the vicinity of our operations and monitor for changes in composition. Every five years, environmental monitoring data, including groundwater, is assessed in detail and compared to previous predictions to validate that the environment remains protected. Read more about our environmental risk assessments.

In addition to our own programs, independent community-based environmental monitoring programs in northern Saskatchewan (read more on page 62) provide opportunities for community members to participate in and collect environmental samples. These programs have shown that water remains safe to drink and that traditionally harvested foods remain safe to eat.

Water management in our fuel services division

The four facilities in our Fuel Services Division manage water from a combination of municipal water sources, surface water from nearby waterbodies, groundwater, and precipitation. Our Fuel Services Division uses water for steam generation, fire protection and emergency response, process and laboratory facility uses, drinking water, sanitary services, and cooling purposes. We also extract groundwater as part of environmental remediation.

A large proportion of the water we withdraw is used as non-contact cooling water (water that is used for cooling and that does not come into direct contact with any solids, liquids or gases used in our processes, or finished products). Cooling water is returned to the environment or the municipal sanitary sewer system. Out of our four Fuel Services Division facilities, our Port Hope conversion facility requires the most water for the once-through non-contact cooling water. To improve water management at this facility, we have transitioned to a new closed loop cooling water system (see sidebar to read more). Learn more about our water management in our Fuel Services Division.

Water management in the US

In our US operations, we mine using in situ recovery (ISR) methods. These operations do not require large volumes of fresh water for mining activities. At our US operations, we primarily manage brackish, non-potable groundwater for mining operations and active groundwater restoration. Read more about our water management practices in the US.

17.1 This description of the closed-loop cooling water system at our Port Hope Conversion Facility has been revised to correct an error in the statement that originally appeared in the report. (June 28, 2024)

Tailings and mining waste management

WHY IT MATTERS TO CAMECO

Tailings are an inevitable byproduct of most mining activities. Responsible and safe management of mining waste streams is critical to protecting the environment as well as the safety of our workers, operations and communities. To strengthen our tailings management approach, we seek to apply lessons learned from industry incidents and are committed to continuous improvement.

Operational context

Mining at our operations in northern Saskatchewan requires the excavation of rock to access the uranium-bearing ore. This waste rock is classified as either mineralized or non-mineralized. Waste rock generated during underground mining is moved to the surface for storage (see page 48). Each rock type is carefully segregated for both operational and post-closure management effectiveness. Our operations in northern Saskatchewan are currently underground, resulting in a low waste rock to ore production ratio.

Milling of uranium ore produces tailings, which are primarily composed of the residual rock left after the uranium is recovered, mineral precipitates, sewage, and minor amounts of processing chemicals. These tailings are safely stored on-site within engineered tailings management facilities. The annual tonnage of tailings produced is dependent on the ore grade and the production rate. The high uranium grade of our mines in northern Saskatchewan means we obtain more uranium per tonne of rock processed than low-grade facilities, resulting in lower amounts of tailings produced compared to other mining operations.

Tailings management is relevant only to our Canadian operations because the in situ recovery method used in our US operations does not produce tailings or waste rock. We have four tailings facilities in Saskatchewan, two at our Key Lake site and two at our Rabbit Lake site. Both Key Lake and Rabbit Lake have one active in-pit tailings facility (in-pit facility) and one above-ground tailings management facility (above-ground tailings facility). Read more about each tailings facility on page 109.

Our tailings management systems and procedures follow **industry-recognized best practices**.

Management and governance

We employ broad, risk-based practices to effectively manage our tailings and mine waste storage facilities. We have accountability at the highest level of the organization, and systems and procedures that follow best practices contained in industry-recognized standards.

Accountabilities and responsibilities

Our Chief Operating Officer holds the highest level of operational accountability for tailings management. Managing our tailings facilities requires cooperation across our organization. Roles and responsibilities of each tailings facility are clearly defined in both our Operation, Maintenance, and Surveillance (OMS) manuals and Tailings Management Standard. The table below explains our governance structure or key roles and responsibilities for tailings:

ROLE	RESPONSIBLE FOR:
Facility Manager	Coordinating the responsibilities of individuals with roles that may directly or indirectly affect the safe function of the tailings facility.
SHEQ Manager/Coordinator	Verifying that the environmental monitoring program for the applicable facility licences and approvals is implemented and followed.
Tailings Facility Design Authority	Developing and implementing the tailings and water management plans of the tailings facility.
Engineer of Record	Overseeing the design of the geotechnical structures and associated components of the tailings facility.
Independent Review Board	Providing an independent, qualified, non-binding opinion to Cameco regarding the operations, risks, management, and design of the tailings facility. The Independent Review Board reports directly to the Chief Operating Officer.
Chief Operating Officer (COO)	The COO is responsible for the overall facility accountability and defining the roles, responsibilities required through all stages of the facility life cycle. The COO reports on a quarterly basis to the board of directors.
Board of Directors	The Board of Directors holds oversight for our tailings facilities and receives quarterly tailings risk reports via the SHE committee.

Financial review

Tailings facilities are included within our preliminary decommissioning plans to verify that we have appropriate financial assurances in place for the decommissioning obligation for these facilities. We review our closure plans every five years to verify that adequate financial capacity is available for closure of these sites. Read more on page 58.

Risk management program

Risks related to Cameco's tailings facilities are included on our enterprise risk register (read more about our Risk Management Program on page 21). We believe that this brings additional rigour and attention to the management of our tailings facilities. This risk is overseen by our COO and quarterly reporting on the status of the mitigating and/or monitoring plans is provided to the board.

Industry standards

We are committed to maintaining our rating and adherence to the Towards Sustainable Mining Tailings Management Protocol (TSM) developed by the Mining Association of Canada (MAC). The goal of this TSM protocol is to minimize harm from both physical and chemical risk associated with tailings, including zero catastrophic failures and no significant adverse effects on the environment or human health. For our tailings facilities, every year we self-assess our practices, and every three years, we undergo third-party verification. The TSM protocol has been the leading system for over 20 years for credible performance measurement and reporting, including rigorous standards to verify that tailings facilities are responsibly managed. Possible ratings range from Level C to Level AAA, with increasing ratings reflecting the comprehensiveness of the relevant management system. Level A is the expectation and a rating that is reflective of good management practices.

Our most recent assessments are:

- At our **Key Lake operation**, we achieved Level A rating across the tailings protocol indicators which was verified by a third-party in 2021. Our 2023 self-assessment confirmed an A rating and our next third-party verification will be completed in 2024.
- At our **Rabbit Lake operation**, we completed a self-assessment in 2023 and scored an A rating across the tailings protocol indicators. Our next third-party assessment will be completed in 2024.

The Mining Association of Canada conducted a gap analysis between the Global Industry Standard on Tailings Management (GISTM) and the TSM protocol and shared the results publicly in 2021. MAC indicated that the TSM protocol met or exceeded the GISTM in a several aspects (this document contains detailed information). Using MAC's gap analysis, we conducted a GISTM audit of our facilities in 2021, which revealed opportunities to better align with the GISTM. We are taking actions over time to address those that make sense for our facilities.

Cameco remains committed to the MAC TSM protocol. The tailings management component of the TSM protocol is an accepted and mature framework, which we believe provides a more robust and rigorous system for measuring tailings performance than the GISTM. As such, we do not plan to fully implement GISTM at this time. We will, however, continue to monitor the development and uptake of GISTM, including through our active membership on the MAC TSM tailings working group, which is working to improve alignment with GISTM.

Cameco policies and procedures

Our tailings management activities are guided by our Tailings Management Standard and our SHEQ Policy. We have site-specific tailings management systems designed to mitigate the potential risks specific to each facility, site-specific operation, maintenance, and surveillance (OMS) manuals, and our tailings facilities are included in each site's emergency preparedness and response plans.

Tailings design and construction

Our two in-pit facilities allow us to store tailings in the excavation of former mine pits. The design of these facilities, which have both been in operation for more than 20 years, was identified as an industry best practice by our independent tailings review board. The storage of tailings below ground within in-pit facilities means that these facilities are not susceptible to catastrophic failures that could release tailings solids or liquids to the surrounding environment. In addition, reuse of former mine pits reduces our overall land disturbance. The design allows for containment of tailings water during the operating phase and allows groundwater to bypass the facilities after they are decommissioned. Our in-pit facilities use a permeable surround design concept that allows groundwater to bypass the facility after closure, minimizing the impact to groundwater. Upon closure, our above-ground tailings facilities will be graded, covered, and vegetated to minimize water entering the facility and reduce the impact to groundwater. Read more.

Our two above-ground tailings facilities are no longer used for ongoing tailings placement. We have repurposed these facilities to safely dispose of radiologically contaminated solids at Rabbit Lake, and both solid and liquid waste at Key Lake. Use of these tailings facilities for disposal of these waste types avoids additional land disturbance. Both above-ground tailings facilities use engineered dams to contain the tailings. The dams were constructed using the centerline and downstream methods at Rabbit Lake and the single-stage method at Key Lake, both which contribute to structural stability. The closure plans for these facilities include the construction of engineered covers, designed to minimize infiltration through the facility and promote surface drainage to help protect the surrounding environment.

Operations and monitoring

We are committed to operating our tailings facilities in a safe and environmentally responsible manner. To manage our tailings facilities, we follow a Plan-Do-Check-Act cycle, which is a standardized method of continuous improvement and managing change. Through regular risk assessments and monitoring, we evaluate potential problems and develop risk mitigation activities.

Risk assessments

Frequent assessments help us identify and appropriately manage risks in the design, structure, or management of our tailings facilities. We conduct different assessments of our tailings facilities, including:

Consequence of dam failure

While significant effort is put into ensuring our tailings facilities are stable, and we remain confident in the stability of these facilities, it is good practice to assess the consequence of a dam failure. Studies to assess a dam failure scenario for our two above-ground tailings facilities were completed in 2020. The results of these studies allow us to classify the dams in accordance with standard consequence classifications and enhance our emergency response plans. It is important to note that this assessment is not an indication of the likelihood of failure, rather it assesses the consequence of failure, should one occur. In accordance with the Canadian Dam Association's consequence classification rating system for dams, dams are classified as having a Low, Significant, High, Very High, or Extreme Consequence based on defined criteria. Under this set of criteria, our dams were determined to have a "Significant" consequence (the second-lowest level in the scale, see graphic here). Significant consequence means a low potential for loss of life, people are only temporarily in the inundation zone, no significant loss or deterioration of biodiversity or landscape, and low economic losses. In 2023, the Canadian Dam Association provided a technical bulletin updating the environmental consequence classification rating method. We plan to review our dam classification based on this updated guidance in 2024.

Modes of failure

We conducted a Failure Modes and Effects Analysis (FMEA) for all four of our facilities in 2021 and 2022. FMEA is a systematic, proactive method to identify where and how a facility might fail and to assess the relative impact of different failures. The FMEA process was able to highlight critical controls for each facility, areas of risk that were well managed, and areas that could be reduced further through additional study or implementation of mitigative actions. From this process, a risk register was developed that presents the current known risks and ranking, and that can be updated to reflect changes to existing risks and to add new risks as they become known. We perform this assessment when there is a material change to our facilities or operations.

Environmental risks

We have assessed the geochemical stability of our tailings, developed hydrogeological models, and use this information in environmental risk assessment models to evaluate the potential impacts to surface water from our tailings management facilities once decommissioned. An environmental risk assessment, evaluating the entire operation, including tailings management facilities, is performed every five years. For each site, a summary of the latest environmental risk assessment is available on our website.

Impacts of climate change

We recognize that climate change has the potential to impact the intensity of future precipitation events. Using a range of climate scenarios, we have assessed how a range of hypothetical storm events and snowpacks may impact our tailings facilities. Our facilities have been designed to help withstand major precipitation events. Read about our climate-related physical risk assessments on page 33.

Addressing identified risks

Risk assessments are conducted by internal and external subject matter experts. These risk assessments are reviewed by the tailings review board and facility managers and are shared with our Chief Operating Officer. Remedial actions that are required to minimize potential risks are entered into our Incident Reporting System, are assigned to an individual for completion, and tracked to verify that the action has been resolved.

Monitoring

We are committed to the safe and environmentally responsible management of our tailings facilities. Through a range of internal and external reviews, we monitor the performance and safety of our tailings facilities with the goal of identifying potential problems before they occur.

Performance monitoring systems

We use several methods to assess the structural integrity and environmental performance of our tailings facilities and their secondary structures. At our above-ground facilities, we use a combination of instruments (vibrating wire piezometers, slope inclinometers and surface movement monuments) to assess dam stability. At our Key Lake in-pit facility, we complete a slope stability assessment biannually to monitor potential erosion, using laser technology. As needed, we conduct an evaluation of tailings geochemistry to confirm that geochemical controls remain consistent with predictions. This evaluation is conducted during the annual performance reviews and through a periodic drilling program, which is the process of extracting samples and gathering geochemical data from tailings.

With the support of internal subject matter experts and the tailings design authority, the engineer of record performs an annual technical performance review of our tailings facilities and prepares a report that is reviewed by the facility manager and the COO. Past and current performance monitoring results are integrated into models to project and predict future closure conditions. Models are continually improved when new information is available. The goal of monitoring programs is to verify that facilities are stable during operations and that decommissioning objectives are met at closure.

Inspections

At our four tailings facilities, we conduct a range of daily, weekly, monthly, and annual inspections to examine various aspects of tailings management. These inspections include monitoring the geotechnical (physical structure) of the tailings facility.

Environmental monitoring

We monitor groundwater and surface water at and around our above-ground facilities to verify that water quality remains at estimated and allowable levels.

Our 5-year Groundwater and Environmental Performance Review includes an evaluation of our groundwater monitoring program. The review assesses groundwater conditions in environments that are at a lower elevation than our tailings facility and compares the results to predicted conditions. Where required, we identify opportunities for improvement or identify corrective actions.

We monitor the **performance and safety** of our tailings facilities through a range of internal and external reviews.

Dam safety review

For our two above-ground tailings facilities with dams, dam safety reviews (DSRs) were completed in 2020 by a qualified consultant in accordance with Canadian Dam Association guidelines. The goal of a DSR is to assess and evaluate the safety of a dam against potential failure modes. Based on the consequence of failure classification (see page 45) of these facilities, DSRs are required to be completed every 10 years.

In 2023, we transferred the Engineer of Record from an internal engineer to a third-party engineer for both above-ground facilities and completed DSRs as part of the transition of responsibilities. At the time of publication, the DSRs have been completed and no critical dam safety deficiencies or non-conformances that could immediately lead to unsafe conditions have been identified. These facilities are considered to be safe and Cameco's dam safety management system is appropriate for the consequence and risks of the structures.

MEET OUR PEOPLE

Charlene Burnett-Seidel

LEAD, ENVIRONMENTAL SCIENTIST, SHEQ CORPORATE OFFICE, SASKATOON

Halfway through her post-secondary studies, Charlene Burnett-Seidel wasn't sure what she wanted to do. Now, nearly 20 years later, Cameco's lead environmental scientist can't imagine doing anything else. "I really wanted that summer position with Cameco," said Charlene, reflecting upon the summer of 2005 when she joined Cameco as an environmental assistant and studied aquatic toxicology in northern Saskatchewan. "Then my dream was to work for Cameco full-time. Now I do and I really love it. I love the people I work with, and the work that we do is very important to the environment and the people of the north. That's what keeps me coming back every day."

After completing her undergraduate degree at the University of Saskatchewan, Charlene pursued a Cameco-funded master's thesis project to develop sediment quality guidelines for uranium mines in northern Saskatchewan. "When I heard about that project, it was music to my ears because I have a passion for environmental regulations."

In her current role as lead environmental scientist, Charlene's responsibilities include guiding Cameco's environmental monitoring programs and providing regulatory oversight and support for the company's northern mining operations. She also supports the Fuel Services Division in Ontario. Charlene was selected as one of 70 global participants for the 2023 World Nuclear University Summer Institute in Osaka, Japan – an immersive, five-week nuclear leadership and professional development program.

Charlene hopes to energize the next generation of environmental leaders through knowledge-sharing and mentoring. "I want to help support others to make sure that they can find their niche, too."

Independent tailings review board

The board meets annually to review our tailings facilities' design, management, and performance, and to provide an independent, qualified, non-binding opinion on the state and risk associated with our tailings facilities. The review board includes two experts, each with significant experience in mining waste management and tailings. Based on their review in 2023, the board concluded that overall, Cameco's four tailings facilities were in sound condition without evidence of immediate dam safety or pit-slope stability issues and were being managed consistent with sound engineering practices.

Emergency preparedness and response plans

Although the risk of a failure of our tailings facilities is considered low based on our facility designs, we have emergency procedures in place to guide our response in the event of failure that presents a potential risk to people and the environment. Our site-specific emergency response plans for our above-ground facilities are informed by inundation studies, which provide worst case failure scenarios to verify that we are prepared for the unlikely event of a major failure. As part of our overall site emergency response plans, we perform regular drills designed to simulate various emergency situations. Through our emergency response drills and exercises, we identify gaps in our response and make plans for improvement. In addition, we apply learnings from recent industry over the past decade and we have completed reviews of international incidents related to tailings dams (including Mount Polley, Fundao and Brumadinho). Read about our learnings here.

Waste rock and other mining wastes

Mining waste from our Saskatchewan sites also includes waste rock. Waste rock is rock that has been excavated to gain access to ore but does not have metal concentrations of economic interest. At Cameco, our active mines are underground and generate low waste rock volumes. We classify waste rock based on its mineral and elemental content. Waste rock comes in the following three general types with management procedures varying on the associated risk of each rock type.

Mineralized

Low-grade uranium ore with greater than 0.03% U_3O_8 concentration. Mineralized waste rock is currently generated by our McArthur River mine and is transported to our Key Lake mill where it is combined with mineralized waste from other deposits, ground and blended with high-grade ore slurry from the McArthur River mine before entering the remainder of the milling process. Mineralized waste rock at our operations is stored on engineered, lined pads or managed by other seepage control systems to minimize soil and groundwater contamination. As part of our decommissioning plans, mineralized waste rock will be milled, or otherwise disposed of within the mine workings or mine pits.

Non-mineralized

Rock that has no economical uranium concentrations (less than 0.03% U_3O_8) and is categorized as either clean or potentially acid-generating based on the likelihood of acidification. This is how we manage the two categories of non-mineralized waste:

Clean

Rock that has little uranium (less than 0.03% U_3O_8) and is not potentially acid-generating. Clean waste rock piles remaining on site will be regraded to blend into the natural environment, covered (as necessary), and revegetated with native vegetation species (read more on page 58).

Potentially acid-generating

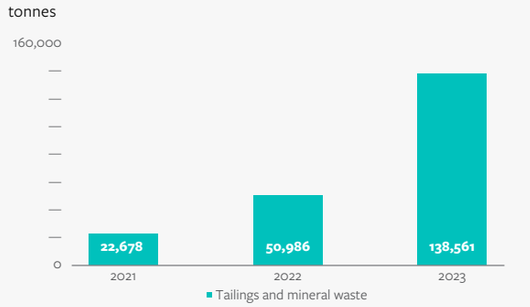
Rock containing sufficient concentrations of sulfide minerals that could potentially oxidize and generate acid rock drainage. Although we generate very low volumes of this type of rock, we store it for longer periods in engineered, lined pads. Potentially acid-generating rock is currently recycled as underground structural backfill and will be suitably managed post-closure.

We also generate sludges and slimes through the mining and milling process. At our Key Lake, McArthur River and Rabbit Lake operations these waste streams are incorporated into tailings or placed underground within the mine workings for disposal. At our Cigar Lake mine, slimes generated during mining are stored on surface in lined facilities. Upon completion of mining activities, we plan to return the slimes to the underground workings for final disposal.

All waste rock is classified and monitored, both directly through elemental testing for general rock classification, and indirectly through monitoring of water quality. Periodically, Cameco re-evaluates various waste rock types to confirm classifications and management practices are sound and up to date. We also evaluate the risks and the potential long-term effects of waste streams. To mitigate risks, programs and procedures are developed for the effective management of each material type, both in the short and long term.

OUR PERFORMANCE

Tailings and mineral waste



The increase in mining waste volumes is related to the restart at McArthur River and Key Lake in 2022.

Non-mineral waste

WHY IT MATTERS TO CAMECO

We generate and manage waste from our operations. We are committed to managing our waste streams in accordance with our compliance obligations and in a way that protects people and the environment, paying special attention to hazardous and radioactive waste.

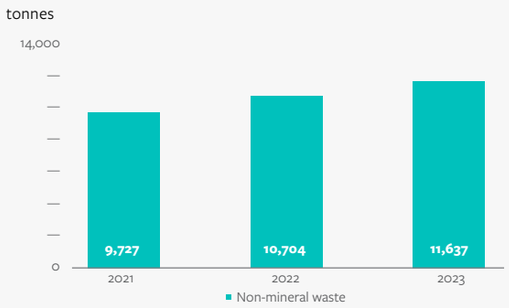
Radioactive waste

We consider the ALARA principle across our operations (see page 69 for radiation safety) and for the management of all wastes, including radioactive waste. Following this principle means that we design our systems and procedures to minimize worker exposure to this waste. Radioactive waste has different classifications depending on the jurisdiction and must be managed in the following ways:

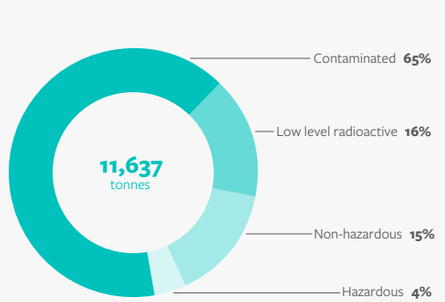
- At our Fuel Services Division in Ontario, we have programs to incinerate combustible waste and to decontaminate scrap metal and release it to a third party for recycling. Other waste is safely stored at a licensed Cameco facility until it is further processed and released from regulatory control or transferred to another licensed facility. These waste types are categorized as low-level radioactive.
- In Saskatchewan, we refer to waste generated with low levels of radioactive contamination as contaminated waste. This waste is transferred to above-ground tailings facilities at Key Lake and Rabbit Lake for placement and cover.
- In the US, we generate 11 e(2) byproduct which is transferred to another licenced facility in the US where uranium is recovered from the waste and the remaining material is safely disposed of. We also refer to this as contaminated waste.
- Prior to Cameco's formation in 1988, the site where our Port Hope conversion facility is located had been used for the storage of legacy radioactive waste for several decades. After meeting prescribed waste acceptance criteria, this waste is eligible for disposal in a government-owned, long-term waste management facility. Vision in Motion is an ongoing project at the Port Hope conversion facility that supports characterization and disposal of this waste (see our 2020 ESG report for details).

OUR PERFORMANCE

Non-mineral waste



2023 non-mineral waste breakdown



In addition to tailings and mineral waste (see preceding pages), we generate and manage hazardous, non-hazardous, contaminated, and low-level radioactive waste. We do not generate intermediate or high-level radioactive waste in either our mining operations or in our Fuel Services Division. The increase in non-mineral waste is due to higher shipments of 11 e(2) byproduct from our Smith Ranch Highland Facility.

Non-hazardous wastes

We seek to reduce the amount of waste we generate and to divert as much as we can by reusing, recycling, or recovering material. Recyclable materials are either picked up by municipal recycling authorities or shipped to off-site recycling programs. Non-recyclable materials are disposed of at Cameco-operated landfills or transported to local municipal landfills. Read about our recycling efforts here.

Hazardous waste

At all of Cameco's operated facilities, hazardous waste is collected and stored on site in designated hazardous waste storage areas and picked up or transferred to a third party for disposal or recycling.

GHG emissions and energy use

WHY IT MATTERS TO CAMECO

At Cameco, we recognize the critical nature of the fight against climate change, and want our employees, customers, investors, and community partners near our operations to know we are committed to being an active and constructive partner in addressing this challenge.

Sources of GHG emissions

Our GHG emissions are directly related to the type and amount of energy we consume. Cameco quantifies emissions following the globally recognized GHG Protocol Corporate Standard.

Scope 1

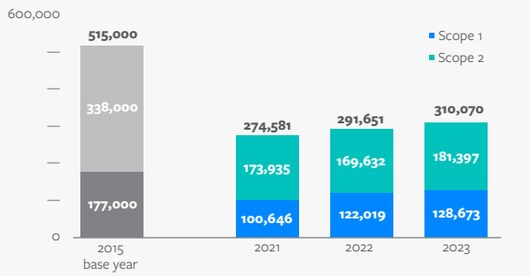
Our Scope 1 GHG emissions are primarily associated with the consumption of propane and natural gas for heating. We also use diesel and gasoline to operate heavy-duty and light vehicles across operations, and relatively small quantities of diesel for back-up power generation. We release small quantities of GHG emissions from chemical processes during milling and from Cameco-operated landfills.

Scope 2

All Scope 2 GHG emissions arise from electricity consumption and correlate to the emissions intensity of grid-supplied electricity in the regions we operate. Our main source of power for our northern Saskatchewan operations is hydroelectric[18]. However, our location-based Scope 2 emissions use a single emissions factor that reflects the energy mix from the entire provincial grid in Saskatchewan and Ontario (data in the performance table).

OUR PERFORMANCE

GHG emissions – operational control and market-based



For the last three years, our GHG emissions have been lower than our 2015 base year due to the non-producing state of several of our operations. In 2021, we temporarily suspended production at our Cigar Lake mine due to the COVID-19 pandemic, further reducing emissions. In 2023, we had normal operation of Cigar Lake and had resumed production Key Lake and McArthur River but were not yet operating at historical production rates. In the near term, we anticipate that our GHG emissions will increase as we continue production ramp-up at McArthur River and Key Lake.

We also report on market-based Scope 2 emissions, which means we take into account direct clean energy contracts or the purchase of energy credits. Although our Ontario facilities only represent a small portion of our total Scope 2 emissions, in 2023, we purchased Clean Energy Credits (CECs) for our Ontario facilities. A CEC is an electronic certificate that represents 1 MWh of clean or low-emitting energy. CECs enable us to verify that the electricity we consumed from the grid has come from clean or low-emitting generation sources, such as nuclear, hydroelectric, wind, solar, or bioenergy.

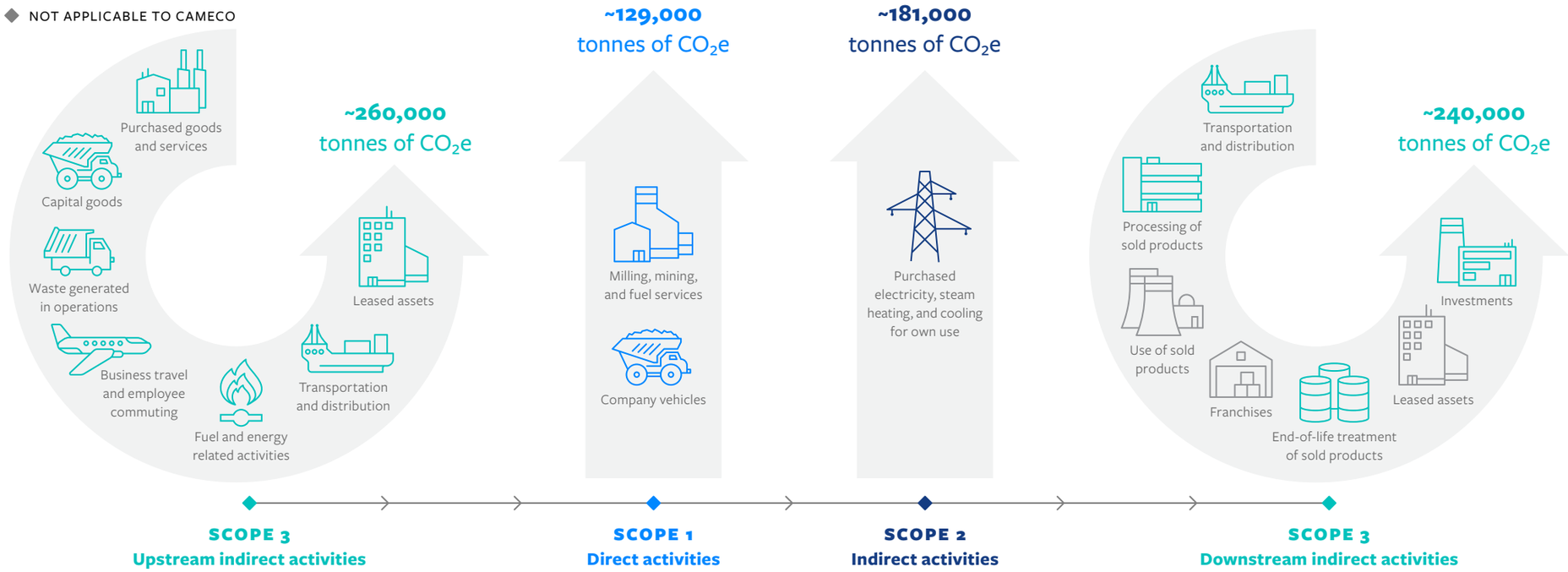
Cameco purchased approximately 117,000 CECs in 2023. The environmental attributes of the CECs purchased by Cameco, including fuel type, source organization, generation location, and vintage year were verified and serialized by the Midwest Renewable Energy Tracking System.

Through these purchases, we secure carbon-free electricity, allowing us to account for zero Scope 2 emissions in Ontario in 2023. Proceeds from the sale of CECs are directed to the Ontario Future Clean Electricity Fund, which supports the development of new low-emissions energy projects as the province works to support electrification and adapt its grid to meet increased demand.

Cameco is proud to partner with Bruce Power for 2023 CECs. This project is a novel decarbonization opportunity where benefits are shared across the nuclear fuel cycle. With this action, we are demonstrating the strong role nuclear power can play as a key support in the transition to a low carbon economy. Bruce Power's Clean Energy Credits are created from Bruce Power's investment in new and incremental nuclear generation output through Life Extension Programs and Project 2030, a series of investments to grow the output from Bruce Power's existing reactors to upwards of 7,000 megawatts for the 2030s.

[18] The region of northern Saskatchewan where Cameco's facilities are located is largely served by power provided by Island Falls Hydroelectric Station.

Cameco's Scope 1-2-3 emissions



Scope 3

Understanding value chain GHG emissions (Scope 3) requires companies to evaluate all the upstream and downstream activities that support their operations. In 2023, we quantified our Scope 3 emissions. We used the Greenhouse Gas Protocol's *Technical Guidance for Calculating Scope 3 Emissions* to develop our inventory, and we have evaluated all 15 categories. Where possible, we used supplier-provided data to complete the calculations. Where supplier data was not available, we relied on the quantity of materials purchased or the total spent on goods and services, along with industry average emission factors. For some categories, neither supplier data nor industry average emission factors were available.

For these, we relied on publicly reported Scope 1 and Scope 2 emissions data for companies providing these services. We continue to work with our suppliers to refine our quantification process.

Our Scope 3 GHG emissions were approximately 500,000 tonnes of CO_2e in 2023. More than 80% of these are associated with the purchase of goods and services, purchased uranium for resale, and downstream processing of our sold products. After completing our analysis, we have deemed several categories, including use of sold products, downstream leased assets, and franchises are not applicable or not material. The illustration above shows the estimated breakdown of upstream and downstream Scope 3 emissions and highlights the categories that are relevant to Cameco.

Working with key suppliers

To develop and refine our Scope 3 emissions inventory, over the past two years, we have engaged nine of our key suppliers to obtain first-party emissions data in order to improve the accuracy of our calculations.

Through this engagement process, we had the opportunity to learn about our suppliers' decarbonization journeys. For example, our ocean freight logistics partners have shared information on how they are responding to regulatory changes by integrating emissions-reducing features into the design of new ocean vessels and incorporating technology such as fuel switching, sails, and the use of batteries to reduce peak loads and minimize fuel use while in harbour.

We plan to continue our engagement with suppliers in 2024.

Our GHG reduction target

We plan to undertake work across our operations to achieve a 30% absolute reduction in Cameco's combined[19] Scope 1 and Scope 2 emissions by 2030, from 2015 levels[20].

Target

Our 30 by 30 reduction target means that we will work to permanently reduce our Scope 1 and Scope 2 GHG emissions by 155,000 tonnes CO_2e across our operated facilities by 2030. Under this target, we will also strive to achieve a minimum reduction of 30,000 tonnes CO_2e from Scope 1 emissions specifically. This sub-target demonstrates our commitment to reducing the direct carbon footprint of Cameco facilities and maintain alignment with facility-based emissions reductions required by regulators.

We have chosen 2015 as our base year as it is the most recent year that represents normal operations at all facilities. Our combined Scope 1 and 2 emissions have been below our 30% reduction target a result of the production curtailment decision we made starting in 2016 in response to the weakened uranium supply and demand fundamentals. Over the last several years we have seen a significant improvement in the market, which supported the restart of McArthur River and Key Lake in 2022, and continued ramp up to its planned production of 18 million pounds in 2024.

Context

Our 30% target is set within the context of ongoing favourable market conditions that could enable further increases in production whether they come from our tier-one active operations, tier-two curtailed operations, the development of advanced projects, or the acquisition of new assets. As a result, our GHG emissions are expected to increase from recent levels over the short-term.

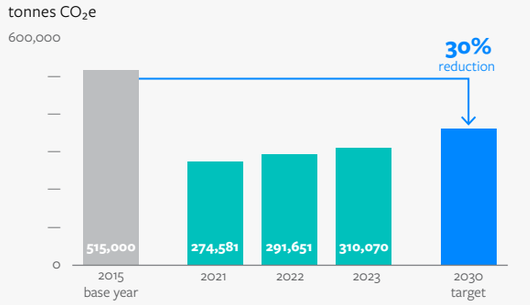
In 2024, we demonstrated the economic feasibility of extracting the resources contained in an extension of the Cigar Lake orebody and extending the estimated mine life to 2036. Additionally, we plan to evaluate the work and investment necessary to expand production at McArthur River/Key Lake up to its annual licensed capacity, which we expect will allow us to take advantage of growing demand when the time is right. We continue to evaluate our ability to meet our 30 by 30 target. We will review our emissions reductions target and key contributing assumptions in alignment with our business strategy as part of our planned Low Carbon Transition Plan three-year review cycle.

How we plan to meet our target

Our Low Carbon Transition Plan includes five decarbonization themes we are exploring, based on our current understanding of existing, emerging, and potential future technologies. The five themes are: efficiency, electrification, waste to value, fuel switching and carbon economy. Details about each theme and their estimated contributions to our target are available in our 2022 ESG report. In 2023, we built on this plan by developing tailored decarbonization pathways for each of our operationally controlled sites (read more on the next page). Leading up to 2030, we expect the efficiency, waste to value, and electrification to account for the majority of our targeted emissions reductions. We also anticipate leveraging emissions reductions through Saskatchewan's provincial grid decarbonization, as the power utility progresses towards its ambition to reduce GHG emissions by 50% by 2030 from a 2005 baseline.

OUR PERFORMANCE

GHG emissions target



Since 2018, our combined Scope 1 and 2 emissions have been below our 30% reduction target as production was curtailed at our Rabbit Lake, McArthur River, Key Lake, and US operations in response to a global slowdown in uranium demand. In addition, in 2020 and 2021, we temporarily curtailed production at Cigar Lake for precautionary reasons to manage the risks to our employees, their families and communities from the Covid-19 pandemic.

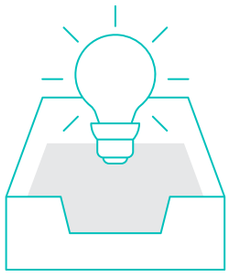
In 2023, we developed **tailored decarbonization pathways** for each of our operationally controlled sites.

[19] This target covers all the facilities where we maintain operational control. The GHG Protocol Corporate Accounting and Reporting Standard defines two distinct approaches to consolidate corporate GHG emissions: the equity share and operational control approaches. Under the operational control approach, a company accounts for 100% of emissions from operations over which it or one of its subsidiaries has operational control. Cameco uses appropriate GHG Protocol guidance for all Scope 1, 2 and 3 emissions quantification practices.

[20] In 2015, Cameco's combined Scope 1 and 2 emissions total was 515,000 tonnes CO_2e (Scope 1: 177,000 T CO_2e and Scope 2: 338,000 T CO_2e). Scope 3 emissions are not included within Cameco's 30 by 30 target.

Identifying site-specific decarbonization opportunities

We have a Low Carbon Transition Plan, which outlines our overarching climate strategy, and we have set a target to reduce our combined Scope 1 and 2 emissions by 30% by 2030, from 2015 levels. Meeting this target requires a detailed decarbonization plan for each Cameco location that considers each site's unique features. In 2023, we identified site-specific decarbonization pathways for our operationally controlled sites by identifying potential projects that could help reduce our GHG emissions and meet our target.



STEP

1

Engaging internal experts

We recognized that employees hold key site-specific knowledge and can provide valuable insight into decarbonization opportunities.

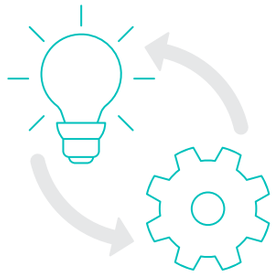
To generate a list of potential projects, we created a virtual "ideas box" where all Cameco employees could contribute their decarbonization project ideas. We also reviewed energy studies, attended conferences, and evaluated peer initiatives. More than 160 potential projects were identified through this process.

STEP

2

Refining ideas

Our climate change team refined the list to projects that are practical by considering technology readiness and cost. Our team then assessed listed projects to evaluate the potential GHG reduction impact of each project and how the project would help us meet our 30 by 30 goal. Through this effort, we reduced our list of potential projects from more than 160 to 60.

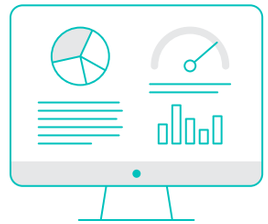


STEP

3

Implementing projects

We have implementation timelines and estimated budgets for more than 25 projects. An example of a decarbonization project identified through this process is vent-on-demand, which we plan to have in operation in 2025 at our McArthur River mine (read more on the next page).



STEP

4

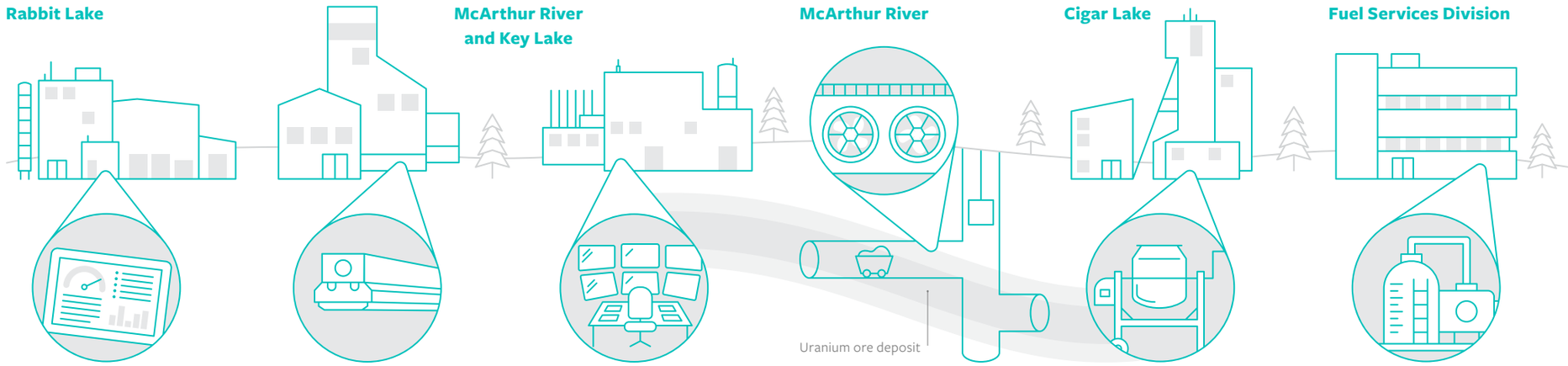
Evaluating our progress

We have identified several different decarbonization pathways to help meet our 30 by 30 target, should some potential projects identified not be feasible.

We will continue to evaluate our emissions reduction performance and provide transparent updates on our progress.

2023 Progress in our efficiency activities

Over the past few years, we have put significant effort towards efficiency and improving the visibility of energy consumption within our organization. Our 2023 activities include:



Energy efficiency

↓ 9.6% energy reduction

Since transitioning to care and maintenance in 2016, our Rabbit Lake operation has increased its focus on energy reductions. The team was able to achieve a 9.6% energy use reduction compared to the previous year, exceeding its objective of a 5% reduction. Energy efficiency changes included reducing the volume of water pumped and treated, reducing external heating along sections of outdoor piping, upgrading lights, and reducing lighting in unused areas.

Industrial lighting

>250 light fixtures
↓ 725 MWh/year reduction

Mining operations and processing of ore require lighting at significant heights and sometimes above equipment and/or chemical processes. In 2023, we replaced more than 250 industrial light fixtures with LED fixtures at our McArthur River and Key Lake operations. This work was technically challenging and required industrial scaffolding. We will continue this project in 2024.

Energy monitoring

Building on work already completed at our Cigar Lake mine, we implemented improvements to energy monitoring and measurement systems at our McArthur River and Key Lake operations. These improvements included installing power and propane meters, and developing digital tools to aggregate, contextualize and communicate energy performance data, which we then use to develop energy and GHG reduction strategies.

Vent-on-demand

↓ >4,000 tonnes of CO_2e annually

Heating and supplying air to an underground mine requires a large amount of propane and electricity. Conventionally, the air flow is kept constant regardless of the activity level in that area. Instead, vent-on-demand allows us to increase the airflow only where there are people or activities being performed. Vent-on-demand can reduce the air and heat required, which we estimate will reduce more than 4,000 tonnes of CO_2e annually. We plan to start using this system in 2025.

Concrete production

Maintaining the structural integrity of tunnels and shafts in underground mines requires concrete. At Cigar Lake, we are in the final stages of implementing improvements in our concrete batching process. We installed a mixer in the upgraded batch plant, and we will use on-site waste rock as aggregate to replace off-site materials. By reducing the number of trucks needed to haul materials and reducing the number of concrete mixing trucks on site, we lower our diesel consumption.

Heating systems

At our fuel services facilities, natural gas-fired boilers are the predominant emissions source. In 2022 and 2023, we upgraded boiler system controls and replaced two combustion air preheater systems to improve the efficiency of this system.

In 2023, we also purchased Clean Energy Credits (CECs) to secure carbon-free electricity, allowing us to account for zero Scope 2 emissions in Ontario in 2023.

Land and biodiversity

WHY IT MATTERS TO CAMECO

We strive to minimize the impacts of our activities on the land, plants, and animals in our operating areas in compliance with regulations and with a commitment to monitoring and measuring our impacts. A considerable portion (42% of our proven and 58% of our probable) of reserves are in or near sites with protected conservation status or endangered species habitat, as defined by the International Union for Conservation of Nature.

Operational context

The mining methods we currently use at Cameco (underground mining and ISR) result in less land disturbance than open-pit mining. Our company-wide footprint is about 3,000 hectares. About 40% of this footprint is from our US ISR operations where the land is occupied by our operations but does not require extensive surface disturbance. Underground mining also requires relatively small surface disturbance. However, we recognize we share this land with Indigenous communities in northern Saskatchewan and we respect their traditional land use. Read about our relationships with Indigenous communities on page 61.

Our mining methods result in **less land disturbance** than open-pit mining.

Biodiversity protection in the US

Although our sites are currently not in operation, we have plans in place to protect biodiversity. Some of our operations in the US are adjacent to Fort Robinson State Park, which is a wildlife and historic area operated by the State of Nebraska. In order to protect species and habitats in Nebraska, we monitor swift fox presence in active development areas. In Wyoming, our operations conduct baseline wildlife monitoring and have developed wildlife monitoring plans that help avoid conflict with sensitive species. This includes seasonal avian surveys for raptors and sage grouse. We also modify field construction activities during nesting seasons, if located in proximity to active nesting or denning areas.

Addressing biodiversity concerns in our plans in Australia

For our exploration projects, we take environmental and biodiversity concerns into consideration in the early stages of project development. While work on our two Australian projects (Kintyre and Yeelirrie) is currently on hold, our plans include considerations for biodiversity concerns. Details are available in our 2020 ESG report.

Biodiversity protection in Canada

We meet all level AA requirements of the Toward Sustainable Mining (TSM) biodiversity management protocols for all applicable Cameco operations (Key Lake, Rabbit Lake, McArthur River and Cigar Lake). We have specific programs to evaluate and minimize our impact on biodiversity:

Woodland caribou research

Woodland caribou are listed as a threatened species in Canada's Species at Risk Act.

Cameco continues to have representation on the National Boreal Caribou Knowledge Consortium and provincial working groups established to develop the Saskatchewan Boreal Shield (SK1) Range Plan for northern Saskatchewan. We have previously joined with government and industry peers to support University of Saskatchewan research on woodland caribou, including a study that ran from 2014 to 2018 and found that the SK1 region has a relatively large, stable population of woodland caribou.

Wildlife management

To minimize potential for wildlife and human interactions, we educate our workforce on food and waste management control, consequences for habituated wildlife, wildlife behaviour, basic personal safety precautions, steps to take if wildlife is encountered, the process for reporting, conditioning programs, and wildlife activity notifications. We also practice attractant management, i.e., removing foods, wastes, or other smells that could potentially attract wildlife to our sites, managing food storage and disposal, and using other means to limit attractants. Additionally, we monitor our sites and surrounding areas. Workers document sightings of a variety of species around our sites, including bear, fox, wolf, or other species that may frequent the area.

Aquatic environment surveys

To understand the potential influence of our operations on aquatic ecosystems, we conduct aquatic surveys every three years on our primary drainage areas. These surveys measure water quality, sediment quality, fish populations, levels of chemicals in fish, and other organisms, in addition to a periodic survey of semi-aquatic mammals.

Avian risk assessments

During exploration activities, or if clearing may be required during a bird's breeding period, we engage a qualified external biologist to complete an avian risk assessment to determine if our activities would pose risks to breeding birds. Risk evaluation includes detection surveys, bird behavioural observations, and habitat evaluation.

Desktop review of species at risk

In 2023, with the help of third-party experts, we conducted a biodiversity inventory assessment and created a database of flora and fauna observed within the vicinity of all Cameco's operations. Information was generated by reviewing previously completed environmental studies and a variety of additional resources, including the International Union for Conservation of Nature (IUCN) Red List.

We also periodically review the scientific literature, published lists from the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and the Species at Risk Act to identify species at risk in northern Saskatchewan. We typically update this review on a five-year cycle in alignment with our environmental risk assessments.

Air quality

WHY IT MATTERS TO CAMECO

Protecting air quality is essential to being a good neighbour and a safe employer. We continually monitor air quality near our facilities and mines. While our mining operations are located in remote areas, our Fuel Services Division facilities are located in or near populated areas in Ontario. Protecting local air quality is a priority for all regions.

Our approach

We keep our air emissions well below applicable regulatory limits. We monitor emissions against ambient air quality standards and, where applicable, action levels – emissions levels that are more stringent than regulatory limits – and have processes in place to investigate trends that may push emissions levels beyond those thresholds. This provides an early indication of potentially elevated values, which can be addressed well before regulatory limits are reached. We have formal processes in place to respond to action level or regulatory level exceedances, should they occur.

We conduct ambient air monitoring and stack sampling. By taking samples from ambient air near our facilities, we can detect the presence and concentration of specific substances of concern, including uranium suspended in air, to determine air quality. At all operating mines and facilities, we collect and verify representative samples of emissions at the point of discharge (i.e., the stack) to determine the total mass of pollutants emitted to the atmosphere. Stack sampling is typically completed more frequently at operations in or near communities compared to remote industrial facilities.

MEET OUR PEOPLE

Terry Grexton

SPECIALIST, ENVIRONMENT

BLIND RIVER REFINERY, ONTARIO

Terry Grexton has contributed to the smooth operation of the analytical laboratory at the Blind River Refinery for the past 27 years. His career with Cameco began when he accepted an offer as a lab technologist from the Blind River Refinery. Terry credits working with his colleagues as one of the most rewarding aspects of his career.

"You spend more time with co-workers than family. I'm now able to use the experience I have gained to mentor the new generation of employees at the refinery, and this brings me satisfaction," said Terry.

Two years ago, Terry was promoted to the role of environmental specialist. With a large increase of new hires at the Blind River Refinery over the past five years, he and his colleagues have been working hard to train new employees, develop their skills, and help them grow their careers are Cameco.

Terry believes that small gestures go a long way, and he applauds Cameco for recognizing its employees' milestones and achievements with luncheons and service awards, which he believes "helps bring the site together as a team." Terry also enjoys working for a company that is focused on making a positive impact outside of its workplace. "I am proud to have been a part of a lot of community projects during my years of service."

OUR PERFORMANCE

Measuring air emissions

Our operations generate the following air emissions that can impact air quality:

AIR EMISSIONS (TONNES)	2020	2021	2022	2023
NOx (excluding N_2O)	138	119	189	**182**
Particulate matter (PM_{10})	149	214	196	**227**
Carbon Monoxide (CO)	9	0	32	**87**
Ammonia (NH_3)	38	35	42	**80**
Volatile organic compounds (VOCs)	1	0	28	**77**
SOx	0	0	63	**0**
Hydrogen Fluoride	0.61	0.63	0.55	**0.48**
Uranium	0.05	0.04	0.05	**0.28**

The increase in air emissions is related to the restart activities at Key Lake and McArthur River in 2022.

Note: Air emissions data is limited to the facilities that we own, operate and are currently in production that reach National Pollutant Release Inventory (NPRI) release based threshold quantities within Canada.

Decommissioning and closure

WHY IT MATTERS TO CAMECO

Our commitment to protecting the environment and the needs of the communities around our operations extends to the full life-cycle of our mines and facilities. This includes planning for decommissioning and preparing our sites for permanent closure.

Planning

In keeping with the conditions of our licences, permits, and approvals, we develop preliminary decommissioning plans for our facilities. This conceptual plan describes activities required to reclaim the site to defined final end-state objectives, after the operating life of a facility. The plan includes a preliminary cost estimate for labour, materials, equipment, waste management, regulatory approvals, monitoring, and administration to carry out the plan. This cost estimate is the basis for determining our decommissioning obligations.

Decommissioning and reclamation obligations

At the end of 2023, the estimated future decommissioning and reclamation costs (total and undiscounted) for our existing operating assets is approximately $1.36 billion. We have recorded accounting provisions for the discounted value of these estimates, and every quarter, we update these estimates based on new cash flow estimates, discount and inflation rates. To ensure we can pay for these future obligations, we have financial assurances of $1.06 billion (in the form of letters of credit or surety bonds to satisfy current regulatory requirements). The expected timing for these costs is based on each mine or fuel services facility's expected operating life. Our required costs for decommissioning and reclamation in each of the next five years are not expected to be material.

Proactive reclamation

If part of an active site is ready for reclamation before the full site reaches the end of its life, we proceed proactively with reclamation work on that area. Some of the projects we have undertaken in the last few years include:

Water restoration in the US

Once we complete our mining operations in an area (or unit), we need to confirm that post-mining concentrations of metals, metalloids, and total dissolved solids in the groundwater do not present an unacceptable long-term risk to human health or the environment. We use a combination of physical and chemical processes during groundwater restoration that include reverse osmosis treatment and the addition of chemicals that help restore the groundwater. Once groundwater restoration is completed, it is monitored for a number of years to verify that water quality is stable. After stability monitoring is complete, an application is submitted to demonstrate that restoration has been completed and a period of long-term monitoring begins.

Decommissioning of the mining area can be completed after the long-term monitoring period by plugging and abandoning all wells and removing surface infrastructure, followed by revegetation. In 2023, two mine units were prepared to enter restoration treatment, two mine units were in reverse osmosis treatment, and two mine units advanced to the stability stage. One mine unit is currently in long-term monitoring, and we are preparing an application for another mine unit to transition to long-term monitoring.

Waste rock pile revegetation at Key Lake

The Key Lake operation continues to undergo progressive reclamation studies. Our planned multi-stage revegetation process begins with native species such as mosses, lichens, and shrubs that create a suitable environment for the introduction of other native species to accelerate natural reforestation. The local sandy soils, however, make it more difficult to establish vegetation. At one of Key Lake's waste rock piles, we have been successful at revegetating a portion of a covered pile through the application of local lake bottom organic sediments as a nutrient source and seed bank to establish shrubs, bushes and trees.

Building a strong workforce and resilient communities

18%
of the US's electricity came from nuclear power in 2022

Charleston, United States
32.7765° N, 79.9311° W

2023

Social highlights

Our relationships with our workforce, Indigenous Peoples, and local communities are fundamental to Cameco's success. The protection of our workforce and the public guides our risk assessment and the planning of our operations and product transport activities. To deliver on our vision of energizing a clean-air world, we invest in programs to attract and retain a diverse, skilled workforce dedicated to continuous improvement and committed to our values. By the end of 2023:

50%
of our employees in northern Saskatchewan were Indigenous

18
Indigenous individuals participated in work placements with Cameco

>4,600
job task observations completed by supervisors as part of our safety practices in 2023

>1,300
samples have been analyzed since 2011, demonstrating food remains safe to eat and water safe to drink

Relationships with Indigenous Peoples and local communities

WHY IT MATTERS TO CAMECO

We believe that Indigenous Peoples and local communities should benefit from resource development on or near their communities or traditional lands, through employment, training, business opportunities, community investment, and environmental stewardship. Cameco has a long history of working collaboratively with Indigenous Peoples and local communities.

Our company-wide approach

The uranium mines, mills and processing facilities we operate are located in three regions: northern Saskatchewan, Ontario and the US. We also have advanced exploration projects in Saskatchewan and Australia. In each of these jurisdictions, we interact with unique local and Indigenous communities. We are committed to open and honest communication, understanding the individual needs of communities, and creating opportunities for shared value.

Formal guidelines

Our Code of Conduct and Ethics contains our commitment to communicate with community members in an open and understandable way and to listen to their concerns and ideas about our business activities. In our interactions, we aim to listen respectfully and answer questions honestly, and if we do not know an answer, we strive to find the answer and follow up. We disclose information in good and bad times and in a manner that is timely, complete, accurate, and balanced. In addition, each of our Canadian operations has public information programs with defined public disclosure protocols that outline how we communicate with local and other audiences. Our public disclosure protocols state that Cameco is committed to honest and ethical communication, both in principle and practice.

Tailored engagement

We tailor our engagement approach across our operating areas to reflect the needs of the local communities and our activity level in the area. Engagement activities range from informal community visits and information sharing to formal Cameco- or government-sponsored committees with representation from local and Indigenous communities.

Opportunities for shared value

We respectfully acknowledge the traditional territories of Indigenous Peoples on which our operations are located and reaffirm our commitment to engagement and the promotion of local representation and participation in economic opportunities that arise from our operations.

We support the principles of the United Nations Declaration on the Rights of Indigenous Peoples through formal agreements with communities, proactive engagement activities, and working to improve our understanding of local Indigenous Peoples and their cultures. Our commitment to supporting local business development and community priorities is exemplified by the long-term relationships and formal, mutually beneficial agreements we have with Indigenous Peoples in Canada and Australia. Some agreements extend to the promotion of economic development after closure of a site. As an example, community businesses under the Ya' thi Néné Collaboration Agreement – signed with Cameco, Orano Canada Inc. (Orano), four municipalities, and three First Nations in northern Saskatchewan – have first right of refusal for work at our Rabbit Lake facility if a decision is made to decommission the operation.

Northern Saskatchewan

Since Cameco was formed in 1988, we have worked in close collaboration with northern Saskatchewan communities, the majority of which are Indigenous. We regularly work with more than 17 Indigenous communities around our Cigar Lake mine, McArthur River mine, Key Lake mill, and Rabbit Lake mine and mill.

Our activities in northern Saskatchewan are supported by our community liaisons in seven communities: Black Lake Denesuline First Nation, Fond du Lac Denesuline First Nation, Hatchet Lake Denesuline First Nation, English River First Nation, Lac La Ronge Indian Band, Southend and the Northern Village of Pinehouse. Our five-pillar approach to corporate responsibility (community engagement, environmental stewardship, workforce development, business development and community investment) guides our engagement in northern Saskatchewan. Key elements include:

Continued community-based monitoring

In addition to our own environmental monitoring programs, we continue to collaborate with community and regional partners through two key programs to uphold our commitments to measuring and mitigating the environmental impacts of our activities:

Eastern Athabasca Regional Monitoring Program (EARMP)

EARMP is a long-term environmental monitoring program, established in 2011, to monitor the potential cumulative downstream effects of uranium mining and milling operations in the Eastern Athabasca region of northern Saskatchewan. This industry-government partnership brings together Cameco, the Government of Saskatchewan, the Canadian Nuclear Safety Commission, and Orano. All samples are analyzed by the Saskatchewan Research Council (SRC), an accredited third-party laboratory. EARMP has two components: the community program and the technical program.

The goal of the EARMP community program is to determine the safety of traditionally harvested food for local consumption through sampling and analytical testing. The goal of the technical program is to monitor potential long-term changes in the aquatic environment far downstream from uranium mining and milling operations in the Eastern Athabasca region. This program collects water, sediment, fish (flesh and bone), and other organisms for analysis. As with the community program, the testing is conducted by CanNorth. Results for 2023 show that regionally sampled traditional foods continue to be safe and healthy dietary choices for residents of the Athabasca Basin. Results are publicly available at earmp.ca and a ten-year summary report of the program can be found here.

Community Based Environmental Monitoring Program (CBEMP)

CBEMP is a component of the collaboration agreement among Cameco, Orano, four municipalities, and three First Nations in northern Saskatchewan (Ya' thi Néné collaboration agreement). Different from the EARMP's region-wide sampling, this CBEMP focuses on traditional foods at the community level. Each year, on a rotating basis, local residents from one or two select communities collect samples of traditional foods for analysis by the SRC. The Ya' thi Néné Lands and Resource Office provides support in the collection of dietary surveys and in the sampling program. CBEMP results continue to indicate that country foods identified by members of the Black Lake Denesuline First Nation, the Northern Hamlet of Stony Rapids, the Fond du Lac Denesuline First Nation, Hatchet Lake Denesuline First Nation and the Northern Settlement of Wollaston Lake remain safe for consumption. Results are publicly available at cameconorth.com.

Capacity building

One of the ways we share economic value with our northern communities is through employment creation and skill building resources that help increase employability in the region. We continued to offer:

Courses

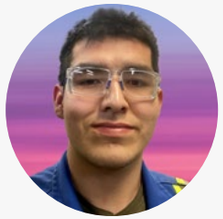
Most roles at our northern Saskatchewan operations require specialized training. Since 2021 we have offered 15 online courses for Residents of Saskatchewan's North (RSNs). These courses help prepare residents to apply for employment at our sites and enhance skills that can be applied to other employment opportunities in the industry or within their local communities. In addition, we also provide work placement opportunities in our operations. In 2023, we placed 18 learners from our online training courses, 13 of whom were women, at our northern Saskatchewan operations for three-month paid work experience opportunities. These placements provide an opportunity for northern residents to learn about our safety culture, day-to-day site operations and work life at our remote facilities. Six community members were offered employment after the completion of their 2023 placement.

Career fairs

We participate in career fairs in the local communities, showcasing the types of jobs that Cameco offers as a major employer in Saskatchewan's north. In addition, we employ community liaisons through our formal agreements in Pinehouse, English River First Nation, Lac La Ronge Indian Band, Fond du Lac First Nation, Hatchet Lake First Nation, Black Lake First Nation and Southend.

Scholarships

We offer a pan-northern scholarship program focused on RSN students pursuing post-secondary education as well as seven other scholarships, all in areas ranging from geological science to business. In addition, we support scholarship programs established under our collaboration agreements with Indigenous communities.



MEET OUR PEOPLE

Spencer Pacquette

PIPEFITTING APPRENTICE

CIGAR LAKE MINE, SASKATCHEWAN

When Spencer Pacquette decided to pursue a career in trades, he wanted to follow a path less travelled by his hometown peers. "A few people from my hometown have journeyman tickets," said Spencer, who grew up in Fond-du-Lac, Saskatchewan. "One of the journeymen from my hometown is a carpenter, another is an electrician, and a couple of them are heavy-duty mechanics. But I knew that none of them had pipefitting experience, so I thought that pursuing that trade would stand out."

Once Spencer completes his four-year apprenticeship program with Cameco's Cigar Lake mine, he will be qualified to fabricate, install, maintain and repair mechanical piping systems. "I appreciate being given the opportunity to work at one of Cameco's mine sites at a very young age and learn a trade," said the 19-year-old.

Spencer started his apprenticeship journey in November 2023 at Cigar Lake. In August, he will begin his first eight-week session at Saskatchewan Polytechnic in Saskatoon. The path to becoming a certified pipefitter involves a combination of classroom training and work experience. "One of the things I'm really grateful for is working with experienced people on site," said Spencer, whose main mentor at Cigar Lake is pipefitter Sherri Hofer. "The people here are really helpful."

While he recognizes that he still has a lot to learn, Spencer is confident that he picked the right career path. "Oh, I love it," he said, singling out metal fabrication as a particular favourite. "It's really great and I've caught on pretty quickly, I'd say."

OUR PERFORMANCE

Strong support for Canadian operations

In addition to regular, in-person consultation and feedback sessions with our communities, we conduct periodic public opinion polling**. Results show Cameco's operations continue to see strong support from the communities where we operate.

PUBLIC SUPPORT (%)	2021	2022	2023
Saskatchewan	82	84	85
Northern SK	78	75	83
Port Hope, ON	91	93	– *
Blind River, ON	96	– *	– *

* Polling in Blind River is conducted less frequently than other sites and was not completed in 2020,2022 and 2023. Polling for Port Hope is now conducted biennially and was not completed in 2023.

** Due to the continued shutdown of our US operations, we have not conducted polling in this region since 2016.

Ontario

Our Ontario facilities are located in three municipalities and include our Cameco Fuel Manufacturing (CFM) facilities (in Port Hope and Cobourg), our Port Hope conversion facility (in Port Hope), and our Blind River refinery (near Blind River). We collaborate with these municipalities and local Indigenous communities. We have a mature public information program to provide relevant information to the community on how activities at our facilities affect the environment and the health and safety of employees and the community. The program is dynamic and uses traditional radio and print media and community-based activities, as well as website and social media outreach to communicate with the public. Read about community activities at our Ontario sites.

United States

Our operations in the US include three in situ recovery (ISR) operations: Crow Butte in Nebraska, and Smith Ranch-Highland and North Butte in Wyoming. Our mining is predominantly on privately-held ranch land that we lease from the owners, along with some parcels owned by Cameco.

The mines are located in sparsely populated areas, and none of the operations have formal collaboration agreements with communities. All sites were in active production from the early 1990s; however, as a result of our 2016 decision to curtail US production due to ongoing weakness in the global uranium market, production ceased in 2018 and our US operations are now in care and maintenance. Since moving to a state of care and maintenance, we have had to decrease our community involvement accordingly.

Australia

Cameco has been exploring for uranium in Australia since 1996 and holds two of the country's largest undeveloped uranium deposits, Kintyre and Yeelirrie. Our activities at these two sites have been scaled back and continue at a pace aligned with our contract portfolio and customer needs. We remain committed to our relationships with the local communities and continue to work with community groups in these two areas. We also continue to engage regularly with local governments and government agencies about the status of the projects and local events or occurrences.

Kazakhstan

Joint Venture Inkai LLP (JV Inkai) is a limited liability partnership between Cameco (40%) and Kazatomprom (60%). Inkai is considered a material uranium property for Cameco. JV Inkai operates an ISR producing mine located in Kazakhstan. The Kazakh Subsoil and Subsoil Use Code imposes local content requirements for works, services and employees. As such, at least 40% of the costs of the acquired goods and equipment, 90% of contract work and 100%, 70% and 60% of employees, depending on their qualifications (workers, engineers and management, respectively), must be of local origin. In accordance with the resource use contract, JV Inkai has also financed education, training and re-training of local employees and has provided support for low-income families in the Suzak District.

Occupational safety and health

WHY IT MATTERS TO CAMECO

Cameco works in challenging physical environments and with substances that require special attention and care. It is our responsibility to keep the occupational health and safety risks associated with our business at levels as low as reasonably achievable, and to send our workers home safely at the end of their shift or work rotation.

Our approach

Safety is a core value at Cameco and the paramount consideration that guides all decisions and actions related to our more than 2,900 employees and contractors. We build safety into the design and operation of our facilities, have a management system that supports the integration of safety into everything we do, and promote a strong safety culture across our workforce.

Addressing safety performance

In 2023, although we exceeded both our leading corporate safety targets, we did not achieve our lagging safety performance target – our targeted total recordable injury rate (TRIR) – for the second year in a row. With respect to our lagging indicator, we are implementing a plan to reduce injuries across our operations. We analyzed the recordable injuries that occurred in 2023, which confirmed that as with the previous years, nearly half of all injuries were related to sprains and strains. We have also recognized that our operating environment presented unique challenges in managing safety. More specifically, due to the extensive recruitment to support the 2022 restart and continued ramp up at McArthur and Key Lake, the expansion into new areas of Cigar lake, and increased activity at Fuel Services, we have a less experienced workforce. In addition, favourable economic conditions mean we are competing with other industries to recruit and retain workers, resulting in a less experienced workforce overall.

To address our safety performance, in 2023 we focused on:

Analysis

- Continued to analyze lagging indicators and evaluate the root cause of injuries that occurred.
- Focused on analyzing leading indicators to guide initiatives to improve safety performance.
- Hired third-party experts to conduct 100 ergonomic assessments to identify ergonomic risks and identify potential workplace improvements to reduce injuries across our operations.

Hazard identification

- Incorporated our Stop, Think, Act and Review (STAR) program at select sites and continued to promote it at sites that had already adopted the program. The STAR program is a self-check assessment performed by workers prior to starting a new task to identify potential hazards.
- Continued to require each front-line supervisor to complete two job task observations on high-risk activities per month, as we recognize that front-line supervisors play a key role in verifying that both new and experienced workers are working safely. These observations increase interactions with workers and assist the supervisors in determining if workers are following the work instructions applicable to the task being performed.
- Continued to hold regular safety leadership meetings led by two members of the Executive team and attended by all operational General Managers.

Accountability

- Our corporate compensable safety targets continue to include the number of job task observations per supervisor and the completion of our planned ergonomics work. These continue to be a focus of our safety targets in 2024.
- Reinforced requirements and accountabilities related to implementation of our corporate Contractor Management Program.

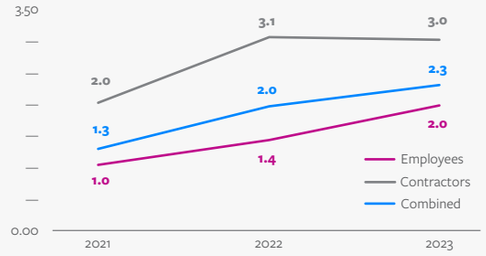
Improvement

- In late 2023, we developed a corporate safety improvement plan focused on training and coaching for supervisors and included a safety campaign that we will roll out in 2024.

OUR PERFORMANCE

Total recordable injury rate

incidents per 200,000 hours worked



This change in safety performance has coincided with change from care and maintenance to commissioning and operations at some of our facilities as well as increasing activities at other facilities, resulting in a large influx of new workers and higher turnover.

Strong systems

We manage the safety of our workers through programs, systems, and standards with our Safety, Health, Environment and Quality (SHEQ) Policy providing overarching guidance. These include training requirements, risk assessment, operational controls, and application of the corrective action process that apply to both employees and contractors. Each operation and corporate office conduct an annual management review to assess safety performance over the previous year and determine actions for the following year. In addition, more frequent formal injury rate statistics reports are distributed monthly, and serious incident reviews and their cause are discussed via internal communications platforms, such as the corporate-wide safety teleconference. Read how our management system contributes to a safe work environment. Additional oversight of contractors, including safety performance, is addressed through our contractor management program (page 93).

Safety culture assessments

We conduct a safety culture assessment at each Canadian site approximately every five years. The survey provides management with insights on our safety culture and helps us better understand the perceptions of employees and contractors. Our most recent assessments were conducted in 2023 at three locations, covering more than 560 workers. A common theme identified through this assessment was the need to improve communication to help ensure workers are aware of priorities and specific improvement activities, such as planned equipment and maintenance upgrades, so they can better understand how their concerns are being addressed. Our next surveys are scheduled for 2025 at Cigar Lake and McArthur River.

MEET OUR PEOPLE

Daley McIntyre

GENERAL MANAGER

KEY LAKE MINE, SASKATCHEWAN

Last year, Daley McIntyre received a YWCA Saskatoon's prestigious Women of Distinction award for leadership in trades. But she's been blazing a trail at Cameco for almost three decades. Daley joined Cameco's environmental protection team at Key Lake in 2002, moving through various leadership roles before becoming Cameco's first female general manager in 2022. She's also the first female general manager (GM) at any northern Saskatchewan uranium operation.

"When I was a summer student, I used to joke with my teammates that someday I would be the first female GM at Key Lake," recalled Daley. "At the time I was positive someone would beat me to it. That didn't happen, and I became the first female manager in the North when I became the SHEQ manager for McArthur River and Key Lake's operations a few years ago. Cameco fostered my growth as an engineer and as a leader, allowing me to reach new professional heights."

Daley also knew that having a leadership role was important to her and she focused on finding opportunities to combine her technical skills and her aspiration to lead. Growing up in northern Saskatchewan has made her journey even more meaningful. "I work in the mining industry and for Cameco because I love it," said Daley. "I have dedicated my entire adult life to Key Lake, its people and the positive impact our operations have on Cameco, the North and the world. People here know that I am one of them. I chose to be here."

Proactive safety behaviours

While good standards and procedures are important, strong safety performance requires more than following procedures. We encourage workers to stop work when they feel unsure or unsafe and to discuss issues with their supervisors and subject matter experts before proceeding. To identify and reduce hazards, we use specific tools and procedures, including:

- Five-point safety system cards, which encourage workers to ask five safety-related questions to eliminate hazards.
- STOP, a safety observation program designed to identify and address unsafe conditions and work practices before an incident or injury occurs.
- Field level risk assessments, job hazard assessments, job task observations, and self-check to assess workplace hazards prior to and during work.

Training

Training is an important part of the process to help workers understand how to work safely. Training covers all aspects of our business and includes technical operational skills, specific safety procedures, radiation protection, and emergency response. Required training is carefully tracked to verify that qualified individuals carry out activities. For example, we selected six of our common highest-risk tasks across the company to develop and deliver consistent training on. We track training compliance for these six activities and aim for 100% compliance at each site. These six training courses, referred to as the High-Risk Safety Training 6, are:

1. Fall Protection
2. Confined Space
3. Control of Hazardous Energy Refresher
4. Electrical Safety – Non-Electrical Worker
5. Basic Radiation (Refresher)
6. Job Hazard Analysis

In 2023, our sites achieved a 90.4% average level of compliance for these six key safety courses. Sites that have not achieved 100% of required training for safety-related tasks are required to have mechanisms in place to verify that only those currently qualified are allowed to conduct the required activities. The importance of training has been further emphasized in 2024 by including this training compliance metric in our compensable corporate targets.

We began mandatory ergonomics training in 2021 and plan to require retraining every three years. This training helps to prevent common ergonomic injuries (e.g., repetitive strain injuries, soft tissue injuries) that can affect employees across the company, both in the office and in our operations.

IN FOCUS

Ergonomics

We strive to protect our workers from common injuries related to ergonomics (such as repetitive strain injuries or soft tissue injuries), which can affect employees across the company, both in the office and in our operations. Addressing ergonomics injuries has been area of focus and ongoing effort for the last 3 years and in 2023 we focused on:

Assessments: In 2023, we performed 100 ergonomic assessments across the company to identify and address ergonomic hazards in our work.

Awareness: To increase awareness about ergonomic hazards, we held education sessions on proper lifting techniques, body positioning and job rotation.

Improvements: To start addressing some of the hazards, at McArthur River, we acquired pipe handling attachments for underground equipment and mechanical lifts to reduce the physical handling of mine service piping. At our Key Lake chemistry lab, we changed the location and the procedure of handling heavy metal containers (called pots) that go into a rock pulveriser, to reduce the strain on the worker's back.

Technology: One site in Ontario and one in Saskatchewan are trialing wearable devices to monitor and improve our ergonomic performance. In Ontario, the tracked information has helped identify and address issues across the site. In Saskatchewan, we teamed up with the University of Saskatchewan to assess the information focusing on upper limb postural issues.

Remedial actions: In 2024, we plan to complete all remedial actions identified from these assessments.

Tailored safety programs

We have safety risks similar to other mining and chemical processing companies, and also experience the unique challenges associated with radiation. Some of the ways we manage these safety risks are noted on the following two pages.

Mine safety

Much of the uranium we produce comes from underground mines, which present specific risks that need to be mitigated, including fall of ground, water inflow, and fires. In accordance with occupational safety requirements, we have a highly trained complement of rescue workers at all our facilities.

Preventing fall of ground

We mitigate fall of ground risks by strictly adhering to our corporate Ground Control Standard, conducting in-depth workplace inspections, and providing workers with multiple avenues to report hazardous or uncertain conditions. We also provide specific training on scaling (a technique to clean loose rock from the roof, walls, and rock face), which includes recognition of fall of ground hazards.

Preventing and managing water inflow

Non-routine water inflow risks are mitigated through proper mapping of the orebody before mining, and the use of best mining practices. Ground freezing also reduces the risk of water inflow and provides additional ground stability. All underground workers receive water inflow prevention and awareness training.

Preventing fires

All our facilities must be compliant with the National Fire Code. We also follow strict safe work practices, including requiring hot work permits and emphasizing hazard recognition. In the case of a fire in one of our mines, we have both permanent and mobile underground refuge stations and numerous portable fire extinguishers along with personal protective equipment underground. We also complete annual stench gas release exercises at our mine sites.

Stench gas is a powerful odour quickly dispersed throughout an underground mine to alert workers of danger and initiate protective actions.

Hazardous substances

Across our operations, we work with hazardous substances that pose potential health and safety risks. To protect our employees, we use a layers of defence model across our facilities. A few examples of these layers of defence are described below:

Engineering controls

To safely handle hazardous substances, we isolate them from the workplace (to the extent possible) with passive and active engineering controls (e.g., tanks with exhaust ventilation). For example, at our Port Hope conversion facility, for specific substances we employ automated leak detection that enables the plant to shut itself down and automatically divert any air in the room to scrubbers before exhausting to the atmosphere.

Highly trained operators

For example, in our Port Hope conversion facility, we have a detailed operator training and certification process. Each area of the plant requires about six to twelve months of training.

Specialized processes

We supplement engineering controls with administrative ones and personal protective equipment. For example, we work with beryllium, a metal used in the manufacturing of fuel bundles. Beryllium dust is hazardous to human health and requires specialized controls. We use a zoning system in which rooms are ventilated separately and adhere to a standardized and stringent cleaning regime, including determining the level of surface and airborne dust contamination. All workers wear appropriate respiratory protection and must follow strict protocols for changing clothing when entering and exiting areas where we work with beryllium.

Radiation

The fundamental approach we take to protect workers from radiation risks is to incorporate radiation protection principles into the design and operation of our facilities and core to these are "time, distance, and shielding". The effectiveness of our control measures is assessed through extensive monitoring of our workers and the work environment.

Monitoring

Our goal is to keep doses ALARA. All employees and contractors designated as nuclear energy workers are monitored to assess their radiation doses. External doses are measured with individually issued dosimeters (a device used to measure an absorbed dose of radiation) that are worn by workers. Internal doses are monitored through personal monitors, area monitoring or bioassay measurements, depending on the site.

Alerts

We have extensive area sampling programs to verify that radiation sources are controlled and workplace conditions are safe for our workers.

At locations where conditions can change rapidly, we continuously monitor the radiation levels and have systems that alert workers of elevated conditions.

Low radiation exposure

The average radiation dose to Cameco site workers is consistently less than 2% of the regulated annual limit for nuclear energy workers.[21]

The average dose to workers (employees and contractors) at Cameco was 0.73 mSv in 2023, while the annual dose limit (set by the Canadian Nuclear Safety Commission) for nuclear energy workers is 50 mSv.[22]

A few numbers for context

Typical chest X-ray:
0.10 mSv

Cameco's workers (average in 2023):
0.73 mSv

Average total dose from natural background radiation in Canada:
1.8 mSv

Typical chest computerized tomography (CT) scan:
7 mSv

Maximum allowed for nuclear workers:
50 mSv

A **millisievert (mSv)** is the International Standard unit used to measure the amount of radiation received. (One millisievert is one thousandth of a sievert.)

[21] https://s3-us-west-2.amazonaws.com/assets-us-west-2/annual/CCO-2022-corporate-profile.pdf

[22] https://www.cnsc-ccsn.gc.ca/eng/resources/radiation/radiation-doses/

Nuclear safeguards

WHY IT MATTERS TO CAMECO

The uranium and nuclear fuel products that we supply to our utility customers around the world are required to be used exclusively for the generation of zero-carbon nuclear power. We operate in a highly regulated industry with mature and established safeguards. We take our national and international obligations seriously and have designed our programs and processes to meet or exceed all applicable regulations regarding nuclear safeguards.

Nuclear safeguard practices

To implement nuclear safeguards across our business, we employ a variety of practices, such as:

Established customer relationships

Our products are delivered to customers and accounts at licensed and safeguarded facilities in accordance with the Nuclear Cooperation Agreements (NCAs) in place with each respective country. The contracts we execute with our customers require the uranium we provide to be exclusively used for power generation and peaceful purposes (not for military or weapons use). We have long-established relationships with nuclear operating utilities that are safe, reliable operators and are subject to extensive regulation and licensing requirements. New customers are subject to a due diligence process to verify that our contracts meet the requirements of the Canadian NCAs and our corporate requirements.

Safeguards at our operations

All of our operations are subject to the international safeguard's regime. Our refinery, conversion plant, and CFM are subject to enhanced safeguards, including frequent inspections by the International Atomic Energy Agency (IAEA), an international organization that works to promote the peaceful use of nuclear energy.

Safeguards during transportation

In order to export our uranium products, we must secure the proper export licences and export permits from the CNSC and Global Affairs Canada. These arrangements are governed by the bilateral and multilateral agreements that are in place between countries. The export licence and permit verifies that the facility receiving the material is properly licensed to receive the material, that the competent authorities have been notified, and provides approval so that the material can enter the country where the facility is located. For the import of uranium products going to our facilities in Canada, we are responsible for obtaining an import licence from the CNSC. The licence verifies that Cameco is authorized to receive the material and that our facilities are properly licensed to receive it.

The uranium and nuclear fuel products we supply are used exclusively for the **generation of nuclear power**.

Following international nuclear agreements

Nuclear co-operation: We abide by Canadian nuclear policy and conduct business in accordance with the NCAs that Canada has with other countries.

Non-proliferation: We are subject to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), an international treaty established in 1970 created to prevent the spread of nuclear weapons and weapons technology, foster the peaceful uses of nuclear energy, and further the goal of achieving general and complete disarmament. As Canada is a signatory to the NPT, we are subject to the treaty and comply with all IAEA requirements. The IAEA monitors what we produce and where we ship our products through a number of inspections and measurements that verify our inventories both within our equipment and of our finished product.

Nuclear safeguards are measures to verify that countries comply with their international obligations not to use nuclear materials for nuclear weapons.

Product and transportation safety

WHY IT MATTERS TO CAMECO

We work with products that require special attention and care, and we take this responsibility seriously. Cameco has safely worked with and transported radioactive materials routinely for more than 30 years. Our transportation safety record is not something we take for granted.

Products transported from Cameco facilities

When transporting uranium product from one Cameco facility to another or to customers with North American delivery locations, we use third-party trucking companies. Outside of North America, we transport our uranium products by sea on large container ships or breakbulk/charter ships operated by third-party transporters. Our sites and transportation procedures are regularly inspected by Transport Canada and the CNSC.

Expectations

Our SHEQ Program contains three transport standards, which are provided to the carrier or freight forwarder during the bidding process as part of the contract. These standards cover ground transport in North America, marine transport, and the air transport of samples. We review and update these standards at least every three years.

North American Ground Transport Standard

This standard sets out our expectations for trucking providers, including the level of driver training (e.g., Transportation of Dangerous Goods [TDG] Class 7), radiation protection programs, reporting requirements, transport security, condition of the equipment used, and emergency contact.

Marine Transport Standard

This standard sets out our expectations, including with respect to TDG Class 7 training, radiation protection programs, reporting requirements, transport security, condition of the equipment used, and emergency contact.

Air Transport Standard

This standard outlines our requirements for the air transport of uranium samples that are sent to customers, laboratories or international agencies for analysis, including TDG Class 7 training, radiation protection programs, reporting requirements, transport security, condition of the equipment used, and emergency contact.

Qualifications

We work with a small set of specialized carriers and freight forwarders that are qualified to deal with Class 7 radioactive materials. Cameco conducts pre-screening of our carriers, independent of the procurement process. All carriers and freight forwarders used by Cameco are expected to have formal quality assurance programs. When we ship UF_6, U_3O_8, UO_2, or UO_3 outside of Canada, we hire a freight forwarder (a logistics company that coordinates the transport of the product from our facility to the shipping location specified by the customer). For example, a freight forwarder coordinates booking the trucks to meet the ocean carrier and the corresponding slot on the vessel and verifies that all the necessary documentation to support the shipment is in place.

Audits

We audit carriers (other than shipping, rail lines or couriers) at least every two years to assess compliance with our transport standards. We also audit all freight forwarders that we use, including auditing their audits of any subcontracted companies they employ. To enhance training opportunities, we also include one or two of our carriers or trucking companies when we complete full-scale emergency exercises.

According to the IAEA, in more than **50 years** there has never been a transport incident that has caused a significant radiological hazard to people or the environment.[23]

Information and labelling

We follow specific requirements for marking containers with information regarding the contents and how to handle them safely. We also follow appropriate category labelling, which indicates the level of radiation coming off the container, and placarding requirements, which are affixed to the sea container, flat rack, or truck.

Our products and packaging

Our products are packaged and handled to maintain safety. Packaging for uranium products must meet the rigorous requirements found in the CNSC's Packaging and Transport of Nuclear Substances Regulations, 2015. For additional quality assurance, we also audit our drum manufacturers.

CAMECO PRODUCTS	PACKAGING
Triuranium octoxide (U_3O_8), also known as uranium ore concentrate – solid, directly from our Key Lake and Orano's McClean Lake mills	Steel drums transported in trucks or secured within a sea container, which is then placed inside a vessel
Uranium trioxide (UO_3) – solid, after it has been processed in our Blind River refinery	Transported from Blind River refinery to Port Hope conversion facility in totes specifically designed for this purpose, or drums secured within a sea container, which is then placed inside the vessel
Uranium dioxide (UO_2) – solid ceramic-grade powder, from our Port Hope conversion facility	Steel drums transported in trucks, or drums secured within a sea container, which is then placed inside the vessel
Uranium hexafluoride (UF_6) – filled as liquid and turns solid, from our Port Hope conversion facility	Specially designed cylinders. The cylinder is placed on a cradle system on top of a specialized sea container (flat rack) or trailers
Fuel bundles – a set of fuel rods, each containing ceramic UO_2 pellets	Specially designed protective packaging to preserve product integrity

[23] https://www.iaea.org/topics/transporting-radioactive-materials

Public safety and emergency preparedness

WHY IT MATTERS TO CAMECO

Keeping our employees, contractors and the general public safe is the ultimate goal of our programs. Taking the time to prepare for emergencies and maintain public safety leads to a stronger reputation, community relationships, and improved safety for all.

Public safety

In accordance with our Risk Management Program, we systematically identify and track the potential risks that could threaten public safety at every facility we operate. As risks are identified, we work to change processes, materials or systems, where we can, to minimize or eliminate the potential hazard. We use process hazard assessments to identify hazards, examine our controls, and minimize risks.

Using this risk-based approach to public safety, we direct significant efforts towards our Fuel Services Division facilities. Our activities focus on:

Keeping public radiation exposure low

Our goal is to keep radiation doses ALARA. At our Port Hope conversion facility, we monitor fence line doses, model the potential dose to public, and use both high-volume air samplers and dust fall jars to monitor trends and respond to any increase in emissions. Cameco's average public dose across our three Fuel Services Division sites is well below the public dose limit of 1 mSv (for reference, the average annual dose from natural background radiation in Canada is 1.8 mSv).

Minimizing chemical risks

Within our Fuel Services Division, we manage a number of hazardous chemicals, such as HF, UF_6, and fluorine gas. We use a defence-in-depth approach to protect our people and the public. This starts with the specialized design of our facilities and systems (the first layer) and extends through multiple controls up to the last layer of defence, which is emergency response.

Emergency preparedness and response

We are the primary responders for all of our sites with the exception of Cameco Fuel Manufacturing, where the municipal fire departments fulfill that role. Therefore, we prepare and train our own emergency response teams. For example, at our Port Hope conversion facility, we train our workers up to the technician level for emergency response and follow National Fire Protection Association 1072, a standard that outlines the levels of competence required by responders to emergencies involving hazardous materials. Many of our workers have industrial firefighting professional certification and we have our own fire truck at the facility. We typically complete either one full-scale or one tabletop exercise each year.

During transportation of our materials, we have an emergency response assistance plan (ERAP) that sets out procedures in the event of an emergency. We also have a network of emergency response contractors on retainer through Green for Life in Canada and Republic Services/SRS in the US. If a significant transport incident were to occur, then we rapidly deploy to the site and contact the incident commander who retains control of the emergency situation. Cameco will then offer emergency assistance and provide materials expertise and our specialized radiation monitoring devices. We collect any spilled material and package and ship anything that is contaminated back to our mine sites where it is handled accordingly.

After any incident, we follow best practices in sharing learnings with industry, for example, through the World Nuclear Transport Institute. Cameco engages with key municipal fire departments along our transportation routes by providing information on the products we ship, radiological hazards, and incident management. We also periodically organize joint response exercises with select local municipal fire departments, emergency response contractors and Cameco's response team.

Inclusion and diversity

WHY IT MATTERS TO CAMECO

We understand the value of a diverse workforce and we embrace, encourage, and support workplace inclusion. Members of a diverse workplace bring new ideas, perspective, experiences, and expertise to the company. Our goal is to create an inclusive work environment, with a diverse and representative workforce being our measure of success.

Our approach

Our goal is a workplace where everyone feels welcome, valued, and an integral part of the team. To achieve our goal, we are committed to creating a safe, innovative, and inclusive culture where we act as "one Cameco". Much of this work is led or supported by our Inclusion and Diversity Committee, which includes 26 volunteer employees and leaders drawn from all company locations and employment equity groups. This committee advocates for, leads, and supports change, and it reports to the President and CEO, and the senior Vice-President and Chief Corporate Officer. We support inclusion and diversity through:

Standards and policies

We endeavor to adhere to all laws in the countries where we operate, including human rights, labour and employment laws (e.g., *Canadian Employment Equity Act*[24]) and share the values reflected in the Universal Declaration of Human Rights. Our commitment to diversity begins at the top through our Board Diversity Policy. Our People Policy describes our commitment to developing and supporting a flexible, skilled, stable, and diverse workforce. Our People Policy is supported by our Respectful Workplace Program, our Workplace Inclusion and Accommodation Program, and our Inclusion and Diversity Plan. We have a gender-neutral language guide to raise awareness about our word choices during daily business emails and interactions.

Data

We have an internal diversity dashboard to provide diversity statistics for employment equity groups by location, position, recruitment/turnover, etc. This dashboard allows Cameco to measure the impact of our diversity-related programs on recruitment, particularly of members of employment equity groups. In 2024, we plan to expand our diversity questionnaire to collect information on other marginalized groups beyond those identified in the Employment Equity Act.

Recruitment

We work to ensure all recruitment processes, including our job postings and job evaluation tools are gender neutral and barrier free. We also continue to give priority to qualified members of employment equity groups, particularly in roles where women are underrepresented. Our recruitment practices help ensure unconscious biases and systemic barriers in our processes are removed. We continue to see these efforts support the representation of women, Indigenous Peoples, and visible minorities in our workforce, including in areas of management (see next page).

Awareness

We work to support awareness and understanding of the benefits of inclusion and diversity at Cameco through open and respectful communication that fosters awareness and understanding. In 2023, we held an event for International Women's Day which included hosting Tammy Cook-Searson, Chief of the Lac La Ronge Indian Band, who spoke to employees about embracing equity. We also celebrated Pride month by raising the Pride flag across Cameco Canadian locations and hosting Micheal Bach of the Canadian Centre for Diversity and Inclusion, who spoke to employees on how they can be an active ally. In honour of the National Day for Truth and Reconciliation we provided orange shirts to employees at our Northern Saskatchewan operations and shared resources on reconciliation.

Training

Some of our training programs and courses that provide an opportunity for employees to learn how to help us create an inclusive workplace are:

Respectful workplace

All employees and leaders take mandatory respectful workplace training. In 2023, we updated our respectful workplace training to include additional information on how to address incidents of disrespectful behaviour. As of December 31, 2023, 93% of employees had completed the updated training.

Unconscious bias

All employees, including our executives, participate in a mandatory course on unconscious bias. As of December 31, 2023, 79% of our organization had taken this unconscious bias training.

Psychological safety

In 2023, we began a pilot project to provide employee workshops on psychological safety. The sessions educated employees on how fostering a psychologically safe environment can improve performance. Twenty-five employees attended these workshops.

[24] As a Canadian federally regulated employer, we are required to comply with the Employment Equity Act. The act requires us to engage in proactive employment practices to increase the representation of four designated groups: Indigenous people, visible minorities, persons with disabilities, and women.

Tailored programs

We also have programs that are tailored to achieving specific diversity and inclusion outcomes and to support underrepresented groups including:

Accessibility

At Cameco, we want to foster a work environment that is inclusive and barrier-free. In 2023, we introduced our first Accessibility Plan, which outlines our intended commitments to support both the attraction and retention of persons with disabilities and was guided by the Accessible Canada Act. We continue to review our facilities and assess how we can make improvements to support the accessibility and inclusivity of our Canadian facilities. Examples of facility improvements we have made include providing all-gender washrooms at our corporate office in Saskatoon and providing a multipurpose quiet room suitable for lactation, prayer, and other needs.

Pay equity

Cameco is committed to gender pay equity. We continue to work on closing any pay gaps; this involves a regular review during the annual compensation cycle and reviews at the time of promotions and recruitment. Questions or concerns about pay equity can be directed at any time to the corporate compensation management team. In 2023, we completed preparatory work for a pay equity plan that we plan to implement in 2024.

We continue to explore ways to make our facilities more **accessible and inclusive**.

Women in leadership

Diversity is also an important element of senior management and board leadership (read about board diversity on page 82). We strive for a percentage of women in senior management that, at a minimum, reflects the proportion of women in our workforce. We met this specific target in 2023 (35% of senior management were women while 25% of the workforce were women in 2023). Our long-term inclusion and diversity efforts should result in more women being identified and prepared for senior-level positions within the company.

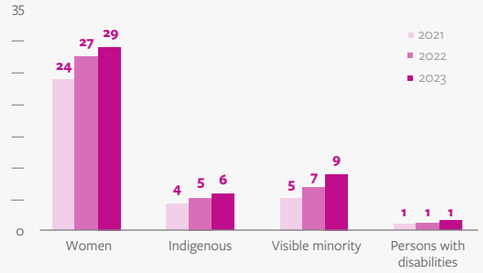
Indigenous employment

Working closely with the Indigenous communities around our operations has always been part of the way we do business. We employ Indigenous individuals across our business areas in a variety of skilled positions, from operators and supervisors to technicians and corporate professional roles. In northern Saskatchewan, we have had a long-standing commitment to maximizing the employment of Indigenous individuals. Read more on the next page.

OUR PERFORMANCE

Diversity in management

per cent

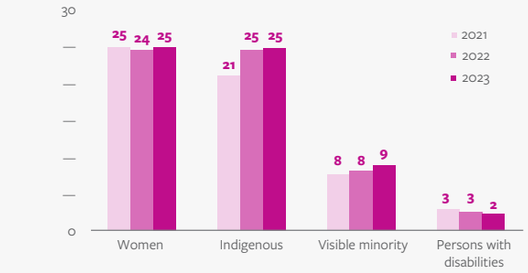


Figures as of December 31 each year. This chart only includes employees from our Canadian operations (including temporary and casual), as other jurisdictions are not (at this time) required to collect or maintain diversity information on employees.

We continue to improve our workplace practices to foster an inclusive environment that aims to support a diverse workforce and their advancement into leadership positions. Management includes all manager positions and above, and select professional and supervisory positions.

Diversity across our workforce

per cent



Figures as of December 31 each year. This chart only includes employees from our Canadian operations (including temporary and casual), as other jurisdictions are not (at this time) required to collect or maintain diversity information on employees.

SPOTLIGHT

Supporting Indigenous employees

In northern Saskatchewan, 50% of our workforce is Indigenous. We recognize the need to create a culturally relevant work environment for them. Through our Elder Advisor/Knowledge Keeper program, incorporating traditional languages into our operations, and celebrating Indigenous culture, we aim to create a welcoming and supportive environment.

Providing on-site cultural supports

Our work requires some employees to be away from their communities and families for extended periods of time, which we recognize can be challenging. To provide cultural supports while they are away from home, we reinstated our Elder Advisor/Knowledge Keeper program at our northern Saskatchewan mines in 2023.

An Elder or Knowledge Keeper is an Indigenous individual who holds spiritual and cultural knowledge in areas such as traditional medicine, languages, cultural teachings, or ceremonies. We employ Elders or Knowledge Keepers on a part-time, rotational basis to provide our workers with on-site support and counsel, helping to promote well-being and encouraging them to bring their whole selves to work.

We work with the local Indigenous communities to identify potential candidates. In 2023, we hired four individuals and plan to hire two more in 2024.

Incorporating Indigenous languages

Many of our northern Saskatchewan employees speak an Indigenous language, such as Dene, Cree or Michif. For some, this may be their first language spoken. We understand the importance of incorporating these languages into our operations to bridge language gaps.

We also provide Cree and Dene audio translations on our northern Saskatchewan website, and our community liaisons speak the local language. Using Indigenous languages helps us communicate effectively and respectfully and helps build trust and understanding.

Celebrating Indigenous culture

We regularly hold cultural events that celebrate and foster an understanding of Indigenous culture. In 2023, our employees were invited to attend the Pinehouse Elders' Gathering. We provided financial support and employee volunteer time for the Pinehouse Elders' Gathering, a week-long gathering attended by community members from across Saskatchewan. Daily workshops and events highlighted traditional knowledge, food, entertainment, and activities.

In recognition of National Indigenous People's Day on June 21, we invited drummers, Elders, and land and resource users from neighbouring communities to our northern Saskatchewan sites. We celebrated with our neighbours by listening to stories and showcasing Indigenous tools, medicines, art, cultural regalia, and traditional foods.

MEET OUR PEOPLE

Frank Natomagan

SITE ELDER

KEY LAKE MILL/MCARTHUR RIVER MINE, SASKATCHEWAN

When Frank Natomagan, an Elder with the Métis Nation-Saskatchewan, the Northern Village of Pinehouse and Pinehouse Christian Fellowship, retired from his 33-year career at Cameco's Key Lake in 2017, it left a void. Frank stayed active after his retirement in his home community of Pinehouse and worked with Cameco's northern liaisons and Pinehouse Business North, one of Cameco's main contractors. But still, something was missing.

Enter the Cameco Site Elder/Knowledge Keeper Advisory Program. Launched in September 2022, Frank was encouraged to apply. He rejoined Cameco as a site Elder at Key Lake and McArthur River. "Cameco was such a wonderful company to work for," said Frank. "I didn't realize how much I missed the people at site, so when this opportunity came, I felt it would be a great chance to re-engage."

In his role, Frank provides information about the mining sector to his community and provides advice to Indigenous employees at both sites, covering anything from adjusting to site life, financial planning, to spiritual advice. Now one-and-a-half years into the role, Frank is encouraged by the feedback he's received. "It's great that Cameco is supporting Indigenous employees and communities in the North, and it feels good to know I am playing a role in that by providing guidance to our people and to our community."

Employee development

WHY IT MATTERS TO CAMECO

We believe that building the skills and competency of our workforce is critical to attracting and retaining talent, mitigating risks, and developing a team that is engaged and stays informed on industry trends and best practices. We work to develop and retain high performing team members through workforce planning, building competencies for operational and professional development, and training and coaching for all employees.

Workforce planning

We conduct an annual review of human capital at Cameco. This includes identifying key positions, assessing succession readiness for those positions, and determining incumbents' potential and performance, including risk and impact of loss.

Defining competencies

Cameco has an orderly, logical and documented approach to determining what employees must know and do at a particular job or in a specific profession. This approach helps employees build competencies based on appropriate education, skills, experience, and behaviours, and provides a means of measuring, monitoring, and improving the performance of employees.

For example, Cameco has four leadership competencies under the acronym *"ABLE": Achieve results, Build trust, Lead change, and Energize people*. For each competency, there are three primary characteristics and five examples of what each leadership characteristic would look like in the work environment.

We believe all employees can be leaders in different capacities so the characteristics and responsibilities outlined under ABLE are things that can be exhibited and practiced by all employees. We work to build awareness around the competencies through company-wide communications.

Training and coaching

Every Cameco employee receives a foundational suite of training during onboarding including site-specific orientations, and training related to respectful workplace, unconscious bias, IT security, and our Code of Conduct and Ethics. In addition, most positions at our operations have a detailed job task analysis and specific compliance training (for example, safety and operational training). All training requirements are assigned, and completion is tracked, in our internal learning management system. To help employees develop their technology skills, we provide access to Cameco's Digital Learning Centre, an online portal with a wide array of digital-themed courses, presentations, and podcasts from upskilling basic digital skills to software development. Our performance management approach is based on a coaching model, with frequent, meaningful conversations about past performance and future goals. These conversations focus on key priorities, behaviours, expectations, and career growth and development.

Leadership development

In 2023, Cameco provided leadership development opportunities that included online and in-person workshops. Participants completed personality and skill assessments to improve their own self-awareness, attended workshops on topics such as psychological safety, Cameco's ABLE competencies and the Five Behaviours of Leaders, and were provided with personal coaching.

Health and wellness

WHY IT MATTERS TO CAMECO

The health and well-being of our employees is important to us. Our philosophy recognizes the importance of maintaining balance across four essential health dimensions: physical, intellectual, mental and spiritual.

We offer a variety of company-wide and site-specific programs and initiatives to support financial, physical, and mental well-being, including a group benefits program and an employee and family assistance program. Read more about our wellbeing programs on our website.

To support financial wellness, we offer a retirement program and employee share ownership plan. To foster physical wellness, we have on-site fitness facilities, lifestyle programs, and team activities. In 2023, we provided Mental Health First Aid Training for supervisors and Mental Health 101 training for employees, facilitated by the Canadian Mental Health Association. In 2023, 270 people participated in this mental health training. We provide an online wellness HUB, Health Connect, on our employee intranet site to promote health and well-being resources available through all our service providers. We also offer flexible work arrangements, which includes a hybrid-working environment for our corporate office location.

MEET OUR PEOPLE

Adam Smith

SPECIALIST, TECHNICAL

BLIND RIVER REFINERY, ONTARIO

An interest in science and technology, particularly in chemistry, led Adam Smith to his career with Cameco in Blind River's analytical laboratory. Recently promoted to the position of technical specialist, Adam enjoys working in the lab to solve both analytical and chemical issues. While he has only been with Cameco for five years, during his tenure he has been exposed to a variety of diverse types of lab work and opportunities, which have helped him expand his professional knowledge and further his career.

"I had the ability to learn many types of analytical instrumentation, which led me to my new role within Cameco," said Adam.

When asked what guidance he would offer a new employee who wants to grow their career at Cameco, Adam spoke about what he says are the keys to his success. "Be dynamic and embrace opportunities to learn many new things," he advised.

One of the things that Adam enjoys most about working for Cameco is the flexibility the company offers to help employees achieve a work-life balance. In addition to being the refinery's only technical specialist, Adam has two children and family time is important to him and finding a company that was the right fit was key.

Adam believes that the nuclear industry is a great place to work and the time is right for people to join the company. "We are part of an industry on the upswing," he said. "It's an exciting time to be at Cameco."

Unions

WHY IT MATTERS TO CAMECO

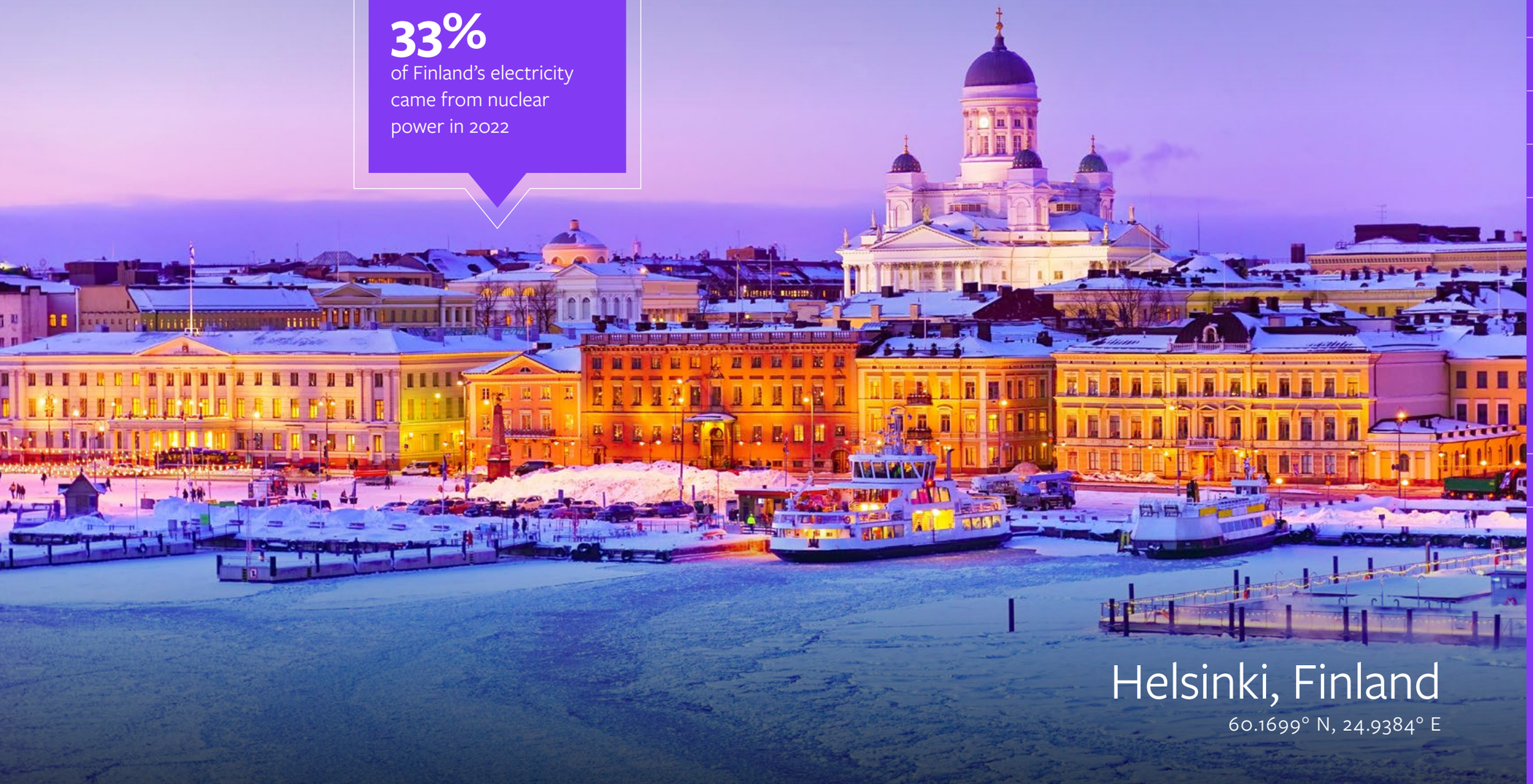
Cameco respects the rights of our employees to associate and welcomes the contributions of organized labour. In 2023, 29% of our employees were covered under collective bargaining agreements.

Unionized employees at our Key Lake and McArthur River sites, our Port Hope conversion facility, and Cameco Fuel Manufacturing are represented by the United Steelworkers. For more than two decades, our collective bargaining agreement (CBA) for our Key Lake and McArthur River sites has included a northern preference provision, which gives preference to northern and northern Indigenous workers in hiring, apprenticeships, recall, and retention during workforce reductions within the first 10 years of employment.

We endeavour to be proactive in our communications, honest and transparent as decisions are made, and engage early to build trust with all union representatives. Along with the standard grievance process for specific issues and the formal bargaining process at the end of each CBA expiry, we host ongoing meetings between union and management (approximately four to seven per year) that have specific agendas. Negotiation for our Key Lake and McArthur River collective agreement began in 2023. As in the past, work continues under the terms of the expired collective agreement while negotiations proceed.

Leading with our values

33%
of Finland's electricity came from nuclear power in 2022

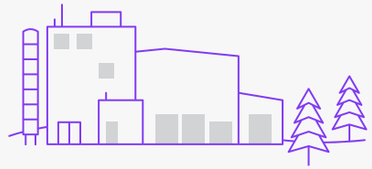


Helsinki, Finland
60.1699° N, 24.9384° E

2023

Governance highlights

At Cameco, we believe that sound governance is the foundation for strong corporate performance. We are dedicated to our core value of integrity and apply high standards of ethical behaviour and transparency to our business activities. We have a suite of policies, programs and practices to manage and protect our systems, information, and assets. At the end of 2023:



74%
of all spend on services at our northern Saskatchewan mine sites was with northern local businesses

20%
of our board members were Indigenous

40%
of our board members were women

100%
of our employees received cybersecurity training

Corporate governance

WHY IT MATTERS TO CAMECO

We view effective corporate governance as an essential element in the ongoing success and sustainability of our company. We are committed to governance practices that align with our values and our strategy, and that are consistent with regulatory expectations and evolving best practices.

Our board of directors plays an important role in providing oversight of the management team and providing direction for our strategy and business affairs. The board guides Cameco to operate as a sustainable business, to optimize financial returns while effectively managing risk, and to conduct our business in a way that is transparent, independent and ethical.

Board composition and renewal

The nominating, corporate governance and risk committee reviews director competencies every year against a skills matrix to validate that they continue to meet Cameco's needs. Each director completes a self-assessment of their competencies following a prescribed rating scale, identifies where they have significant or demonstrable experience, and meets with the nominating, corporate governance and risk committee chair or the board chair to review their self-assessment. The committee reviews the results for consistency and to confirm that the directors possess skills in these areas. We have term limits and a retirement policy for directors and have added three new directors in the past five years. Read more on page 30 of our 2024 Management Proxy Circular.

MEET OUR PEOPLE

Chief Tammy Cook-Searson

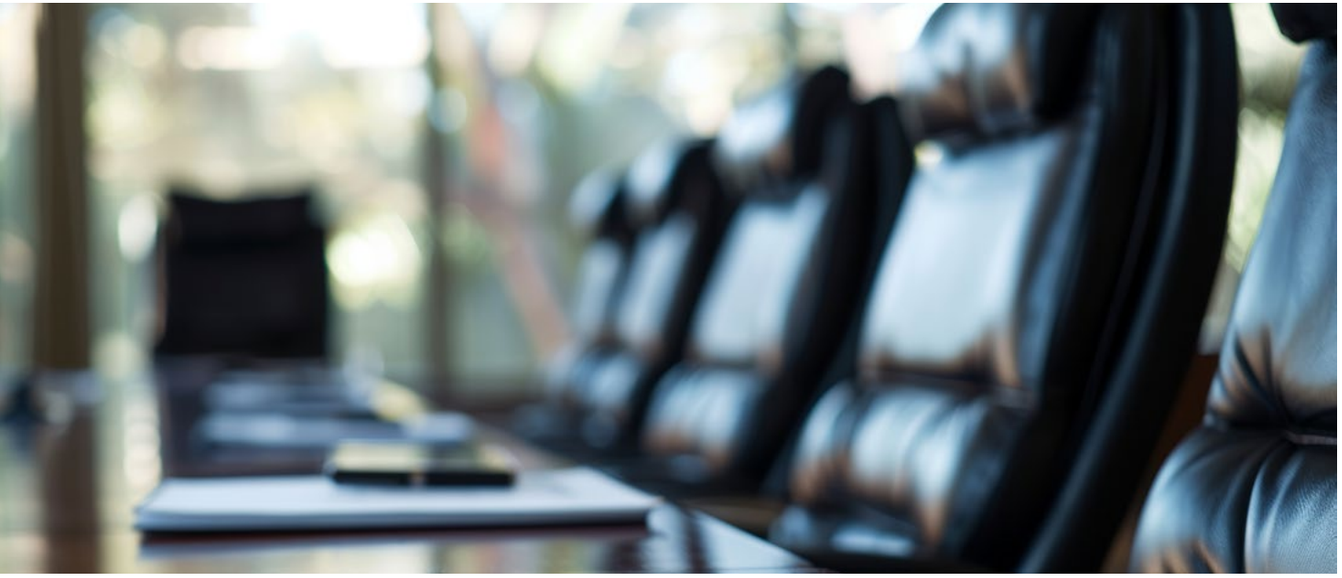
BOARD MEMBER

When Chief Tammy Cook-Searson was approached to join Cameco's board of directors in 2023, she didn't hesitate. Chief Tammy has served as the Chief of the Lac La Ronge Indian Band for 19 years and is president of Kitsaki Management Limited Partnership, the entity that manages the Band's economic development activities. She had seen first-hand how Cameco operated in northern Saskatchewan, where some of Cameco's key assets are located.

She'd also heard fellow Lac La Ronge Indian Band member Senator Chief Harry Cook speak glowingly of the company during his tenure on the Cameco board.

She informed Cameco that if a position ever became available, she wanted to be considered. Now that the opportunity to actively oversee the next chapter of development, partnerships and growth in the north has arrived, she's thrilled. "I was really grateful to be chosen to join Cameco's board," said Chief Tammy. "It's such a well-organized company that provides many jobs for northerners and plays a very important role in producing the uranium necessary to generate zero-carbon electricity. And I've always admired the way that safety and protecting the environment is a top priority.

"I've always seen Cameco as very respectful and mindful of the northern communities," said Chief Tammy. "I'm grateful that we have a diverse board and I'm looking forward to the learning opportunity that lies ahead."



Board diversity

A board with a mix of diverse skills, backgrounds, experience, gender, and age, that also reflects the evolving demographics and geographic areas where we carry out business, is important for sound decision-making and good governance. The board has a formal diversity policy, which includes a set of measurable objectives for achieving diversity on the board, including the identification and nomination of directors who are women or who have Indigenous heritage. At the end of 2023, four of our directors were women (40% of the total number of directors). To incorporate Indigenous perspectives and to reflect the communities where we operate, especially since a significant portion of Cameco's operations are in northern Saskatchewan, our diversity policy requires at least one director to have Indigenous heritage and be from Saskatchewan.

At the end of 2023, two directors Indigenous and from Saskatchewan (20% of the total number of directors), and we have had Indigenous directors on our board since 1992. Our diversity policy also requires the board to have directors with extensive experience in geographical areas where we have or anticipate having significant business interests, and to represent a range of ages. Read more on page 34 of our 2024 Management Proxy Circular.

Having a board that reflects the areas where we carry out business is important for **sound decision-making** and **good governance**.

GOVERNANCE INFORMATION

ETHICS	
Code of Conduct and Ethics for directors, executives and employees	Yes
BOARD COMPOSITION AND INDEPENDENCE	
Size of board	10
Independent directors	8
Separate chair and CEO	Yes
Independent chair (required)	Yes
COMPREHENSIVE BOARD	
Assessment process	Yes
Directors that are financially literate	100%
Board meetings held in 2023	8
Average meeting attendance	94%
BOARD RENEWAL AND DIVERSITY	
Annual election of directors	Yes
Average age of directors	64
Mandatory retirement age	Yes
Average director tenure	8.2 years
Women board members	40% (4)
Board Diversity Policy	Yes
Indigenous board members	20% (2)

All chart information as of December 31, 2023.

For More Information
- 2024 Management Proxy Circular, page 45, 'Our Corporate Governance'
- Code of Conduct and Ethics
- 2023 Annual Report
- 2023 Annual Information Form

Our key governance documents are available on our website (cameco.com/about/governance).

SPOTLIGHT

Focused on good governance

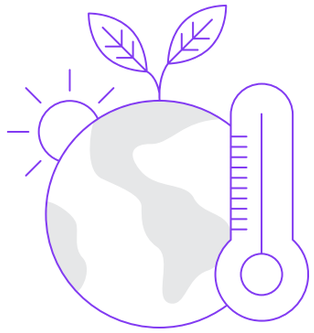
A well-functioning, strategic and responsive board is important to our overall success, and provides oversight, guidance and stability to our organization. The nominating, corporate governance and risk committee is responsible for the director recruitment and succession process, maintaining a well-rounded board, and overseeing board performance. We maintain a high-performing board by:

Aiming for a diversity of perspectives

Cameco recognizes and embraces the benefits of having a diverse board for effective decision making, and views diversity at the board level as an important element in strong corporate governance. A diverse board will include and make use of differences in skills, experience, gender, age, ethnicity and geographic background.

The nominating, corporate governance and risk committee is responsible for overseeing board succession. The committee continually maintains a list of suitable candidates based on their skills, character, integrity, judgment, professional achievements, diversity, and any other characteristics that would enhance the board's overall composition and oversight.

As part of the board's deliberate and thoughtful approach to succession planning, in 2023, Chief Tammy Cook-Searson and Dominique Minière were appointed as board members, who bring new perspectives and skills to our board.



Enhancing sustainability and climate skills

A well-rounded board with a diverse range of competencies is able to provide strong oversight across all areas of the business. While we require all board members to be proficient in core competency areas, such as financial literacy and business judgment, each director completes a self-assessment of their skills annually to identify additional areas of experience they bring to the board. These assessments are used to assist in succession planning.

In 2023, we added a climate competency as a new skill to our skills matrix. At the end of 2023, nearly all of our board members self-identified as having climate experience, which we defined as experience assessing challenges and opportunities facing the business brought about by climate change. This experience is gained through a variety of ways, including development opportunities provided or supported by Cameco.

Assessing board performance

Assessing board effectiveness is key to maintaining a high-functioning board. The nominating, corporate governance and risk committee is responsible for overseeing the annual performance and effectiveness assessment of the board and its committees.

Board members complete annual assessment questionnaires to provide feedback on the board's and its committees' effectiveness and its proficiency in providing oversight and guidance on Cameco's affairs. The insights gathered are used to create action plans and identify improvement opportunities, as required.

In addition, we use a third party to conduct an independent board assessment every five years, which is used to develop an additional action plan focused on governance improvements.

Governance for sustainability matters

WHY IT MATTERS TO CAMECO

We are dedicated to conducting our business responsibly and overseeing and managing our risks in a diligent manner. We integrate key sustainability factors (safety performance, a clean environment, and supportive communities) into our executive and employee compensation strategy as success in these areas is critical to Cameco's long-term success.

Role of the board

Our board is responsible for overseeing the integration of sustainability and ESG principles throughout the company. The board's goal is to help ensure we operate as a sustainable business, optimizing financial returns while effectively managing risk, including sustainability matters and climate-related risks. The board also oversees our strategic planning process and annual corporate objectives; and approves incentive compensation for our executives, all of which are based on performance against our four measures of success, including sustainability performance. Sustainability governance, risk oversight and disclosure are regular topics of discussion at board and committee meetings.

Safety, Health and Environment (SHE) committee

Oversight of sustainability reporting and disclosure, including climate-related reporting and disclosure, has been delegated by the board to the Safety, Health and Environment (SHE) committee for review and to make recommendations to the board. The SHE committee is responsible for overseeing risks related to its mandate, including those posed by changing climate conditions and economic transition, operational and value chain energy and greenhouse gas (GHG) emissions management, and climate change-related policy and regulation.

Enhancing sustainability and climate competence

Cameco's board has deep experience in risk management and is continuing to advance their understanding of sustainability and climate-related risks. In 2023, Cameco's board of directors continued to participate in educational sessions focused on climate, both as a group and individually, building on the climate-focused educational sessions that they undertook in 2022. We also evaluate climate change experience as part of our board skills matrix.

In 2023, nearly all board members reported having experience assessing challenges and opportunities facing the business brought about by climate change. In addition, in 2023, Cameco appointed Chief Tammy Cook-Searson (see page 81) and Dominique Minière (see below) as board members who have both been appointed to serve on Cameco's Safety, Health and Environment Committee of the board and are expected to bring unique perspectives to the sustainability and climate discussion at the board table. In 2024, Mr. Minière was appointed as chair of the Safety, Health and Environment Committee following the retirement of Jim Gowans.

MEET OUR PEOPLE

Dominique Minière

BOARD MEMBER

With more than 40 years of technical and senior management experience in the nuclear industry, Dominique Minière has pretty much seen it all. But he still sees something special in Cameco. Dominique joined Cameco's board of directors in September 2023, but he's long been an enthusiastic supporter of the company from afar.

"Over my career, I've been involved with all sorts of companies – state-owned, private, big and small," said Dominque. "But Cameco is one of the best I've worked with. They have a very good image, and you know you're dealing with a very professional and very trustworthy company. That was very appealing to me."

Dominique was intrigued by the idea of helping Cameco reach the next level on its path towards energizing a clean-air world. "The way Cameco continues to expand across the fuel cycle with the Westinghouse acquisition and our Global Laser Enrichment investment, I believe we can really become a world nuclear leader," said Dominique. "If we manage the company in a way that's ambitious and while still applying the right amount of caution, we can grow into that."

Dominique is encouraged as momentum for nuclear energy continues to build. "Our work is to alert, challenge and prevent the company from making costly mistakes," said Dominique. "From my experience, I have insight into many areas that are important for Cameco's future," said Dominique. "We need a lot of new nuclear and being part of a company closely involved in this is very appealing."

Mechanism for discussion and oversight

Cameco's board recognizes that climate-related risks and opportunities must be characterized and addressed appropriately. Today, individual climate-related risks and opportunities are considered by the board, or within the various board committees (see diagram on the next page), such as the SHE committee, on a quarterly basis as part of our Risk Management Program and annual reporting processes. Examples of climate-related topics that have been discussed and reviewed are listed below:

- Potential impacts to assets, operations, and workers resulting from shifts in temperature, precipitation and more frequent and extreme weather events.
- Regulatory risks related to GHG pricing and mandatory changes to electricity, fuels, and transportation systems.
- Sustainable financing taxonomies and tools in Canada and worldwide.
- Cameco's role as a supplier of choice and in advocating for nuclear energy as a central part of achieving a net-zero economy in a world with increasing electricity demand.
- Our approach to maintaining integrity and transparency throughout our climate action, target setting and disclosure actions in order to manage climate-related legal risks.

Our executive team works with leaders across the company to **manage climate-related risks** and opportunities.

Management's role

Our executives work with leaders and experts across the company to better understand and manage sustainability topics and climate-related risks and opportunities. The chart on the next page illustrates how sustainability topics and climate-related information flows between groups with ESG and climate-related responsibilities across Cameco. Our ESG and climate governance includes:

Executive team

Our executives provide strategic and operational leadership and take a proactive approach to managing risk across the company. As part of our Risk Management Program, our executives regularly report to the board and its committees on risks, which include any identified climate-related risks and opportunities. Our executives:

- Are responsible for preparing the company's disclosures of the major risks faced by the company.
- Receive regular updates from Cameco's climate change team on topics including climate governance, performance reporting, policy and regulation, energy and emissions management, climate risk management and adaptation.
- Approved Cameco's Low Carbon Transition Plan, establishing new climate action targets for our organization in 2022.
- Approved our site-by-site decarbonization pathways in 2023, outlining potential activities to achieve our 30 by 30 GHG emissions reduction target and possible projects to support our longer-term net-zero ambition (see page 53 for details on these pathways).

One of our executives, the Senior Vice President and Chief Corporate Officer, is ultimately responsible for development and delivery of our overarching climate change strategy.

ESG steering committee

Chaired by the senior vice-president and chief corporate officer, our multi-disciplinary ESG steering committee reviews our approach to sustainability, ESG governance and reporting, evolving trends, and climate. The ESG steering committee reports directly to our executives.

Subject matter experts

Many subject matter experts have sustainability responsibilities across our business. These experts and their leaders are responsible for tracking our performance, implementing sustainability initiatives and reporting to the ESG steering committee.

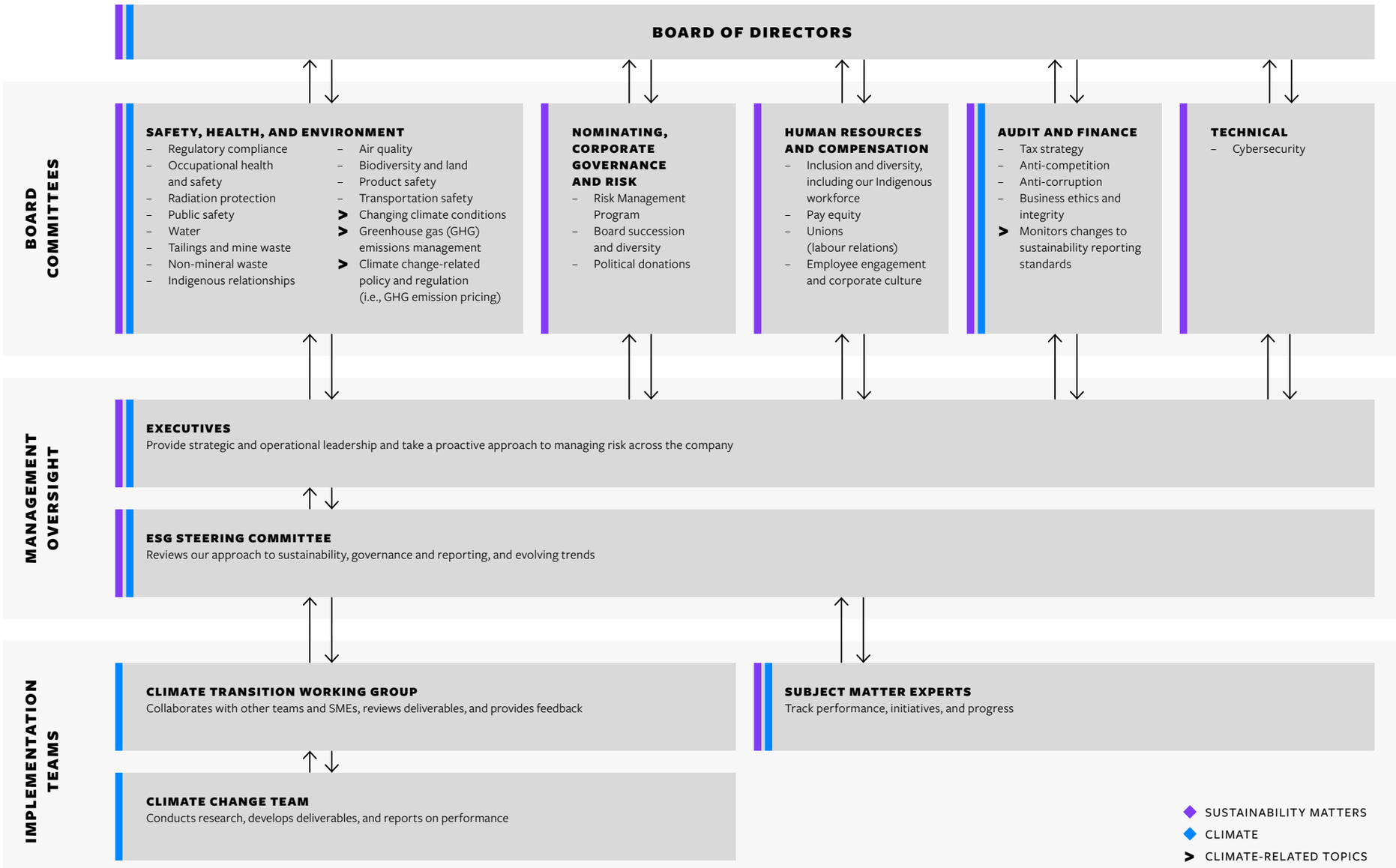
Climate transition working group

This interdisciplinary group with representatives from safety, environment, finance, corporate strategy, marketing, risk management, technical services, operations, and asset management. The climate transition working group is chaired by the Manager, Climate Change, and engaged in target setting, developing decarbonization strategies for our operations and value chain, preparing Cameco for the transition to a low-carbon economy, and proactively managing climate-related risks.

Climate change team

This team is responsible for climate-related trend research, climate strategy and deliverable development, and performance reporting. The climate change team is led by the Director, Climate Change, Environmental Affairs and Geo-environmental Engineering, as part of the larger Safety Health Environment Quality and Regulatory Relations (SHEQ&RR) business unit under the Vice-President, SHEQ&RR.

Sustainability and climate governance structure



Management approach for sustainability matters

At Cameco, sustainability principles are integrated within our strategy and our business planning processes and reporting. We have a strong and well-established management system and practices, and we strive to continuously improve their rigour.

Tying compensation to sustainability performance

Our compensation program emphasizes our balanced scorecard approach and our commitment to integrating sustainability measures into our executive compensation. 50% of our short-term incentive targets for employees, including executives, are tied to sustainability performance measures.

Cameco's management system

Our management system describes the framework of policies, processes, and procedures we use to help us fulfill all the tasks required to achieve our objectives and strategy. The Cameco management system (CMS) sets out our vision, values, and measures of success. It identifies our policies and also speaks to our strategic planning process, leadership alignment and accountability, compliance and assessment, people and culture, process identification and work management, risk management, communications and stakeholder support, knowledge and information management, change management, problem identification and resolution, and continual improvement. (Read more about Cameco's management system.)

Stringent regulatory environment

In addition to following the same provincial or state and federal compliance requirements for environmental and social performance as other mining companies, the facilities we operate are federally regulated through their entire lifecycle by national regulators including the Canadian Nuclear Safety Commission (CNSC) and the United States Nuclear Regulatory Commission (NRC) or its designate. Some of the enhanced oversight activities that apply to our facilities include:

Inspections

Our operations are regularly inspected by the applicable regulatory authorities to verify that we have systems in place to protect people and the environment (read more about our systems for environmental protection).

Relicensing

We are subject to a comprehensive relicensing process by the federal regulator on a regular basis. The relicensing proceedings are multi-year processes that culminate with public proceedings that feature interventions and participant funding.

Transparency

These life-cycle regulators regularly provide independent reports (that include the environmental and social performance) of our operated facilities to the public. For example, the CNSC publishes annual regulatory oversight reports for our Canadian operations.

Audits

Read about our internal and external audits.

Business ethics and integrity

WHY IT MATTERS TO CAMECO

At Cameco, one of our four core values is integrity. Through our personal and professional integrity, we lead by example, earn trust, honour our commitments, and conduct our business ethically. Our reputation for maintaining high standards of ethical behaviour has helped Cameco to grow into the global business it is today.

Business ethics

Our Code of Conduct and Ethics guides how we uphold our value of integrity. The Code applies to all employees, executives and members of Cameco's board and subsidiary boards and sets out our principles and guidelines for ethical behaviour at Cameco and with our shareholders, our communities and all our stakeholder groups. Read more on pages 53 through 56 of our 2024 Management Proxy Circular. Cameco's corporate ethics program is underpinned by:

Conduct and ethics committee

Our conduct and ethics committee is the management group responsible for oversight of ethics matters and practices. Our conduct and ethics committee includes representatives from internal audit, human resources, legal, and our executive team. The committee actively reviews all ethics hotline matters as they arise and formally meets quarterly to review the current status of ethics matters. Our executives and the audit and finance committee of the board receive quarterly updates on any new matters that could impact the integrity of financial reporting or the credibility of Cameco's senior management. Additionally, the conduct and ethics committee provides recommendations to the board of directors on matters relating to the Code of Conduct and Ethics, conflict of interest standards, and any related policies and programs.

SOx compliance

Controls around key ethics-related risks are assessed annually by our internal Sarbanes-Oxley (SOx) compliance function and audited by our external auditors.

Conduct and ethics training

All new Cameco employees take a mandatory Code of Conduct and Ethics training course. Every year, employees in certain functional areas complete Code of Conduct and Ethics online training and submit a declaration statement. At least every three years, all employees complete this online training and declaration statement. The training includes key issues such as conflicts of interest, fraud prevention, privacy matters, acceptable gifts and invitations from vendors, respectful workplace matters, and avenues available to raise concerns about ethics matters.

Ethics hotline

We encourage our employees to speak to their manager, or to the human resources, legal, or internal audit groups regarding any ethics concerns. Through a third-party service provider, we also offer an anonymous ethics hotline that is open to all employees, contractors, and suppliers from across our operations. Information about the hotline is broadly communicated to employees and is included in our Supplier Code of Conduct and Ethics to let suppliers know they can communicate any concerns to us in this way. Every year, we complete a benchmarking exercise of our hotline statistics against other companies comparable to our size and industry, based on information obtained from a third party. Results of our benchmarking are reported to our executive team and to the audit and finance committee of the board. In 2023, 33 ethics-related matters were reviewed, investigated, and addressed under the conduct and ethics committee's formalized processes.

OUR PERFORMANCE

Reports to our ethics hotline

	2021	2022	2023
Ethics reporting rate [reports per 100 employees]	1.03	1.33	**1.54**
Total ethics reports	20	28	**33**
NUMBER OF REPORTS BY CATEGORY			
Unethical conduct or conflict of interest	6	7	**12**
Safety, health, environment	5	3	**6**
Discrimination or harassment	4	8	**7**
Violation of laws, regulations, policies or procedures	2	7	**1**
Theft, embezzlement, or fraud	1	3	**5**
Privacy	2	–	**1**
Harm to property or security of persons	–	–	**–**
Financial reporting and accounting	–	–	**–**
Manipulation or falsification of data	–	–	**1**

We believe the number of reports to our ethics hotline has increased over the last two years due to increased ethics training and a greater awareness of our ethics reporting process.

All employees completed our **Code of Conduct and Ethics** e-learning course in 2023.

Anti-corruption

Cameco places great importance on the integrity of our relationships with government agencies, officials, political parties, leaders, and candidates for public office around the world and is committed to maintaining high standards of ethical behaviour. Cameco has no production in countries with high levels of corruption risk (as determined by the 20 lowest rankings in Transparency International's Corruption Perception Index). We believe that all business transactions, no matter where they occur in the world, must be conducted in a manner that enhances our reputation for integrity and best business practices. We uphold these values in the following ways:

Anti-corruption program

We have had an Anti-Corruption Policy/Program since 1996. Our Global Anti-Corruption Program supplements our Code of Conduct and Ethics by setting out the principles, practices, and rules employees, and third parties acting on behalf of Cameco, are expected to follow. This program applies to all our operating subsidiaries, including our offices in the US, Australia, Europe, and Kazakhstan. Examples of actions we take as part of our program include monitoring in-country risk, conducting applicable due diligence related to third parties and affiliated entities, and monitoring gifts and hospitality. Our Global Anti-Corruption Program sets out the reporting and approval requirements for political contributions which is further supplemented by Cameco's Political Donations Standard. We also complete an anti-corruption risk assessment as part of our Risk Management Program (read more on page 21).

We have had an **anti-corruption policy** or program since 1996.

Our program includes:

Integrity due diligence and monitoring: Our Integrity Due Diligence Procedure formally documents the key processes and requirements involved in our risk-based due diligence process. All documentation prepared or obtained as part of this procedure is maintained and stored for the duration of the relationship and for at least an additional 10 years.

Risk Assessment Procedure: Our Risk Assessment Procedure supplements the regular quarterly and annual risk assessments that are required as part of the ERM process.

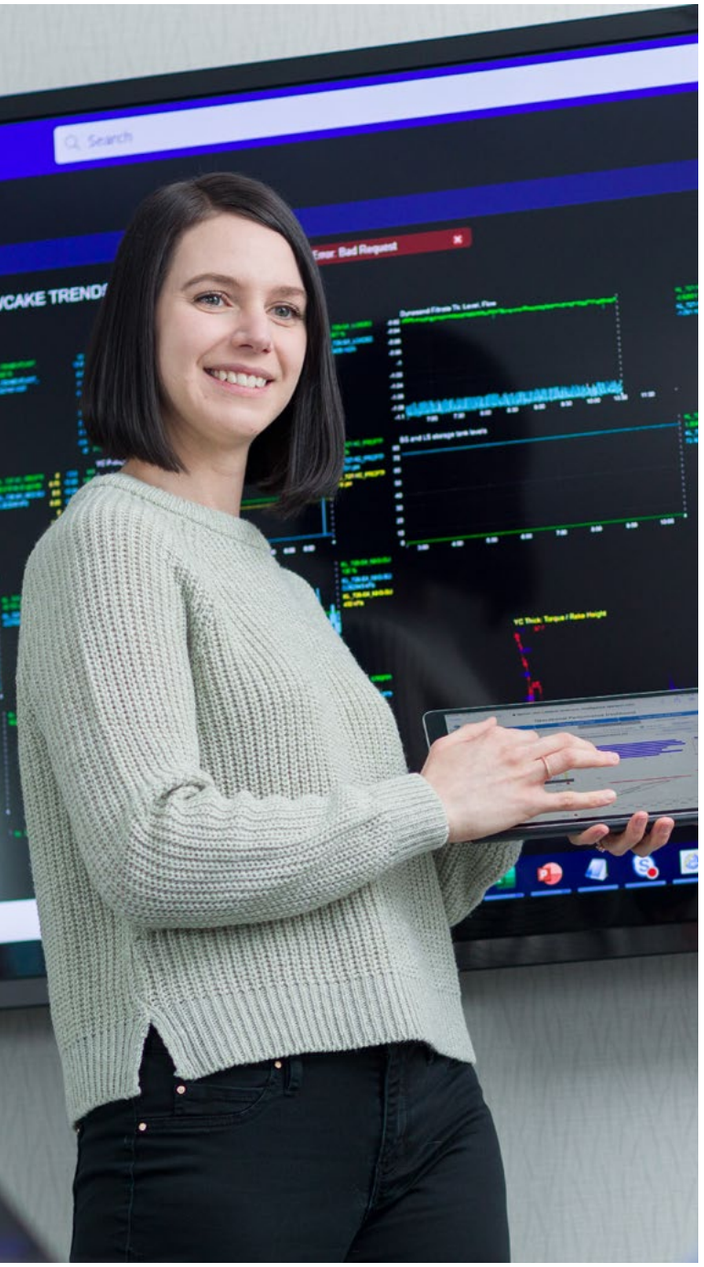
Monitoring Procedure: Our Monitoring Procedure sets out the process for developing and implementing annual testing and monitoring activities used to determine the effectiveness of the Global Anti-Corruption Program.

Training

In addition to Code of Conduct and Ethics training, we provide scenario-based and discussion-centric anti-corruption training to employees who are in certain functional areas, conduct business in higher-risk countries, or directly interact with public officials. We provide similar training to third parties that act as our representatives in higher-risk countries.

Fraud risk assessment

We complete a full fraud risk assessment every two years which seeks to identify Cameco's vulnerabilities to fraudulent activity and assess the risk (likelihood and impact) that those exposures may result in potential material misstatements in the financial statements, material loss and/or reputational damage.



Human rights

We are committed to respecting and observing the protection of human rights and share the values reflected in international proclamations about human rights, such as the Universal Declaration of Human Rights. We respect human rights wherever we operate and prohibit human trafficking, slavery, forced labour, and child labour within our operations and our supply chain. We strive to provide a safe and healthy working environment that is free from harassment and discrimination. We have formalized our commitment to human rights in our Code of Conduct and Ethics and our People Policy. We also have a Supplier Code of Conduct and Ethics that sets standards for those who provide goods and/or services to Cameco and states our expectation that they comply with all human rights, labour and employment laws in the countries where they operate. Cameco assesses the risk around respectful workplace and protected grounds in the Canadian Human Rights Act annually as part of our Risk Management Program.

Competition law compliance

Competition laws (referred to in the US as "antitrust laws") are an important aspect of free and open markets. They are designed to provide consumers with product choice and competitive prices, to protect competitors from unfair competition, and to promote economic efficiency. A mere allegation of anti-competitive conduct can be damaging to a company's reputation and disruptive to its business. We endeavor to follow competition and antitrust laws in all our interactions with our customers, suppliers, and competitors. We work to prevent anti-competitive behaviour in the following ways:

Competition law program

Our Competition Law Compliance Program guides our actions and is updated regularly. It outlines our expectations of all employees, executives, and directors.

Training

In addition to mandatory Code of Conduct and Ethics training for all new employees, we provide targeted competition law training to employees in certain functional areas to support them in understanding the rules. These employees have been selected because they are in higher-risk roles or directly interact with our suppliers, customers, and competitors. Our training covers high-risk areas including discussions with competitors, arrangements with customers and suppliers, and joint ventures.

Transparent disclosure

Our corporate reputation, both locally and internationally, is tied to how we communicate with our stakeholders. We continually provide important financial and operational details to the public, ensuring that complete, accurate and balanced information is disclosed openly and honestly. We have a Corporate Disclosure Policy, as well as a program and procedures that govern our disclosure controls and practices. The board's audit and finance committee is responsible for overseeing the review of our disclosure controls and procedures once a year and recommending any significant changes to the board for approval.

Public policy involvement

We co-operate and engage with government bodies and regulatory agencies about public policy positions, laws and regulations that are relevant to our business. Our activities may include direct lobbying on specific policy proposals or advocating our positions on issues of key importance to the company through industry or business associations such as the Saskatchewan Mining Association, the Mining Association of Canada, and the Canadian Nuclear Association, among others. At all times, we conduct ourselves ethically and with integrity, and duly publicly report interactions with government officials on the lobbying registries in jurisdictions that maintain such systems.

Tax transparency

WHY IT MATTERS TO CAMECO

Cameco's commitment to ethical behaviour and integrity includes transparency into our corporate taxation. As a resource company, we pay significant amounts of tax across multiple jurisdictions, including income taxes, uranium royalties, property taxes, sales and use tax, and indirect taxes. In addition, we collect and remit employment taxes from our more than 2,600 employees.

Our approach

At Cameco, we believe that tax is a fundamental component of overall financial performance. We are guided by our Code of Conduct and Ethics and comply with all tax laws that apply to our operations. Our tax department works collaboratively with other business units to preserve long-term value, and we monitor and adjust to legislative changes in each jurisdiction where we do business. Cameco employs qualified personnel and engages with respected external service providers for their expertise prior to the execution of any significant transactions.

Each quarter, the Chief Financial Officer provides a report to the audit and finance committee of the board updating them on tax-related activities, issues, risks, and the potential impact of legislative or tax policy changes since the prior quarter. We approach all tax authorities in a professional, collaborative, and transparent way. We seek to help them understand our business and resolve uncertain or disputed matters through well-supported tax filing positions, timely audit inquiry responses and clear communication. Where we do not agree with tax authority assessments, we proactively appeal and defend our positions.

As a Canadian multinational company with a global customer base, Cameco needs to charge for various goods and services provided to and from its various subsidiaries and affiliated companies. We do this in compliance with relevant laws in the affected jurisdictions. As such, our consolidated tax rate is a blend of rates applicable in Canada and in the jurisdictions of our foreign subsidiaries and affiliates.

We adhere to the arm's-length principle, seeking to align intercompany pricing and other terms and conditions with comparable contracts between arm's length parties.

Commitment to transparency

We have annually reported payments to governments, as required by Canada's Extractive Sector Transparency Measures Act (ESTMA), since 2016. Extending beyond tax transparency, the report details royalties, fees, and other payments made to Indigenous, municipal, provincial, and federal governments in Canada, the US, and Australia by Cameco and our subsidiaries for commercial development related to the exploration and extraction of minerals. Read Cameco's 2023 ESTMA Report.

Cybersecurity

WHY IT MATTERS TO CAMECO

In the digital era, cybersecurity threats pose an ongoing risk to organizations across industries. We recognize the high importance of maintaining constant vigilance and resilience to these types of threats.

Our approach

We protect our systems, information, and physical assets through a cybersecurity program that aligns with the National Institute of Standards and Technology (NIST) Cybersecurity Framework and implement applicable security controls and benchmarks from the Center for Internet Security (CIS). We also work regularly with government organizations, such as the Canadian Centre for Cyber Security which provides regular updates on emerging issues. We have a well-defined incident response process in place which includes keeping external security specialist firms on retainer and having our security incident response interfaced with our corporate crisis management plans, which enables rapid response and activation of subject matter experts.

All of our employees received **cybersecurity training** in 2023.

Cybersecurity risks

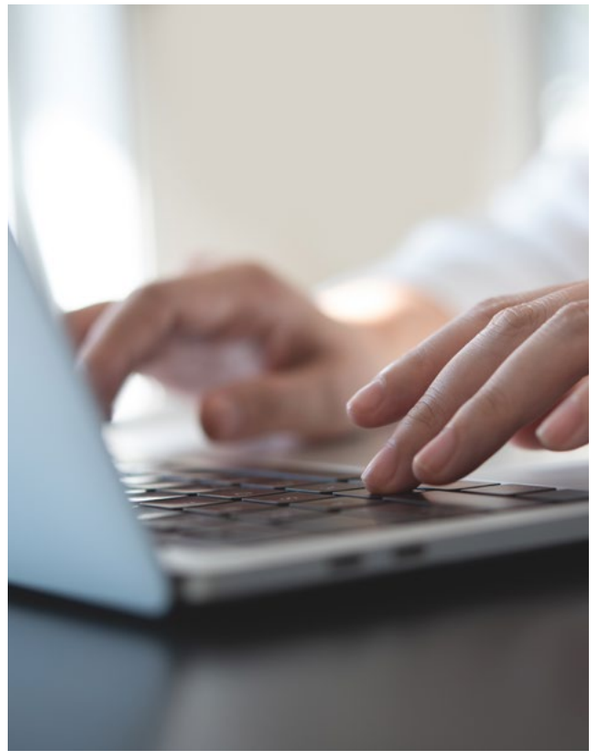
On an annual basis, our internal audit team develops a risk-based internal audit plan, which also covers one or more cybersecurity related subjects. As part of our integrated audit, we also engage external auditors to complete reviews every year to examine our security controls and IT internal controls. We also commission third-party cybersecurity experts to complete external multistage penetration tests and use their findings to further enhance our security processes and controls. Each quarter, we present a dashboard to the board that highlights changes to our cybersecurity risk profile, outlines areas of focus, provides a self-rating, and describes how we are responding to the external environment. In 2023, Cameco implemented the recommended improvements identified during a backup and ransomware assessment focused on the 'recovery' phase, which is the last line of defense in the event of ransomware attack, completed in 2022.

Cybersecurity awareness

Our board and workforce play a role in protecting Cameco from cybersecurity threats. We work to educate and inform our workforce to recognize potential threats and help prevent cyber-related incidents. As employees join the company, we provide cybersecurity awareness training and require an annual mandatory e-learning module and sign-off. We also run a contractor module, and a special module for employees who use our industrial control systems. We supplement this training with awareness campaigns, topical emails, and articles in Cameco's weekly email news bulletin and intranet site. In 2023, 100% of our employees completed our information security course. For more information on our board's role on cybersecurity oversight, see page 49 of Cameco's Management Proxy Circular.

Data protection

Under the CNSC's Nuclear Safety and Control Act, strict regulations dictate what data we can and cannot expose. At Cameco, apart from controlled nuclear technology (as regulated by CNSC), we also maintain and keep secure employee and contractor personal data, our intellectual property, and data on our industrial control systems. We protect this data through a "defense in depth" strategy, that includes several layers of security processes, technology and controls, and incorporates multiple redundancies. We also restrict access to our systems and data and log and monitor sensitive access.



Responsible supply chain

WHY IT MATTERS TO CAMECO

We are committed to fair competition in all dealings with suppliers, supporting local procurement, and making our purchases honestly and objectively. We also want to make sure that our suppliers and contractors respect and uphold our ethical, safety and environmental practices.

Supplier and contractor selection

We use ISNetworld to screen contractors who provide services at our sites. All contractors must meet our basic requirements including demonstrating technical capabilities and having adequate safety practices and appropriate insurance in place. As a supplier to the Canadian nuclear industry, our fuel services facilities follow Canadian Standards Association's (CSA) N299 standard, which sets out quality assurance program requirements for the supply of items and services for nuclear power plants. CSA N299 is designed to ensure there are quality assurance systems in place to verify production processes, inspection, testing, and corrective actions. In accordance with this standard, if a product or service is considered high risk, we have stricter requirements for suppliers to verify that they are qualified to supply the item or service. Cameco only purchases these high-risk items through a supplier that meets or exceeds all our requirements. For example, we have a special vendor approval process for the supply of zirconium, and for transportation of our products, we only work with a small set of specialized carriers and freight forwarders that are qualified to transport radioactive materials.

Contractor management program

Working with contractors is integral to Cameco's operations and construction projects. Cameco has a contractor management program to support a consistent approach to managing contractor activities. This consistent process for prequalification, selection, performance monitoring and review of SHEQ aspects of contractor management helps to secure high quality contractors, fosters and promotes information sharing, reduces SHEQ risks and stimulates continuous improvement in safety performance.

Expectations of suppliers

We believe that a sustainable and ethical supply chain starts with choosing suppliers that will uphold our standards. Our Supplier Code of Conduct and Ethics outlines our expectations for those who provide goods and/or services to Cameco, including their representatives and employees. The Supplier Code requires our suppliers to adhere to all human rights, labour, and employment laws in the countries where they operate. Suppliers and their employees are expected to treat everyone with respect and dignity, not tolerate harassment, and take appropriate action if complaints occur.

Our role in fighting against forced labour and child labour in supply chains

Cameco continues to take steps to further its commitment to respecting and observing the protection of human rights, including preventing and reducing the risk that forced labour or child labour is used in our operations or supply chains. On January 1, 2024, Canada's Fighting Against Forced Labour and Child Labour in Supply Chains Act came into effect, which requires certain companies and government entities to report on the preventative measures they have taken to address the risk of forced and child labour in their supply chain.

We have published our first Modern Slavery Report, outlining the steps we have taken to address the risk of forced labour and child labour across our supply chain.

Read the report here.

Auditing

In addition to screening, we also audit our most critical suppliers in the following ways:

- For critical supplies that come from outside of Canada, such as anhydrous hydrogen fluoride (a crucial input to the conversion process for UF_6 which comes from the US and Spain), we strive to complete a third-party audit of our suppliers' facilities every three years on average to assess safety practices and quality management processes.
- For drum suppliers, Cameco conducts a quality audit on drum manufacturers at least every five years.
- For our transportation providers (trucking), freight-forwarders and transportation emergency response providers, we audit them every one to three years. For our two largest ground transporters, the completion of these audits typically alternates between Cameco staff and a third-party firm. Read more on page 72.
- For our contracted air carriers, audits are conducted on a one- to three-year basis by external subject matter experts.

"Al's Place" is a hotel located in Stoney Rapids, Saskatchewan.

Commitment to local procurement

We are committed to using local suppliers wherever we operate. It is a commitment codified in our Procurement of Goods and Services Policy and exemplified by our spending in northern Saskatchewan, where we have procured more than $471 million in services from local companies over the past three years. In 2023, 74% of all spend on services at our northern Saskatchewan mine sites was with northern local businesses.

In northern Saskatchewan, we have commitments through collaboration agreements with a select number of construction and civil works companies that are Preferred Northern Contractors (PNCs). All PNCs must also follow our standards.

We procured **$471 million** in services from local companies in northern Saskatchewan over the past three years.

OUR PERFORMANCE

Services procured from local companies

(% OF SPENDING)	2021	2022	2023
Company-wide	63	66	**63**
Northern Saskatchewan	82	80	**74**
Ontario	47	50	**52**
US	65	51	**50**

Appendices

62.5%
of France's electricity was generated from nuclear power in 2022

Paris, France
48.8566° N, 2.3522° E

Performance table

Below are the metrics that describe our ESG performance for the last three years. The reference column indicates the alignment of that specific metric with the Sustainability Accounting Standards Board (SASB) indicators. In instances where there is no SASB metric suggested, we include the corresponding reference to the metric suggested by the GRI standards. Note that in some cases a single metric aligns with both the SASB and GRI standards but only the SASB reference is noted.

All references that start with EM-MM refer to SASB metrics for the Extractives & Minerals Processing Sector – Metals & Mining.

For details on indicator boundaries see our ESG Performance Table (XLS file)

COMPANY CONTEXT	UNIT	2021	2022	2023	REFERENCE
OPERATIONS					
Revenues	thousand CAD $	1,474,984	1,868,003	**2,587,758**	GRI 201-1
Total mining production[1]	lb U_3O_8	6,091,172	10,364,262	**17,638,201**	EM-MM-000.A
Production in our fuel services division (includes results for UF_6, UO_2, and fuel fabrication)	KgU	12,097,638	13,014,111	**13,275,966**	EM-MM-000.A

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
WATER WITHDRAWAL[2]	m³	21,063,713	18,102,946	**15,173,917**	GRI 303-3a
Water withdrawal by source					
Surface water[3]	m³	7,272,974	6,368,727	**3,899,720**	GRI 303-3a
Groundwater	m³	12,672,643	11,408,475	**10,850,722**	GRI 303-3a
Third-party[4]	m³	1,118,096	325,745	**423,475**	GRI 303-3a
Water withdrawal by categorization					
Fresh water[5]	m³	19,509,956	16,797,361	**14,050,183**	GRI 303-3b
Other water	m³	1,553,757	1,305,585	**1,123,734**	GRI 303-3b
Withdrawal in areas of high water stress, by categorization[6]					
Freshwater	m³	0	0	**0**	EM-MM-140a.1
Other water	m³	564,677	572,901	**357,126**	

NOTES

NR – Not reported

N/A – Not applicable

1 Cameco's equity share of production from Cameco operated facilities. Cameco's share of production from Joint Venture Inkai mine in Kazakhstan is not included.

2 Cameco withdraws water from surface water, collects groundwater, and withdraws water from municipal water utilities in the areas where we operate. Rainwater that comes into contact with our operations is intercepted or collected and stored, which is reflected in our water withdrawal volumes. Cameco does not withdraw wastewater directly from other organizations. Water withdrawal from our exploration activities is not included.For part of 2021 and 2022, an intake water meter was offline at Cigar Lake. As a result, when compared to the numbers published in the 2022 report, the water withdrawal for 2021 was restated from 21,021 to 21,064 thousand m³, and the 2022 water withdrawal from 17,960 to 18,103 thousand m³.

3 For part of 2021 and 2022, an intake water meter was offline at Cigar Lake. As a result, when compared to the numbers published in the 2022 report, the surface water withdrawal for 2021 was restated from 7,230 to 7,273 thousand m³, and the 2022 surface water withdrawal from 6,226 to 6,369 thousand m³.

4 Third party water includes municipal water suppliers and municipal wastewater treatment plants, public or private utilities, and other organizations involved in the provision, transport, treatment, disposal, or use of water and effluent.

5 Fresh water is defined as water with an average total dissolved solids (TDS) less or equal to 1,000 mg/L for the purpose of this indicator.
For part of 2021 and 2022, an intake water meter was offline at Cigar Lake. As a result, when compared to the numbers published in the 2022 report, the fresh water withdrawal for 2021 was restated from 19,467 to 19,510 thousand m³, and the 2022 surface water withdrawal from 16,654 to 16,797 thousand m³.

6 Baseline water stress categorization is determined using the World Resources Institute Aqueduct Water Risk Atlas, available online at: https://www.wri.org/aqueductAreas. Cameco's North Butte operation is classified in an area of high water stress (3-4). Cameco withdraws fresh water from a drinking water aquifer at North Butte for use in firewater suppression systems, bathrooms, and sinks within surface buildings. The quantity of water withdrawn is < 5,000 m³ annually. This is such a small proportion of total water withdrawn that it is not measurable within the corporate total.

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
Withdrawal in areas of high water stress, by source[6]					
Surface water	m³	0	0	**0**	GRI 303-3c
Groundwater	m³	564,677	572,901	**357,126**	GRI 303-3c
Other water	m³	0	0	**0**	GRI 303-3c
WATER DISCHARGES[7]	m³	19,489,976	16,749,704	**14,790,791**	GRI 303-4a
Water discharged to					
Surface water	m³	18,431,674	15,676,767	**13,534,570**	GRI 303-4a
Groundwater	m³	915,559	904,674	**811,316**	GRI 303-4a
Third-party[4]	m³	142,744	168,263	**444,905**	GRI 303-4a
Water discharged by categorization					
Fresh water	m³	16,732,695	14,654,491	**10,997,561**	GRI 303-4b
Other water	m³	2,757,281	2,095,213	**3,793,230**	GRI 303-4b
Discharge in areas of high water stress[6]					
Fresh water	m³	0	0	**0**	GRI 303-4c
Other water[8]	m³	164,507	142,536	**147,163**	GRI 303-4c
WATER QUALITY					
Number of incidents of non-compliance associated with water quality permits, standards, and regulations[9]	number	0	0	**0**	EM-MM-140a.2

NOTES

7 This indicator presents the annual volume of planned water discharge in cubic metres (m³) by destination (i.e. surface water, municipal treatment facilities, land, evaporation pond, or deep disposal well) and treatment method (i.e. treated by Cameco, treated by municipal authorities, clean, or untreated). Cameco does not reuse water produced by other organizations. The annual volume of water discharged to evaporation from our Smith Ranch-Highland operation is not included.

8 We only dispose of water into licensed disposal wells in our US operations.

9 Incidents of non-compliance associated with water quality permits, standards, and regulations are water-related incidents that resulted in formal enforcement actions. Although in 2022 we reported one incident of non-compliance associated with water quality permits, standards and regulations, this incident did not meet our revised definition of non-compliance, which aligns with SASB metric EM-MM-140a.2. Under the SASB definition, companies are only required to report incidents of non-compliance that resulted in formal enforcement actions. As the incident reported did not result in a formal enforcement action, we have restated the number for 2022 from one to zero incidents.

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
TAILINGS AND MINERAL WASTES					
Weight of tailings and mineral waste	tonnes	22,678	50,986	**138,561**	
Tailings waste[10]	tonnes	3,782	30,021	**137,431**	EM-MM-150a.5
Waste rock[11]	tonnes	11,660	14,416	**-17,373**	EM-MM-150a.6
Other mineral waste[12]	tonnes	7,236	6,549	**18,503**	
Percent of tailings waste recycled	percent	0	0	**0**	
Number of tailings impoundments (tailings management facilities)[13]	number	4	4	**4**	EM-MM-540a.1
Number of tailings impoundments, broken down by Canadian Dam Association Consequence Classification Rating[13]	number	Significant	Significant	**Significant**	EM-MM-150a.3
NON-MINERAL WASTES[14]	tonnes	9,727	10,704	**11,637**	EM-MM-150a.4
Weight of contaminated waste[15]	tonnes	4,595	6,199	**7,495**	
Contaminated waste diverted	tonnes	0	0	**0**	
Contaminated waste landfilled or stored[15]	tonnes	4,595	6,199	**7,495**	

NOTES

10 Includes the amount of tailings generated by Cameco operated facilities.

11 The annual net change of waste rock of –17,373 is due to mineralized waste consumption at Key Lake as mill feed blend.

12 Includes water treatment sludges and mine slimes that are not stored with tailings

13 Cameco has four tailings facilities but two are in-pit facilities. In-pit facilities are below the ground surface, so we do not classify them with respect to the consequence of a dam failure.

14 Non-mineral waste does not include solid waste generated as tailings, water treatment sludge and slime, or waste rock. The total amount of contaminated, low-level radioactive, non-hazardous, and hazardous waste generated in each category is separated and presented by disposal method: diverted, landfilled, or stored on site. Diverted materials include those that are recycled, reused, repurposed, or reprocessed. We separate waste into these disposal categories using internal tracking systems that track the inventory of waste on site and the transfer of waste off site. The amount of waste transferred off site is confirmed through information provided by the receiving organization.
Due to a change in categorization for some materials now included in low-level radioactive waste (see note 17), the values non-mineral waste for 2021 have been restated from 9,394 to 9,727 tonnes and the values for 2022 have been restated from 10,328 to 10,704 tonnes.

15 Contaminated waste includes industrial materials from our mining operations that have become contaminated with radioactive material. Includes industrial materials, such as protective equipment, paper, cardboard, equipment, tools, metal, plastic, concrete, sand, sludges, insulation, and wood. Contaminated waste also includes 11 e(2) byproduct generated at our US operations. Historical values have been adjusted to account for a updated in methodology at Cigar Lake which now tracks total contaminated waste based on materials transferred to Rabbit Lake for permanent disposal. The 2021 values have been restated from 4,661 to 4,595 tonnes and the 2022 values have been updated from 6,309 to 6,199 tonnes.

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
Weight of low-level radioactive waste[16]	tonnes	2,629	2,751	**1,899**	
Low-level radioactive waste diverted[17]	tonnes	1,942	1,468	**1,537**	
Low-level radioactive waste landfilled or stored[18]	tonnes	687	1,283	**362**	
Weight of non-hazardous waste[19]	tonnes	2,211	1,568	**1,750**	GRI 306-3
Non-hazardous waste diverted	tonnes	658	562	**541**	GRI 306-4
Non-hazardous waste landfilled or stored	tonnes	1,554	1,006	**1,209**	GRI 306-5
Weight of hazardous waste[20]	tonnes	292	186	**494**	EM-MM-150a.7
Hazardous waste diverted[21]	tonnes	230	111	**NR**	GRI 306-4
Hazardous waste recycled[21]	tonnes	NR	NR	**139**	EM-MM-150a.8
Hazardous waste landfilled, stored or incinerated[22]	tonnes	62	75	**355**	GRI 306-5
Number of significant incidents associated with hazardous materials and waste management[23]	count	NR	NR	**0**	EM-MM-150a.9

NOTES

16 Low-level radioactive waste includes materials from our Fuel Services Division that have become contaminated with radioactive material and are more radioactive than clearance levels and exemption quantities allow. Cameco does not generate intermediate or high-level radioactive waste. To align with Ontario community disclosures, materials sent offsite with recoverable uranium are now included as low-level radioactive waste generated and diverted. The 2021 value for total low-level radioactive waste has been restated from 2,231 to 2,629 tonnes and the 2022 value has been restated from 2,266 to 2,751 tonnes.

17 To align with Ontario community disclosures, materials sent offsite with recoverable uranium are now included as low-level radioactive waste generated and diverted. The 2021 value for low-level radioactive waste diverted has been restated from 1,279 to 1,942 tonnes and the 2022 value has been restated from 868 to 1,468 tonnes.

18 To align with Ontario community disclosures, materials sent offsite with recoverable uranium are now included as low-level radioactive waste generated and diverted. The 2021 value for low-level radioactive waste landfilled or stored has been restated from 952 to 687 tonnes and the 2022 value has been restated from 1,398 to 1,283 tonnes.

19 Non-hazardous waste includes domestic, commercial, and industrial materials that become waste, such as plastic, tin, paper and cardboard, tires, metal, wood pallets, kitchen waste, and wood.

20 Hazardous waste includes materials with hazardous properties that may have negative effects to human health or the environment. It includes materials such as used petroleum fuels (oil, diesel, gas), paint and paint-related materials, compressed gas cylinders, and light fixtures. Port Hope Conversion Facility generates small volumes of batteries and electronic waste which are recycled by a third party but not included in the total weight shown here.

21 To align with SASB indicator EM-MM-150a.8, Cameco now reports hazardous waste recycled, rather than diverted. The most notable difference between the definition of "diverted" and "recycled" is that recycled excludes materials incinerated. We have not determined the recycled volumes for prior years.

22 Data for hazardous waste landfilled, stored, or incinerated has been updated due to a correction to waste volumes at our fuel manufacturing facility. As a result, the values for prior years have changed from 112 to 62 tonnes for 2021 and from 61 to 75 tonnes for 2022.

23 Cameco defines a significant waste incident as an environmental incident that results is or has a reasonable potential to have a significant environmental impact (impairment of ecosystem function), result in current and future remediation costs exceeding $10 million, or results in a significant environmental fine (>$100,000).

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
GHG EMISSIONS/ENERGY USE[24]					
Gross global Scope 1 emissions (equity share)[25]	tonnes CO_2e	85,990	102,250	**108,835**	EM-MM-110a.1
Scope 2 emissions (equity share – location based)[26, 27]	tonnes CO_2e	138,367	137,609	**146,237**	GRI 305-2
Gross global Scope 1 emissions (operational control)[28]	tonnes CO_2e	100,646	122,019	**128,673**	GRI 305-1
Scope 2 emissions (operational control – market-based)[28,29]	tonnes CO_2e	173,935	169,632	**181,397**	GRI 305-2
Scope 2 emissions (operational control – location-based)[28,30]	tonnes CO_2e	173,935	169,632	**185,859**	GRI 305-2
Scope 3 emissions[31]	tonnes CO_2e	NR	NR	**500,000**	GRI 305-3

NOTES

24 Cameco's greenhouse gas (GHG) emissions are presented as tonnes of carbon dioxide equivalents (CO_2e). CO_2e is used to compare the emissions from various GHG sources based on their global warming potential (GWP). Cameco adopted the GWPs published by Environment and Climate Change Canada (ECCC) and the United States Environmental Protection Agency (US EPA), which reference the International Panel on Climate Change (IPCC). In alignment with changes at ECCC, Cameco has begun transitioning to GWPs from IPCC's Fifth Assessment Report for Canadian operations in the 2022 figures, whereas US operations continue to use GWPs from IPCC's Fourth Assessment Report in alignment with US EPA guidance at the time of calculation. Cameco's significant sources of direct (Scope 1) GHG emissions include those generated by the consumption of fuel from non-renewable sources and industrial processes. Emission factors are country- and fuel-specific. For our Canadian operations, we have used emission factors published by ECCC through the Greenhouse Gas Reporting Program. For our US operations, we use the emission factors published by the US EPA in the most recent Emission Factors for Greenhouse Gas Inventories document. Indirect GHG emissions are calculated by applying a utility- or region-specific emission factor to the amount of electricity purchased from that area, which is determined through utility invoices.

25 Historical values are adjusted year-to-year due to refinements in calculation methodology and emission factors.

26 Under the equity share approach, we have adjusted the GHG emissions reported to align with our financial ownership, specifically: 69.805% of McArthur River mine, 83.333% of Key Lake mill, 54.547% of Cigar Lake mine, and we have included 40% of emissions from JV Inkai.

27 2021 Scope 2 equity share emissions have been restated from 131,089 to 138,367 tonnes CO_2e and 2022 Scope 2 equity share emissions have been restated from 102,418 to 102,250 tonnes CO_2e. This is due to an update to methodology for calculating emissions from JV Inkai. We are now applying a regional rather than national emission factor to JV Inkai's power consumption, in alignment with the methodology used by Kazatomprom.

28 Operational control basis means we report 100% of GHG emissions from Cameco operated facilities regardless of financial ownership.

29 A market-based approach reflects the emissions from electricity that we have purposefully chosen and includes reductions to GHG emissions through emissions trading or purchases such as Clean Energy Credits.

30 A location-based approach reflects the average emissions intensity of grids on which the energy consumption occurs.

31 Scope 3 emissions result as a consequence of Cameco's activities but occur from sources not owned or controlled by the company.

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
Total energy consumed[32]	GJ	3,062,209	3,511,677	**3,735,799**	EM-MM-130a.1
Grid electricity	percent	45	42	**44**	EM-MM-130a.1
TRANSITION TO A LOW CARBON ECONOMY					
Scope 1 emissions covered under emissions-limiting regulations (operational control)	percent	96	97	**97**	EM-MM-110a.1
Scope 1 emissions covered under emissions-limiting regulations (equity share)	percent	74	75	**76**	EM-MM-110a.1
AIR QUALITY[33]					
Carbon monoxide (CO)	tonnes	0	32	**87**	EM-MM-120a.1
NOx (excluding N_2O)	tonnes	119	189	**182**	EM-MM-120a.1
SOx	tonnes	0	63	**0**	EM-MM-120a.1
Particulate matter (PM_{10})	tonnes	214	196	**227**	EM-MM-120a.1
Volatile organic compounds (VOCs)	tonnes	0	28	**77**	EM-MM-120a.1
Ammonia (NH_3)	tonnes	35	42	**80**	
Uranium	tonnes	0.04	0.05	**0.28**	
Hydrogen fluoride	tonnes	0.63	0.55	**0.48**	RT-CH-120a.1
BIODIVERSITY/LAND[34]					
Proven reserves in or near sites with protected conservation status or endangered species habitat	percent	38	39	**42**	EM-MM-160a.3
Probable reserves in or near sites with protected conservation status or endangered species habitat	percent	53	51	**58**	EM-MM-160a.3

NOTES

32 Cameco's energy consumption includes fuels and electricity. Energy consumed as fuel includes propane, natural gas, diesel and gasoline and is calculated by applying a fuel- and region-specific energy content factor to the consumed volume. Cameco does not utilize renewable energy sources directly. Energy consumed as electricity is converted from kilowatt hours (kWh) to gigajoules (GJ) using a conversion factor of 0.0036 GJ/kwh. Cameco does not sell energy as electricity, heating, cooling, or steam. We report energy consumption on an operational control basis, which means we report 100% of energy consumption from Cameco operated facilities, regardless of financial ownership.

33 Air emissions are reported only for operated facilities in Canada that reach NPRI (National Pollutant Release Inventory) release based threshold quantities. Air emissions from our in situ recovery operations in the US are not material for this indicator and are not included. Air emissions of NOx, SO_2, CO, VOCs, PM, PM_{10}, $PM_{2.5}$ and NH_3 are calculated using the guidance provided by ECCC through the National Pollutant Release Inventory. The total air emissions for these constituents include air emissions released through point sources such as process stacks, storage and handling, fugitive emissions, and as a result of road dust. Air emissions of uranium and Hydrogen Fluoride include air emissions released through point sources.

34 Protected conservation status or endangered species habitat in alignment with SASB Standards definition.

ENVIRONMENT	UNIT	2021	2022	2023	REFERENCE
ACID-GENERATING SEEPAGE, WASTE ROCK					
Percentage of mine sites where acid-generating seepage into surrounding surface water and/or groundwater is:					
Predicted to occur	percent	33	17	**17**	EM-MM-160a.2
Actively mitigated[35]	percent	33	17	**17**	EM-MM-160a.2
Under treatment or remediation	percent	0	0	**0**	EM-MM-160a.2
Percentage of annual production output in metric tons (on an equity share basis) where acid-generating seepage into surrounding surface water and/or groundwater is:					
Predicted to occur	percent	63	66	**38**	EM-MM-160a.2
Actively mitigated[35]	percent	63	66	**38**	EM-MM-160a.2
Under treatment or remediation	percent	0	0	**0**	EM-MM-160a.2
DECOMISSIONING/CLOSURE					
Terrestrial acreage disturbed[36]	hectares	3,199	3,202	**3,202**	EM-MD-160a.3
Terrestrial acreage restored	hectares	0	0	**0**	EM-MD-160a.3

NOTES

35 Active mitigation includes placing waste rock on a lined facility and collecting seepage.

36 Cameco's land, leased and owned, currently in use and not yet rehabilitated. This indicator excludes advanced uranium projects (Kintyre, Yeelirrie, Millennium), office structures, exploration activities, operations in which Cameco does not have operational control, or rented facilities that Cameco operates (Cobourg). The definition of land disturbed and not yet rehabilitated is dependent on the jurisdiction of the operation. In Saskatchewan, total land disturbed and not yet rehabilitated is accepted by regulators as "Developed" land. In the US, total land disturbed and not yet rehabilitated is defined by regulators as "Affected Area". For Ontario, total land disturbed is equal to the licensed area of the facility.

SOCIAL	UNIT	2021	2022	2023	REFERENCE
OCCUPATIONAL SAFETY/HEALTH					
Avg. radiation dose to employees[37]	mSv/year	0.95	0.91	**1.13**	
Avg. radiation dose to contractors[37]	mSv/year	0.24	0.37	**0.35**	
Avg. radiation dose to employees and contractors[37]	mSv/year	0.60	0.63	**0.73**	
Total recordable injury rate (TRIR)[38]					
TRIR employees	incidents per 200,000 hours worked	1.0	1.4	**2.0**	EM-MM-320a.1
TRIR contractors	incidents per 200,000 hours worked	2.0	3.1	**3.0**	EM-MM-320a.1
TRIR combined (all Cameco)	incidents per 200,000 hours worked	1.3	2.0	**2.3**	
Fatality rate employees	fatalities per 200,000 hours worked	0	0	**0**	EM-MM-320a.1
Fatality rate contractors	fatalities per 200,000 hours worked	0	0	**0**	EM-MM-320a.1
Average hours of health, safety, and emergency response training for full-time employees	hours	37	41	**32**	EM-MM-320a.1
Average hours of health, safety, and emergency response training for contractors	hours	19	18	**17**	EM-MM-320a.1
TRANSPORTATION SAFETY					
Number of transport incidents[39]	number	0	0	**0**	RT-CH-540a.2
EMPLOYEES					
Total number of employees[40]	number	2,095	2,424	**2,638**	EM-MM-000.B
Total number of contractors[41]	number of FTEs	596	983	**998**	EM-MM-000.B
Voluntary turnover rate[42]	percent	4	7	**5**	CG-EC-330a.2
Involuntary turnover rate[43]	percent	2	1	**1**	CG-EC-330a.2

NOTES

37 The average radiation dose is an arithmetic average of the annual effective doses received by all workers monitored for radiation at Cameco operated facilities at our mining, milling, and fuel services divisions in Saskatchewan, Ontario, and the US.

38 TRIR as defined by US OSHA.

39 Transport incidents include any transport incident that involves a release or potential release, per Section 8.2. of the Transportation of Dangerous Goods Regulation in Canada or 49 CFR 171.15 in the US.

40 This indicator reports the total number of regular and temporary full- and part-time employees.

41 Full time equivalent (FTE) contractors is equal to the number of contractor hours divided by 2,000 hours, as 2,000 hours is deemed the number of hours for a full-time equivalent employee.

42 Turnover is calculated on regular full- and part-time employees. The voluntary turnover rate for 2022 has been restated from what was reported in the 2022 ESG Report, from 8% to 7%. This was due to a data error.

43 The involuntary turnover rate for 2022 has been restated from what was reported in the 2022 ESG Report, from 7% to 1%. This was due to a data error.

SOCIAL	UNIT	2021	2022	2023	REFERENCE
DIVERSITY AND INCLUSION[44]					
Total workforce					
Women	percent	25	24	**25**	GRI 405-1
Indigenous	percent	21	25	**25**	GRI 405-1
Visible minority	percent	8	8	**9**	GRI 405-1
Persons with disabilities	percent	3	3	**2**	GRI 405-1
Management[45]					
Women	percent	24	27	**29**	GRI 405-1
Indigenous	percent	4	5	**6**	GRI 405-1
Visible minority	percent	5	7	**9**	GRI 405-1
Persons with disabilities	percent	1	1	**1**	GRI 405-1
UNIONS					
Employees covered under collective bargaining agreements	percent	25	28	**29**	EM-MM-310a.1
Employees covered under collective bargaining agreements in Canada	percent	26	29	**30**	EM-MM-310a.1
Employees covered under collective bargaining agreements outside of Canada	percent	0	0	**0**	EM-MM-310a.1
Number of strikes and lockouts[46]	number	0	0	**0**	EM-MM-310a.2
Duration of strikes and lockouts	worker days idle	0	0	**0**	EM-MM-310a.2
RELATIONSHIPS WITH COMMUNITIES[47]					
Number of non-technical delays	number	2	0	**2**	EM-MM-210b.2
Duration of non-technical delays	days	110	0	**37**	EM-MM-210b.2

NOTES

44 Diversity information for employees is only maintained on all regular and temporary full and part time in Canada. Our US operations are no longer required to file their equity information as the operations have less than 100 employees.

45 Management includes select professional and supervisory positions, and all manager positions and above.

46 Work stoppages involving 1,000 or more workers lasting one full shift or longer.

47 Non-technical delays are defined as all delays that are not technical in nature that result in production interruptions. The non-technical delays in 2021 were related to COVID-19 and the forest fire in close proximity to our Cigar Lake mine. The non-technical delays in 2023 were related to forest fires in close proximity to our Key Lake Mill and supply chain issues with N_2 and H_2 for UO_2 production at Port Hope.

SOCIAL	UNIT	2021	2022	2023	REFERENCE
PUBLIC SUPPORT[48]					
Saskatchewan	percent	82	84	**85**	
Northern Saskatchewan	percent	78	75	**83**	
Port Hope, Ontario	percent	91	93	**N/A**	
Blind River, Ontario	percent	96	N/A	**N/A**	
Nebraska	percent	N/A	N/A	**N/A**	
Wyoming	percent	N/A	N/A	**N/A**	
INDIGENOUS RIGHTS					
Proved reserves in or near Indigenous land[49]	percent	75	77	**78**	EM-MM-210a.2
Probable reserves in or near Indigenous land[49]	percent	77	76	**80**	EM-MM-210a.2
Indigenous employees in all positions at Northern Saskatchewan Operations	percent	48	50	**50**	
Indigenous employees in management positions at Northern Saskatchewan Operations	percent	8	13	**16**	
Progressive Aboriginal Relations Achievement Level[50]		Three-year	Three-year	**Gold**	
CONFLICT ZONES					
Percentage of proven reserves in or near areas of conflict	percent	0	0	**0**	EM-MM-210a.1
Percentage of probable reserves in or near areas of conflict	percent	0	0	**0**	EM-MM-210a.1

NOTES

48 Reported data on public support is taken directly from polling Cameco undertakes in the various regions in which we operate. Data collection is undertaken by marketing research experts using industry-accepted methodology aimed at collecting unbiased opinions of community support. Accuracy of individual polls varies by region and from year to year based on individual sample sizes. It is important to note that polling questions in Ontario are framed in terms of support for Cameco operations specifically while other regions are asked about their support of the uranium industry more broadly.

49 Cameco defines Indigenous Land as Indigenous Territory, which is overlapping within the area of our northern Saskatchewan operations. Per the constitution of Kazakhstan, the land is owned by the state and there are no groups designated as Indigenous.

50 The Canadian Council of Aboriginal Business (CCAB) promotes the full involvement of Indigenous people in Canada's economy by building bridges between corporate Canada and Indigenous communities. Progressive Aboriginal Relations (PAR) recognized performance in the areas of Indigenous employment, business development, individual capacity, and community relations. Cameco has been awarded the CCAB's PAR gold level distinction since 2001 on a three-year certification cycle.

GOVERNANCE	UNIT	2021	2022	2023	REFERENCE
ETHICS					
New employees who have completed Code of Conduct and Ethics course	percent	100	100	**100**	
Targeted employees who have completed annual Code of Conduct and Ethics refresher course[51]	percent	100	100	**100**	
CYBERSECURITY					
Percentage of employees who received cybersecurity training	percent	100	100	**100**	
ANTI-CORRUPTION					
Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	tonnes	0	0	**0**	EM-MM-510a.2
LOCAL PROCUREMENT					
Proportion of services procured by local providers by Cameco	percent	63	66	**63**	GRI 204-1
Proportion of services procured by local providers in:[52]					
Northern Saskatchewan[53]	percent	82	80	**74**	GRI 204-1
Ontario[54]	percent	47	50	**52**	GRI 204-1
US[55]	percent	65	51	**50**	GRI 204-1

NOTES

51 Employees in certain functional areas include all directors and above, as well as employees who work in supply chain management, human resources, tax, treasury, finance, investor relations, business technology services, marketing, corporate development, legal and executive offices, must complete a mandatory online Code of Conduct and Ethics (Code) refresher training course, including the requirement to adhere to the Code and report any potential, perceived or actual conflicts of interest. In 2021, 2022 and 2023, all employees completed online training about the Code and submitted a declaration statement.

52 Local supplier – Is defined differently for each of Cameco's operating locations as follows:

53 Northern Saskatchewan local supplier – A company or joint venture that is at least 50% owned by people or communities from the Northern Saskatchewan Administration District.

54 Ontario local supplier – One located in the province of Ontario.

55 US local supplier – A supplier located in the same state as the US mine operations. For Crow Butte operations, it is a supplier located in the state of Nebraska. For Smith Ranch-Highland operations it is a supplier located in the state of Wyoming.

SASB index

Below are the metrics and references to qualitative descriptions in this report that align with the Sustainability Accounting Standards Board (SASB) standard for the Extractives & Minerals Processing Sector – Metals & Mining.

NR – Not reported

N/A – Not applicable

REFERENCE	SASB INDICATOR	2023 DATA OR PAGE
GHG EMISSIONS		
EM-MM-110a.1	Gross global Scope 1 emissions (Equity share) [tonnes CO_2e]	108,835
EM-MM-110a.1	Percentage covered under emissions-limiting regulations	76
EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Pages 36-37, 50-54
AIR QUALITY		
EM-MM-120a.1	Carbon monoxide (CO) [tonnes]	87
EM-MM-120a.1	Nitrogen oxides (NOx) (excluding N_2O) [tonnes]	182
EM-MM-120a.1	Sulphur oxides (SOx) [tonnes]	0
EM-MM-120a.1	Particulate matter (PM_{10}) [tonnes]	227
EM-MM-120a.1	Mercury (Hg) [tonnes]	N/A
EM-MM-120a.1	Lead (Pb) [tonnes]	N/A
EM-MM-120a.1	Volatile organic compounds (VOCs) [tonnes]	77
ENERGY MANAGEMENT		
EM-MM-130a.1	Total energy consumed [GJ]	3,735,799
EM-MM-130a.1	Percentage grid electricity	44
EM-MM-130a.1	Percentage renewable	NR

REFERENCE	SASB INDICATOR	2023 DATA OR PAGE
WATER MANAGEMENT		
EM-MM-140a.1	Total water withdrawn (fresh and non-fresh) [thousand m^3]	15,174
EM-MM-140a.1	Total water consumed	NR
EM-MM-140a.1	Percentage of fresh water withdrawn and consumed in regions with high or extremely high baseline water stress	0
EM-MM-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	0
WASTE & HAZARDOUS MATERIALS MANAGEMENT		
EM-MM-150a.4	Total weight of non-mineral waste generated [tonnes]	11,637
EM-MM-150a.5	Total weight of tailings produced [tonnes]	137,431
EM-MM-150a.6	Total weight of waste rock generated [tonnes]	NR
EM-MM-150a.7	Total weight of hazardous waste generated [tonnes]	494
EM-MM-150a.8	Total weight of hazardous waste recycled [tonnes]	139
EM-MM-150a.9	Number of significant incidents associated with hazardous materials and waste management	0
EM-MM-150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	Page 49
TAILINGS STORAGE FACILITIES MANAGEMENT		
EM-MM-540a.1	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	Page 109
EM-MM-540a.1	Consequence classification by Canadian Dam Association Consequence Classification Rating	Page 45
EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Pages 43-47
EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Page 47

REFERENCE	SASB INDICATOR	2023 DATA OR PAGE
BIODIVERSITY IMPACTS		
EM-MM-160a.1	Description of environmental management policies and practices for active sites	Pages 55-56
EM-MM-160a.2	Percentage of mine sites (percentage of mine sites by annual production output in metric tons on an equity share basis) where acid-generating seepage into surrounding surface water and/or groundwater is: 1) predicted to occur	17 (38)
EM-MM-160a.2	Percentage of mine sites (percentage of mine sites by annual production output in metric tons on an equity share basis) where acid-generating seepage into surrounding surface water and/or groundwater is: 2) actively mitigated	17 (38)
EM-MM-160a.2	Percentage of mine sites (percentage of mine sites by annual production output in metric tons on an equity share basis) where acid-generating seepage into surrounding surface water and/or groundwater is 3) under treatment or remediation	0
EM-MM-160a.3	Percentage of proven reserves in or near sites with protected conservation status or endangered species habitat	42
EM-MM-160a.3	Percentage of probable reserves in or near sites with protected conservation status or endangered species habitat	58
SECURITY, HUMAN RIGHTS & RIGHTS OF INDIGENOUS PEOPLES		
EM-MM-210a.1	Percentage of proven reserves in or near areas of conflict	0
EM-MM-210a.1	Percentage of probable reserves in or near areas of conflict	0
EM-MM-210a.2	Percentage of proven reserves in or near Indigenous land	78
EM-MM-210a.2	Percentage of probable reserves in or near Indigenous land	80
EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, Indigenous rights, and operation in areas of conflict	Pages 61-64, 90
COMMUNITY RELATIONS		
EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Pages 61-64
EM-MM-210b.2	Number of non-technical delays	2
EM-MM-210b.2	Duration of non-technical delays	37

REFERENCE	SASB INDICATOR	2023 DATA OR PAGE
LABOUR RELATIONS		
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements	29
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, employees in Canada	30
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, employees outside of Canada	0
EM-MM-310a.2	Number of strikes and lockouts	0
EM-MM-310a.2	Duration of strikes and lockouts [days]	0
WORKFORCE HEALTH & SAFETY		
EM-MM-320a.1	Total recordable injury rate as defined by OSHA for employees	2.0
EM-MM-320a.1	Total recordable injury rate as defined by OSHA for contractors	3.0
EM-MM-320a.1	Fatality rate for employees	0
EM-MM-320a.1	Fatality rate for contractors	0
EM-MM-320a.1	Near miss frequency rate (NMFR) for employees	NR
EM-MM-320a.1	Near miss frequency rate (NMFR) for contractors	NR
EM-MM-320a.1	Average hours of health, safety, and emergency response training for employees	32
EM-MM-320a.1	Average hours of health, safety, and emergency response training for contractors	17
BUSINESS ETHICS & TRANSPARENCY		
EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	Pages 88-90
EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index [tonnes]	0

Mine tailings disclosure table

This is Cameco's Tailings Storage Facility (TSF) inventory in alignment with SASB EE-MM-540a.1

	RABBIT LAKE, SK, CANADA	KEY LAKE, SK, CANADA	RABBIT LAKE, SK, CANADA	KEY LAKE, SK, CANADA
Ownership status	Operator	Operator	Operator	Operator
Operational status	Operational	Operational	Interim Closure	Interim Closure
Construction method	Other, In-pit	Other, In-pit	South Dam centerline, North Dam downstream	Single-stage
Maximum permitted storage capacity	10.10 tonnes	17.80 tonnes	6.50 tonnes	3.59 tonnes
Current amount of tailings stored	9.13 tonnes	6.20 tonnes	6.50 tonnes	3.50 tonnes
Consequence classification	N/A	N/A	Significant	Significant
Date of most recent independent technical review	2023	2023	2023	2023
Material findings	No	No	No	No
Mitigation Measures	No	No	No	No
Site-specific EPRP	As part of site EPRP	Yes	Yes	Yes

Limited assurance report

Independent practitioner's limited assurance report on the selected ESG performance metrics presented within Cameco Corporation's 2023 Sustainability Report

To the Board of Directors and Management of Cameco Corporation

We have undertaken a limited assurance engagement of the accompanying selected ESG performance metrics included in Schedule 1 (the subject matter) as presented within the 2023 Sustainability Report (the Report) of Cameco Corporation (Cameco) for the year ended December 31, 2023.

Cameco's responsibility for the subject matter

Cameco is responsible for the preparation of the subject matter in accordance with the criteria (the applicable criteria) established in the Performance Table within the Report. Cameco is also responsible for the design, implementation and maintenance of internal control relevant to the preparation of the subject matter that is free from material misstatement, whether due to fraud or error.

Our independence and quality management

We have complied with independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code) and of the relevant rules of professional conduct/ code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to express a limited assurance conclusion on the subject matter based on the procedures we have performed and evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* issued by the International Auditing and Assurance Standards Board and in respect of greenhouse gas emissions, International Standard on Assurance Engagements (ISAE) 3410, Assurance Engagements on Greenhouse Gas Statements issued by the International Auditing and Assurance Standards Board.

These standards require that we plan and perform this engagement to obtain limited assurance about whether the subject matter is free from material misstatement.

A limited assurance engagement undertaken involves assessing the suitability in the circumstances of Cameco's use of the applicable criteria as the basis for the preparation of the subject matter, assessing the risks of material misstatement of the subject matter whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the subject matter. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Making enquires of corporate management and senior executives to obtain an understanding of the overall governance and internal control environment relevant to the management, aggregation and reporting of the subject matter;
- Conducted a limited number of virtual interviews to further understand data measurement, collection, reporting and control processes for the subject matter;
- Analytical reviews and trend analysis of reported data for the subject matter;
- Additional substantive testing procedures over underlying data for the subject matter, as applicable; and
- Reviewed the subject matter disclosure in the Report to ensure consistency with the evidence obtained and adherence to the applicable criteria.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether Cameco's subject matter has been prepared, in all material respects, in accordance with the applicable criteria applied as explained in the subject matter.

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"PwC" refers to PricewaterhouseCoopers LLP, an Ontario limited liability partnership.

Significant inherent limitations

Non-financial data is subject to more limitations than financial data, given both the nature and the methods used for the determining, calculating, sampling, or estimating such data. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements.

GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Cameco's subject matter for the year ended December 31, 2023, is not prepared, in all material respects, in accordance with the applicable criteria.

Purpose of subject matter and restriction on use of our report

The subject matter has been prepared in accordance with the applicable criteria to report to the Board of Directors. As a result, the subject matter may not be suitable for another purpose. Our report is intended solely for Cameco.

We acknowledge the disclosure of our report, in full only, by Cameco at its discretion, without assuming or accepting any responsibility or liability to or any other third party in respect of this report.

PricewaterhouseCoopers LLP

Chartered Professional Accountants
Vancouver, British Columbia
June 27, 2024

Schedule 1

Our limited assurance engagement was performed on the following selected ESG performance metrics:

#	ESG PERFORMANCE DATA METRIC	CRITERIA	2023 VALUE	REPORT PAGE(S)
1	Total Energy Consumed (GJ) (For the year ended December 31, 2023)	SASB EM-MM-130a.1	3,735,799	101
2	Gross global Scope 1 emissions (equity share) (tonnes CO_2e) (For the year ended December 31, 2023)	SASB EM-MM-110a.1	108,835	100
3	Gross global Scope 1 emissions (operational control) (tonnes CO_2e) (For the year ended December 31, 2023)	GRI 305-1	128,673	100
4	Scope 2 emissions (equity share – location based) (tonnes CO_2e) (For the year ended December 31, 2023)	GRI 305-2	146,237	100
5	Scope 2 emissions (operational control – location based) (tonnes CO_2e) (For the year ended December 31, 2023)	GRI 305-2	185,859	100
6	Air Quality – Uranium (tonnes) (For the year ended December 31, 2023)	Air emissions are reported only for operated facilities in Canada that reach NPRI (National Pollutant Release Inventory) release based threshold quantities. Air emissions are calculated using the guidance provided by Environment and Climate Change Canada through the National Pollutant Release Inventory. Air emissions of uranium are calculated using site specific data released through point sources.	0.28	101
7	Avg. radiation dose to employees and contractors (mSv/year) (For the year ended December 31, 2023)	The average radiation dose is an arithmetic average of the annual effective doses received by all workers monitored for radiation at Cameco-operated facilities at the mining, milling, and fuel services divisions in Saskatchewan, Ontario, and the US.	0.73	103

#	ESG PERFORMANCE DATA METRIC	CRITERIA	2023 VALUE	REPORT PAGE(S)
8	Total Recordable Injury Rate (TRIR) – TRIR employees (For the year ended December 31, 2023)	SASB EM-MM-320a.1	2.0	103
9	Total Recordable Injury Rate (TRIR) – TRIR contractors (For the year ended December 31, 2023)	SASB EM-MM-320a.1	3.0	103
10	Number of Transport Incidents (number) (For the year ended December 31, 2023)	SASB RT-CH-540a.2 and management's internally developed criteria stated within Cameco's performance table; Transport incidents include any transport incident that involves a release or potential release, per Section 8.2. of the Transportation of Dangerous Goods Regulation in Canada or 49 CFR 171.15 in the US.	0	103
11	Water Withdrawal (m^3) (For the year ended December 31, 2023)	GRI 303-3a	15,173,917	96
12	Weight of tailings and mineral waste produced (tonnes) (For the year ended December 31, 2023)	The total of Tailings waste (computed in accordance with SASB EM-MM150a.5), Waste rock (computed in accordance with SASB EM-MM-150a.6), and Other mineral waste defined by management to include water treatment sludges and mine slimes that are not stored with tailings.	138,561	98
13	Non-hazardous waste diverted (tonnes) (For the year ended December 31, 2023)	GRI 306-4	541	99
14	Hazardous waste recycled (For the year ended December 31, 2023)	SASB EM-MM-150a.8	139	99
15	Total workforce – Women (per cent) (For the year ended December 31, 2023)	GRI 405-1	25%	104
16	Management – Women (per cent) (For the year ended December 31, 2023)	GRI 405-1	29%	104
17	Total workforce – Indigenous (per cent) (For the year ended December 31, 2023)	GRI 405-1	25%	104
18	Management – Indigenous (per cent) (For the year ended December 31, 2023)	GRI 405-1	6%	104
19	Indigenous employees in all positions at Northern Saskatchewan Operations (per cent) (For the year ended December 31, 2023)	Number of Northern Saskatchewan Operations employees that have self identified as indigenous divided by the total number of Northern Saskatchewan Operations Employees. Diversity information for employees is only maintained on all regular and temporary full- and part-time in Canada. No contractors are included in this metric.	50%	105
20	Proportion of services procured by local providers in: Northern Saskatchewan (per cent)	GRI 204-1	74%	106
21	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index (tonnes)	SASB EM-MM-510a.2	0	106

Forward-looking statements

Caution about forward-looking information

Our Sustainability Report includes statements and information about our expectations for the future. When we discuss our strategy, plans, future financial and operating performance, or other things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian and United States (US) securities laws. We refer to them in this Sustainability Report as forward-looking information.

Forward-looking information typically includes words and phrases about the future, such as: anticipate, believe, estimate, expect, plan, will, intend, goal, target, forecast, project, strategy and outlook. It represents our current views and can change significantly. Commitments, goals and targets discussed in this report are aspirational and there can be no assurance that they will be achieved.

The forward-looking information in our Sustainability Report is based on a number of material assumptions, including those we have listed on pages 5-6 of our 2023 Annual MD&A, which may prove to be incorrect. Actual results and events may be significantly different from what we currently expect, due to the risks associated with our business. We list a number of these material risks on pages 4-5 of our 2023 Annual MD&A. We recommend you also review our most recent annual information form, which includes a discussion of other material risks that could cause actual results to differ significantly from our current expectations. Forward-looking information is designed to help you understand management's current views of our economic, environmental, social and governance-related impacts and objectives, and it may not be appropriate for other purposes. Forward-looking information in this Sustainability Report is given as of December 31, 2023, unless otherwise indicated. We will not necessarily update this information unless we are required to by securities laws.

Examples of forward-looking information in this Sustainability Report include: the impact of Cameco's acquisition of a 49% interest in Westinghouse Electric Company; our target of a 30% absolute reduction in Scope 1 and 2 GHG emission levels by 2030 from a 2015 baseline, the means by which Cameco plans to achieve such target and details regarding any other milestones to achieve Cameco's net-zero ambition and the impact thereof on its employees and assets; our social targets pertaining to workplace safety, indigenous and community relations, inclusion and diversity; our governance targets pertaining to board diversity, conduct and ethics and cybersecurity; our views regarding our ability address environmental, social and governance (ESG) risks and opportunities, including our expectation that nuclear power must be a central part of the solution to the world's shift to a low-carbon climate resilient economy; our planned measures to address climate change impacts in our operations and their timing; our expectation that increasing demand for low-emissions electricity will bring significant opportunities for Cameco; our expectations respecting the impact of new technology and uncertainty surrounding drivers of future GHG emissions related activity to enable us to achieve our ESG goals; our expectations regarding continued and increased government support for energy conservation and emissions reduction; our expectations about uranium supply, consumption and demand; our goals regarding waste reduction and plans for reusing, recycling, or recovering material; our decommissioning estimates and reclamation plans; our commitment to local procurement and supply chain management.

Material risks that could lead to different results include the risks that: our strategies may change, be unsuccessful or have unanticipated consequences; actual sales volumes or market prices for any of our products or services are lower than we expect, or cost of sales is higher than we expect, for any reason; we are adversely affected by changes in currency exchange rates, interest rates, royalty rates, tax rates or inflation; our production costs are higher than planned, or necessary supplies are not available, delayed or not available on commercially reasonable terms; our strategies may change, be unsuccessful or have unanticipated consequences, or we may not be able to achieve anticipated operational flexibility and efficiency; changing views of governments regarding the pursuit of carbon reduction strategies or our view may prove to be inaccurate on the role of nuclear power in pursuit of those strategies; we are affected by environmental, safety and regulatory risks, including workforce health and safety or increased regulatory burdens or delays resulting from a pandemic or other causes; necessary permits or approvals from government authorities cannot be obtained or maintained; the risk that Westinghouse's strategies may change, be unsuccessful, or have unanticipated consequences; the risk that Westinghouse may be unsuccessful in respect of its new business; the risk that Westinghouse may be delayed in announcing its future financial results; the risk that Westinghouse may fail to comply with nuclear license and quality assurance requirements at its facilities; the risk that Westinghouse may lose protections against liability for nuclear damage, including discontinuation of global nuclear liability regimes and indemnities; the risk that increased trade barriers may adversely impact Westinghouse's business; the risk that Westinghouse may default under its credit facilities, impacting adversely Westinghouse's ability to fund its ongoing operations and to make distributions; the risk that liabilities at Westinghouse may exceed our estimates and the discovery of unknown or undisclosed liabilities; the risk that occupational health and safety issues may arise at Westinghouse's operations; the risk that there may be disputes between us and Brookfield regarding our strategic partnership; and, the risk that we may default under the governance agreement with Brookfield, including us losing some or all of our interest in Westinghouse; operations are disrupted due to problems with our own or our suppliers' or customers' facilities, the unavailability of reagents, equipment, operating parts and supplies critical to production, equipment failure, cyber-attacks, lack of tailings capacity, labour shortages, labour relations issues, strikes or lockouts, fires, underground floods, cave-ins, ground movements, tailings dam failures, transportation disruptions or accidents, aging infrastructure, or other development and operating risks;

we are affected by political risks, including unrest in Kazakhstan, and geopolitical events, including the Russian invasion of Ukraine; we are affected by war, terrorism, sabotage, blockades, civil unrest, social or political activism, outbreak of illness (such as a pandemic), accident or a deterioration in political support for, or demand for, nuclear energy; a major accident or incident at a nuclear power plant; we are impacted by changes in the regulation or public perception of the safety of nuclear power plants, which adversely affect the construction of new plants, the relicensing of existing plants, and the demand for uranium; government laws, regulations, policies, or decisions that adversely affect us; and various other risk factors described in our fiscal 2023 Management's Discussion and Analysis and Annual Information Form for the year ended December 31, 2023 filed on SEDAR+ (www.sedarplus.com) under the heading "Material risks" and "Risks that can affect our business" in our Annual Information Form for the year ended December 31, 2023 which are incorporated by reference.

Material assumptions that we have made include assumptions regarding: our expectations regarding sales and purchase volumes and prices for uranium and fuel services, cost of sales, trade restrictions, inflation, and that counterparties to our sales and purchase agreements will honour their commitments; our expectations for the nuclear industry, including its growth profile, market conditions, geopolitical issues, and the demand for and supply of uranium; our ability to adopt innovative and advanced digital and automation technologies to improve efficiency and operational flexibility; the continuing pursuit of carbon reduction strategies and greenhouse gas emissions strategies by governments and the role of nuclear in the pursuit of those strategies; our expectations regarding spot prices and realized prices for uranium; that the construction of new nuclear power plants and the relicensing of existing nuclear power plants will not be more adversely affected than expected by changes in regulation or in the public perception of the safety of nuclear power plants; our ability to continue to supply our products and services in the expected quantities and at the expected times; our expected production levels; plans to transport our products succeed and our ability to mitigate any adverse consequences related to such plans; our cost expectations, including production costs, operating costs, and capital costs; our expectations regarding tax rates and payments, royalty rates, currency exchange rates, interest rates and inflation; our operations are not significantly disrupted as a result of political instability, nationalization, terrorism, sabotage, blockades, civil unrest, breakdown, climate change, natural disasters, forest or other fires, outbreak of illness (such as a pandemic), governmental, political or regulatory actions, litigation or arbitration proceedings, cyber-attacks, the unavailability of reagents, equipment, operating parts and supplies critical to production, supply chain issues, labour shortages, labour relations issues, strikes or lockouts, health and safety issues, underground floods, loadings to the environment, cave ins, ground movements, tailings dam failure, lack of tailings capacity, improper air emissions releases or treated water releases, transportation disruptions or accidents, aging infrastructure, or other development or operating risks; our and our contractors' ability to comply with current and future environmental, safety and other regulatory requirements and to obtain and maintain required regulatory approvals; Westinghouse's production, purchases, sales, deliveries, and costs; the assumptions and discussion set out under the heading Westinghouse Electric Company – Future Prospects in the 2023 Annual MD&A; the market conditions and other factors upon which we have based Westinghouse's future plans and forecasts; Westinghouse's ability to mitigate adverse consequences of delays in production and construction; the success of Westinghouse's plans and strategies; the absence of new and adverse government regulations, policies or decisions; that there will not be any significant adverse consequences to Westinghouse's business resulting from business disruptions, including those relating to supply disruptions, economic or political uncertainty and volatility, labour relation issues, and operating risks; Westinghouse's ability to announce future financial results when expected; Westinghouse will comply with the covenants in its credit agreements; Westinghouse will comply with nuclear license and quality assurance requirements at its facilities; Westinghouse maintaining protections against liability for nuclear damage, including continuation of global nuclear liability regimes and indemnities; that known and unknown liabilities at Westinghouse will not materially exceed our estimates; and, the absence of disputes between us and Brookfield regarding our strategic partnership, and that we do not default under the governance agreement with Brookfield; in addition to the assumptions listed in our fiscal 2023 Management's Discussion and Analysis and our Annual Information Form for the year ended December 31, 2023 under the heading "Material assumptions", which are incorporated by reference. These assumptions are based on information currently available to Cameco, including information obtained from third-party sources. While Cameco believes that such third-party sources are reliable sources of information, Cameco has not independently verified the information or underlying assumptions.

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