2023 Climate Change Accountability Report

May 2024

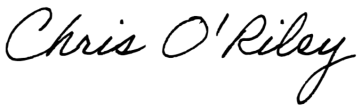
BC Hydro
Power smart

This Climate Change Accountability Report for the period January 1, 2023 to December 31, 2023 summarizes our emissions profile and the total offsets to reach net–zero emissions for buildings, fleet and paper emissions required by the Carbon Neutral Government Regulation. The report also documents our broader greenhouse gas management plan, our approach to managing climate change risks, the actions we have taken in 2023 to reduce our greenhouse gas emissions, and our plans to continue reducing emissions in 2024 and beyond.

By June 30, 2024 BC Hydro and Power Authority's 2023 Climate Change Accountability Report will be posted to our website at **bchydro.com**

Executive sign off:

June 04, 2024



Chris O'Riley
President & CEO

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Cover photo: Seton Lake looking south from up near the BR2 Penstocks. Photo by Felicia Julefs.

1. Overview

In 2023, we continued to take significant actions to reduce our greenhouse gas emissions, adapt to climate change and support our customers to transition from fossil fuels to low-carbon energy alternatives.

Globally, climate change is a defining issue of our time. As climate concerns take centre stage, people are rethinking their environmental impact and expecting the same from the companies they interact with. Here in British Columbia, we've seen an acceleration in climate change and an increased urgency for decarbonization, leading to a societal shift towards sustainable energy. This energy transition is propelling our province and the world towards a carbon-neutral economy, where our low-carbon energy serves as both a solution and a driving force.

BC Hydro's mission is to provide our customers with safe, reliable, affordable, and clean electricity. Our **five-year strategy**, updated in 2023, outlines a vision for a cleaner, more sustainable future through electrification. This vision celebrates our low-carbon and renewable energy advantage, as well as our role in environmental stewardship in British Columbia.

As a Crown Corporation, we play a crucial role in supporting the government's climate actions and targets. The specific measures and targets for GHG reduction identified in our **five-year strategy** align with the Provincial government's CleanBC objectives, the **2030 roadmap**, and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and these measures are expected to have a positive influence on mitigating climate change.

The low-carbon energy we supply has significant potential to combat climate change by supporting the reduction of greenhouse gas (GHG) emissions. Our approach to battling climate change includes strategies and plans that address climate adaptation, ensuring our power system's resilience, and mitigation, which reduces our own GHG emissions and enables our customers to do the same. Our GHG Management Plan, a key component of our mitigation approach, targets GHG reductions across all operational areas where emissions occur.

The climate in British Columbia is changing, with weather events becoming more extreme and frequent. These changes have real impacts on our assets, customers, and our ability to provide reliable power. In recent years, B.C. has experienced record-breaking wildfire seasons, severe storms,and sustained droughts, and 2023 was no exception. BC Hydro's approach to balancing reliability, risk, and affordability includes adapting our business practices and modifying our electricity infrastructure to address climate and weather-related risks. We have assessed the impacts and adapted our planning, design, and operational practices to consider both the observed and potential impacts of climate change. Our **Climate Change Adaptation Plan** describes our ongoing efforts to understand the risks of climate change and maintain robust adaptation practices.

Launched in 2021, BC Hydro's **Electrification Plan** spans five fiscal years (Fiscal 2022–Fiscal 2026) and outlines the actions we're taking to help people in B.C. to electrify. These actions include encouraging customers to transition away from fossil fuels and attracting new businesses, particularly those with their own climate targets seeking low–carbon electricity. We're also exploring ways to make it faster and easier for new customers to connect to our grid. The Plan allocates $263 million for electrification incentives, studies, and supporting internal resource requirements.

In B.C., we anticipate a 15% increase in electricity demand between now and 2030 due to factors such as population growth, housing construction, increased industrial development), and more homes and businesses transitioning from fossil fuels to renewable electricity. In response, we're expanding, strengthening, and diversifying our electricity system to meet this growing demand while creating opportunities for First Nations and businesses in the clean energy sector. This includes investing nearly $36 billion over the next 10 years in our **Capital Plan** and launching a **2024 Call for Power** to ensure that individuals and businesses have the clean, affordable electricity they need to power B.C.'s growing economy and create jobs throughout the province. This call, which seeks 3,000 GWh/y of clean or renewable resources, involved extensive engagement with First Nations, the independent power producer industry, and stakeholders. One of the key requirements is for projects to have a minimum 25% First Nations equity ownership in each project (with an evaluation credit up to 51%) and is expected to generate an estimated $2.3 to $3.6 billion in private capital spending throughout the province.

In addition, we continue to implement energy efficiency initiatives. Energy efficiency has been a crucial component of BC Hydro's long–term energy planning strategy and a valuable part of our overall customer offering for decades. These initiatives help offset the need for future energy and capacity resources, lower the stress on our transmission and distribution grid, and reduce our overall costs. Furthermore, by helping our customers to reduce their electricity use and shift the timing of their electricity consumption, we provide them with opportunities to save money on their bills.

We are actively expanding our **network of public electric vehicle (EV) chargers**. Over the next decade, we aim to reach more than 3000 charging ports to our network. This expansion will ensure reliable charging ports for people in communities across B.C.

We are committed to maintaining transparent communications about our Environmental, Social, and Governance (ESG) performance. In 2023, we published our inaugural ESG report, "**Powering a Sustainable B.C.**," detailing our practices, impacts, and performance over the past three years. We plan to continue this practice by regularly publishing ESG reports.

The provincial government has set ambitious targets for reducing greenhouse gas emissions. Electrification across all sectors can help us achieve these targets.

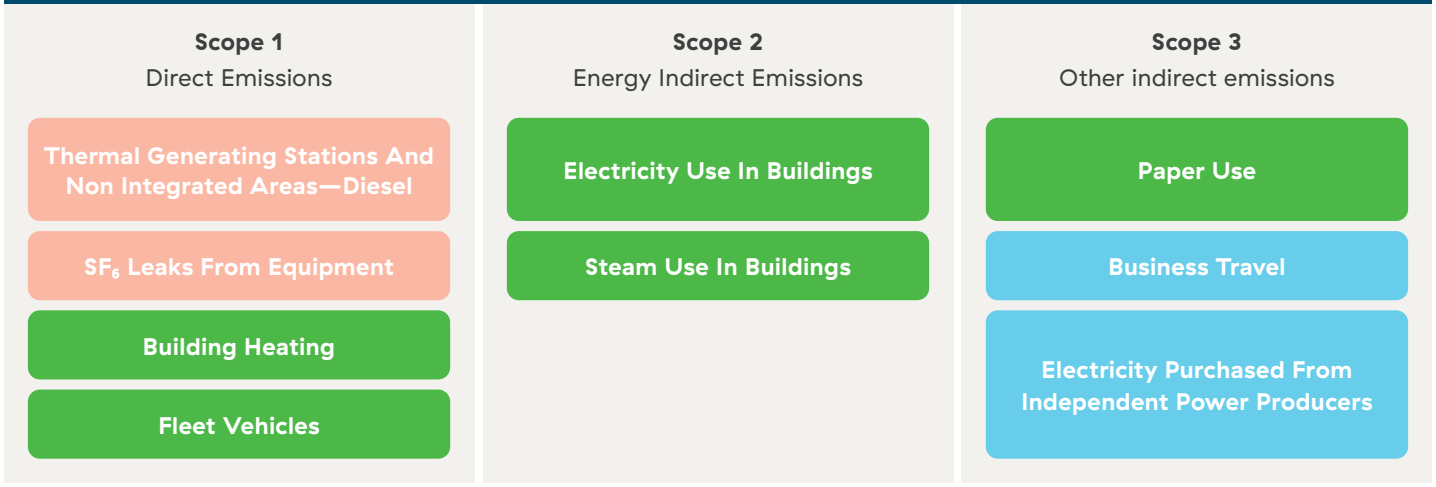
Arrow Reservoir flats at the Cartier Bay wetland.
Photo credit: Jen Walker–Larsen

2. Our Emissions

We monitor and report on our emissions

Our **GHG Management Plan** includes emissions we're required to report under the **Canadian Environmental Protection Act**, **BC Greenhouse Gas Industrial Reporting and Control Act**, and **BC Climate Change Accountability Act**. We also report on emissions that we're not required to screen and report by regulation[1], such as emissions from Independent Power Producers (IPPs), corporate air travel and facilities with emissions under regulatory reporting thresholds. Our GHG emissions from large industrial facilities[2] are verified by a third party as required by the **Greenhouse Gas Emission Reporting Regulation**.

Figure 1—Our greenhouse gas emissions and associated reporting requirements



- Required by: *BC Climate Change Accountability Act, Carbon Neutral Government Regulation*
- Required by: *Canadian Environmental Protection Act, Bc Greenhouse Gas Industrial Reporting And Control Act*
- Other GHG Emissions tracked by BC Hydro that are not required by any regulation

- **Scope 1: Direct GHG emissions** occur from sources owned or operationally controlled by BC Hydro.
- **Scope 2: Indirect GHG emissions** are associated with the purchase of electricity and steam consumed to heat and cool BC Hydro–owned buildings.
- **Scope 3: Other indirect GHG emissions** come from business activities (i.e., GHG emissions that are a consequence of BC Hydro's activities but occur from sources not owned by BC Hydro).

1 Independent Power Producers (IPP) emissions are not included in our emission reports submitted to regulators since IPPs report on their own emissions directly. We do include IPP emissions in our GHG Management plan since our decisions may directly affect provincial GHG emissions.

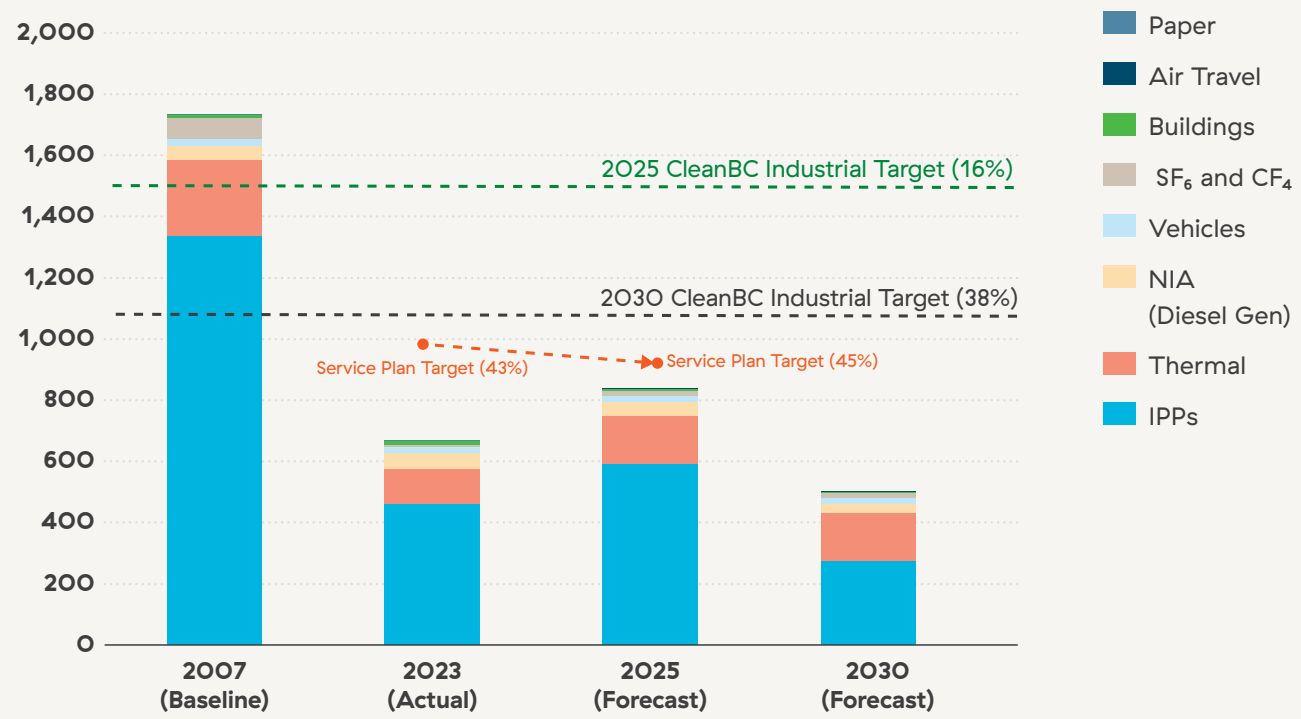
2 Our Fort Nelson Generating Station undergoes independent third–party verification in accordance with the Greenhouse Gas Emission Reporting Regulation. We also voluntarily complete independent third–party verification of our Masset, Ah–Sin–Heek and Prince Rupert generating station emissions since these have historically exceeded or been close to thresholds that trigger verification or reporting.

We include Scope 3 emissions from Independent Power Producers, corporate air travel and paper use in our emission report since they are either of materiality to our operations and with a current mechanism to measure, and/or required by the Carbon Neutral Government Regulation. BC Hydro recognizes the current GHG management plan does not capture all our indirect emissions included in Scope 3. To address this, we intend to expand our understanding of scope 3 emissions over the coming years.

In 2023, our supply chain team engaged with key suppliers by way of a utility-focused **Sustainable Supply Chain Alliance** survey to learn where different companies are in terms of measuring and reporting emissions. This will help us prioritize and identify options to work with our suppliers on Scope 3 reporting going forward.

In 2023, we continued our flexible work model for office-based workers. This model, which allows employees to work from home when their roles permit up to three days per week, thus reducing commuting. Our flexible work model helps to reduce GHG emissions as workers travel less to and from the office, however we have not quantified or reported on these reductions yet since they are outside the current scope of our GHG reduction plan.

Figure 2—BC Hydro GHG Emissions, Targets and Forecasts (kt CO_2e)



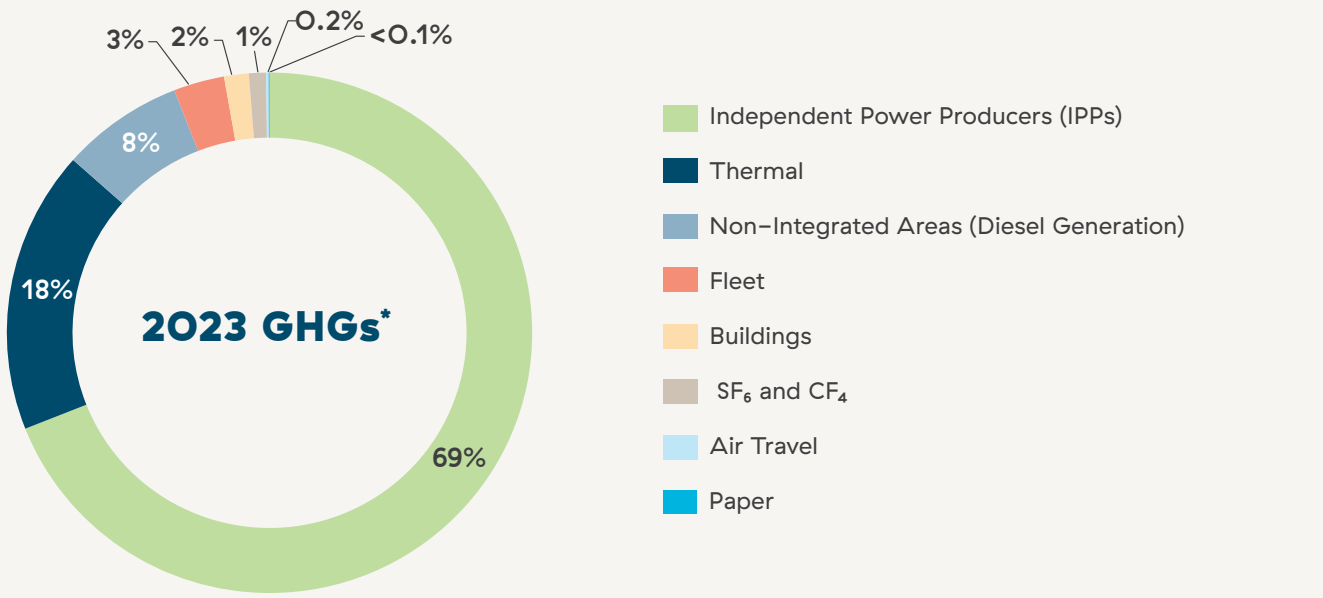
In 2023, we achieved a 61% reduction in our emissions compared to our baseline, and we continue to be on track to exceed the 2025 and 2030 Provincial CleanBC reduction targets for industry

Our Greenhouse Gas (GHG) emissions are some of the lowest in the North American electric industry, with our direct emissions contributing less than 1% of the total industrial **GHG emissions in British Columbia**. While we're already a low emitter, we want to be leaders in the fight against climate change by continuing to reduce our emissions even further.

We have set ambitious, achievable reduction targets. In 2023, we updated (increased) our thermal emission targets through 2030 to reflect the most recent operational plan. This changes our total overall emission reduction forecast for 2025 (down from 51% to 48%) and 2030 (down from 71% to 68%) compared to the Provincial CleanBC industry sector targets, of 16% and 38–43% respectively. We're on track to meet our forecasted reductions and continue to introduce additional measures to reduce emissions and update our forecasts.

We also set a reduction target each year as part of our **Annual Service Plan** to ensure that we have measures and actions in place that will help us meet our 2025 and 2030 reduction goals. Our Service Plan target is to reduce emissions by 45% by 2025, including a 43% reduction target in 2023 (relative to respective baseline years).

Figure 3—BC Hydro 2023 GHG Emission Distribution



* Due to Rounding, percentages may not sum up exactly as shown

Table 1—BC Hydro Greenhouse Gas Emissions Summary

GHG Category	Baseline	2022	2023		2025		2030	
		Actual	Actual	Change from Baseline	BC Hydro Forecast	BC Hydro Forecast Reduction	BC Hydro Forecast	BC Hydro Forecast Reduction
	k tCO_2e	k tCO_2e	k tCO_2e	%	k tCO_2e	%	k tCO_2e	%
Buildings	7.4	11.3	10.1	36	6.3	−15%	3.7	−50%
Fleet	22.3	20.6	20.8	−7%	22.1	−1%	19.7	−12%
SF_6 and CF_4	70.4	10.2	8.5	−88%	15.0	−79%	15.0	−79%
NIA (Diesel Gen)	46.3	52.8	50.3	9%	44.1	−5%	30.4	−34%
Thermal	246	199	117	−52%	207	−16%	201	−18%
IPPs	1,339	569	460	−66%	592	−56%	276	−79%
Air Travel (domestic)	2.4	1.1	1.4	−41%	1.4	−40%	1.4	−40%
Paper	0.2	0.1	0.1	−75%	0.1	−40%	0.1	−40%
Totals	**1,735**	**864**	668	−61%	**888**	**−49%**	**548**	**−68%**
Provincial Target (CleanBC)					1,457	−16%	1,075	−38%
Amount Plan exceeds Clean BC Target					569	−32%	528	−30%
BC Hydro Service Plan Target			989	−43%	954	−45%	–	–

Notes:

1) Baseline year is 2007 except as follows.
2) Fleet, buildings and paper baselines are based on 2010 as 2007 data is unavailable.
3) Air Travel (domestic) baseline is based on 2019 as 2007 data is unavailable.
4) Baselines were calculated using emission factors and global warming potentials (GWP) in effect at the time they were established.
5) Emissions are reported on a calendar year basis, consistent with regulatory reporting requirements.
6) Due to rounding, numbers may not sum up exactly as shown.
7) IPP emissions are calculated using the latest available emission factors at the time. The IPP 2025 and 2030 forecasts were prepared using the 2019 emissions factors that were in effect when the GHG Plan was developed.
8) BC Hydro Service Plan reduction target was 43% for 2023 compared to baseline and will increase by one percent a year until it reaches 46% in 2026.

GHG Emissions decreased from baseline

GHG Emissions increased from baseline

Although the overall building portfolio and GHG emissions have increased by 36.8% since baseline, these emissions have been declining in the last few years. The increase from the baseline is attributed to the temporary Site C construction worker's camp. However, emissions from other buildings have decreased by 23.6% from the baseline. We expect the Site C buildings emissions to decrease significantly starting in 2025 when construction is substantially complete. Once fully decommissioned, BC Hydro's building's emissions will be on track to meet the provincial reduction target for public service organization buildings.

Non-integrated area emissions decreased from 2022 and were 9% above baseline. This variance is a result of normal changes in year-over-year electricity demand based on influencing factors such as weather and community growth. We're taking a collaborative approach, working with communities in these areas to identify and move low-carbon and renewable energy projects forward, and increase their supply of low carbon and renewable energy. Emissions are expected to decrease once these community projects are brought online (refer to Section 3.3 for more details).

3. Key areas of GHG emissions

3.1 Buildings

GHG emissions from our core buildings portfolio were 23% less than baseline

BC Hydro owns or leases over 260 buildings in more than 80 municipalities across British Columbia. There have been several retrofit, upgrade and new construction projects underway in 2023 in our core (Properties managed) building portfolio, for which we follow an integrated design process with energy efficiency, GHG emission reduction and high-performance building elements in mind.

Our building design standards include energy efficiency targets, low carbon system metrics and prioritize electric options. The lower energy use intensity, a key metric to determine a building's energy efficiency per unit, leads to more energy efficient and thus low carbon footprint buildings.

We'll continue to install low carbon systems in our new facilities and upgrade systems in our existing facilities. The priority for capital asset replacement and electrification will be for building systems that are at or close to the end of useful life. We review and implement technologies that are becoming available to decarbonize buildings, including air source and water source heat pumps for space heating and domestic hot water, heat recovery systems, and carbon dioxide heat pump hot water heaters.

We have integrated data from over 500 meters at our 260 buildings into the Energy Star Portfolio Manager (ESPM), a platform that tracks and monitors energy consumption. This integration has empowered us to enhance the energy efficiency of our buildings and strategize for future projects and initiatives aimed at reducing emissions. Here are some highlights from our key achievements in 2023:

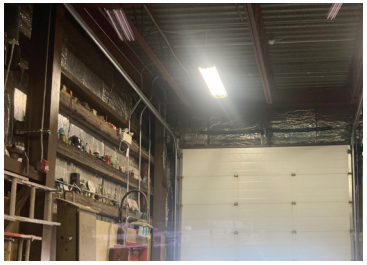
- We are adopting the **Climate Resilience Framework & Standards for Public Sector including the Resilience Minimum Standards** for New Buildings and Existing Buildings. The framework includes climate exposure screening, risk assessment and application of minimum climate resilience standards. Refer to additional sustainable practices below for more detail on climate risk management at our buildings.
- Under the BC Hydro Energy Manager's Program, we're committed to conserving energy and reducing electrical demand in our buildings, while concurrently addressing climate impacts. We have initiated and recommended energy-efficient procedures and best practices across our facilities. These include measures such as closing blinds during the summer, installing high-performance filters, and optimizing control sequences of operations to alleviate HVAC systems and thermal loads from severe weather conditions. Building operators have been trained on and engaged in these changes.

Vernon Regional Office

Maple Ridge Field Office

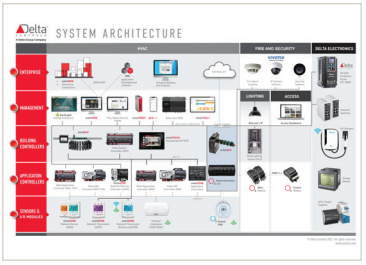
- Our Facilities Lifecycle Management Standards (FLMS) were revised to incorporate more energy-efficiency initiatives and to implement measures that reduce carbon emissions as follows:
  - Supporting electrification where possible, such as through implementing HVAC systems in retrofits and upgrades.
  - New construction projects will, at a minimum, adopt the Energy Step Code 3 and Emissions Level 3 (EL-3) of the B.C. Building Code (BCBC). For an institutional building, the Step Code 3 depicts an energy efficiency improvement of 40% above the BCBC requirements. EL-3 represents a strong carbon performance of less than 3 kg CO_2e / m_2 per year.
  - We'll reduce demand for heating and cooling by using passive solar strategies and increased building insulation above the Building Code standard.
  - Implementing several other environmentally sustainable designs, such as increased use of heat pumps, heat recovery, advanced lighting controls and sensors, and variable speed drives.
  - Making efforts to reduce the embodied carbon in construction projects. For instance, environmentally-friendly materials will be used in place of high carbon cement, aluminum, and insulation.
  - Employing design strategies to reduce water usage.
  - Across our facilities, we'll adopt advanced controls including implementing **ASHRAE** guideline 36 for High-Performance Sequences of Operation for HVAC Systems.
  - Encouraging the use of recycled building materials in both new construction and maintenance.
  - Designing new buildings with a 75-year lifespan to minimize ongoing renovations and the associated use of construction materials.
  - Purchasing new furniture that uses materials and processes that have a lower environmental impact, do not emit gases or particles into the workplace, and can be easily reused or recycled at the end of their service life.
- We're implementing additional sustainable practises in our buildings portfolio as follows:
  - **Waste reduction and recycling**—we have implemented an operations policy to facilitate reducing and diverting building occupant waste from landfills or incineration facilities. This includes composting, collecting plastics, battery recycling, etc. Design consultants are required to incorporate a waste management plan in project specifications, and contractors must provide and implement a construction site waste management plan. Our Facilities Lifecycle Management Standards were updated to enhance waste collection during projects. We also developed a Request for Proposal to hire a new operator for all of our properties to facilitate collecting and separating various building wastes for recycling, and minimizing the occupant wastes that goes to landfill. We're encouraging the use of paper-based and recycled building materials in new construction and maintenance.
  - **Water conservation measures**—we have introduced water conservation measures such as water reduction strategies through design, including using low flow plumbing fixtures and appliances, and high-efficiency washers. We're also using climate and drought resilient plants and shrubs in our landscaping. All design decisions are evaluated with environmental impact in mind and follow Leadership in Energy and Environmental Design (LEED) best practices.
  - **Climate engagement, education, and awareness**—we offer full demonstration and training programs for our facilities team and operators on the new systems and best practices of operation.
  - **EV charging**—we're installing Electric Vehicle (EV) chargers and infrastructure for our fleet and staff to significantly increase the numberof EV charging stations in our buildings.
  - **Indoor air quality**—we completed a pilot project aimed at improving the Indoor Air Quality (IAQ) in our buildings. This project involved replacing numerous existing HVAC filters with high-performance ones. The IAQ was measured and verified according to industry-standard methods, resulting in an impressive 77% improvement in indoor air quality compared to the previous state.

The following are examples of high energy-efficient design and low carbon systems that have been implemented in 2023.



We continued our corporate-wide LED lighting upgrade in 2023 to include facilities in Burns Lake, Smithers, Kelowna, Vernon, Kamloops, Terrace, Dunsmuir, Vanderhoof, Campbell River, Port Alberni, Powell River, Qualicum, Sechelt, Clearwater, Cache Creek, Valemount, Mayne and Saturna Islands. Old energy intensive high-bay down lights were retrofitted with highly energy-efficient LED fixtures. Lighting controls were added or improved with additional motion, photocell, and daylight sensors to turn lights off or dim down when not in use.

At our Powertech building, one large electric boiler was installed to act as the primary source of heating to displace the natural gas-fired boiler for space heating. Boiler controls were optimized for improved heating water supply temperature and the staging of boilers. We also upgraded two gas-fired boilers to a 95% high efficiency condensing boiler which has five times more capability of meeting smaller heating loads than older draft boilers. This can result in less emissions and higher operational performance. A total reduction of 130 tonnes CO_2e was achieved in 2023.



Recommissioning of the buildings automation system to improve energy and operational performance at Dunsmuir office in 2023. The whole building automation system was upgraded, including adding smart controls and data analytics. Operational optimization such as demand based temperature and pressure controls and lowering fans, pumps and heating energy are a few highlights of several measures we implemented during the recommissioning. The measured energy savings totalled about 360,000 kWh. We also installed high-performance filters to improve the zonal temperature and make the offices more comfortable for employees.

The Terrace District Office underwent a thorough roof upgrade in 2023. It included two-layer high performance isocryanurate insulation with two-ply styrene butadiene styrene (SBS) overlay boards. All skylights were replaced with proper sealing, which prevent water leakage and excessive heat loss. The roof insulation was improved with a new 5.2" insulation. This achieved a total reduction of 26 tonnes CO_2e in 2023.

The Southern Interior Operations (SIO) office underwent a thorough roof upgrade in 2023. It included two-layer high performance isocryanurate insulation with two-ply SBS overlay boards. Two layers of three-inch thick rigid insulation with R-Value of 17.5 was adhered with foam adhesive. We installed vapor barriers to prevent water leakage and heat loss. This achieved a total emissions reduction of about 4.5 tonnes CO_2e (20%) in 2023.

3.2 Vehicles

GHG emissions from our fleet were 7% below baseline

BC Hydro's Fleet Services is responsible for the acquisition and lifecycle management of our fleet assets. Fleet Services manages over 3,900 vehicles, trailers, and pieces of equipment in support of our operations—an increase of approximately 10% since 2020. Our fleet has been avoiding emissions from vehicles through investment in EVs and other low carbon technologies. For example, 95% of the BC Hydro sedans are either zero emission or electric–gas hybrid vehicles. While technologies for reducing GHGs in medium–duty and heavy–duty vehicle categories that meet our needs as an emergency service provider are not available today, we're testing technologies, such as Electric Power Take Off (ePTO) systems in heavy bucket trucks, to advance our knowledge and experience with GHG–avoiding alternatives.

In 2023, we took the following actions to improve our fleet emissions by:

- Continuing to pilot two hydrogen fuel cell sedans and five battery electric half–ton pickup trucks (EVs) to test the reliability and performance of these new technologies.
- Increasing our fleet of hybrids to 311 vehicles (out of a total of 1,551 light vehicles) from 268, including operating 43 hybrid pickup trucks, and 254 hybrid sport–utility vehicles (SUVs). Where Battery EV or hybrid–electric options are feasible, Fleet considers those GHG avoiding options before renewing a retired internal combustion engine vehicle with another internal combustion engine vehicle.
- Introducing two ePTO systems on bucket trucks (with more planned for 2024).
- Continuing to implement a telematics program to address unproductive idling and to improve fuel economy.

In 2023, fleet emissions increased slightly compared to 2022, remaining 7% below the baseline.

Electric power takeoff (ePTO) system that powers the boom and auxiliary functions on bucket trucks

3.3 Non-integrated areas

Non-Integrated Area emissions were 9% above baseline

The Non-Integrated Area (NIA) supplies electricity generation and distribution to 28 off-grid communities, in 14 isolated microgrids, most of which are Indigenous communities. NIAs have approximately 8,000 customers, mostly residential and some commercial. NIAs are supplied by approximately 50% clean and renewable resources such as stored hydro, run-of-river hydro and solar, with the remainder supplied by diesel generation.

In the past few years, new sources of funding for clean energy projects from provincial and federal agencies have driven increasing interest in, and development of, renewable energy for NIAs. We're taking a collaborative approach, working with First Nations in these areas to identify and move projects forward, and increase their supply of low carbon and renewable energy. In addition to helping meet climate change objectives, these projects are an opportunity to advance reconciliation with Indigenous communities through forming mutually beneficial relationships while providing economic opportunities.

Specific activities currently underway include:

- Developing a regulatory framework that supports community renewable energy projects, informed by engagement, ongoing working groups and project-specific experiences with NIA communities.
- Creating nine technical working groups with First Nations to advance the first ten community energy projects as well as community energy plans, and resource assessments to support diesel reduction activities.
- Sharing data and information with project developers to size and plan for energy project integration into the isolated NIAs.
- Conducting Load Forecasting to inform community and clean energy planning.
- Receiving Natural Resource Canada funding to advance a solar/battery-based demand response and diesel reduction pilot on Haida Gwaii.
- Providing subject matter expertise to First Nations who are developing energy projects.
- Coordinating with Provincial and Federal Government agencies to align funding programs and policies.
- Exploring the impacts of new and emerging technologies on existing operations.
- Implementing energy efficiency programs in 10 of our 14 NIAs.

BC Hydro signed the first ever Community Energy Purchase Agreement with Ulkatcho First Nation at Anahim Lake

While we work with First Nations to advance energy projects and support other diesel reduction activities in NIAs such as demand–side management initiatives, we're also preparing for an overarching strategy focused on Non–Integrated Areas, focusing on the pillars of:

- Clean Energy (e.g. clean energy projects, small scale solar, etc).
- Reliability (e.g. distribution reliability improvements).
- Affordability (e.g. customer rate design options).

We've allocated resources, established internal governance and are implementing changes across the organization to support NIA diesel reduction across the province. We've established a $150 million, 10–year capital budget focused on modernizing NIA microgrids with battery energy storage systems, microgrid controls and other upgrades in order to enable the efficient and reliable integration of renewables that displace diesel use. As we implement our strategy, we continue to consult with the Provincial government and First Nations.

Our five–year strategy includes implementing a plan and pursuing agile solutions to reduce diesel use in Non–Integrated Areas. A current example includes partnering with Ulkatcho First Nation in Anahim Lake through the development of a solar farm. Located in Anahim Lake, Ulkatcho First Nation is currently fully reliant on diesel for electricity via a BC Hydro microgrid. Part of Ulkatcho First Nation's strategic plan included moving away from diesel generation through various projects to reduce the environmental and social impacts of burning fuel.

The solar farm is expected to offset up to 65% of the diesel used to power Anahim Lake and surrounding communities and will be fully owned by the First Nation's economic development company. The combined solar and battery system is expected to not only reduce diesel consumption, but also provide up to 70 days during the summer without need for any diesel power and will be the largest off–grid solar farm in Canada. Further information about the project can be found at **Fiscal Year 2024 ESG Report***.

Non–integrated area emissions decreased from 2022 and were 9% above baseline. This variance is a result of normal changes in year–over–year electricity demand based on influencing factors such as weather, energy efficiency activities (see Section 5) and community growth. Emissions are expected to decrease once community renewable energy projects are brought online.

* Available by August 2024.

3.4 Thermal Generation

BC Hydro thermal power generation emissions were 52% lower than baseline

BC Hydro owns and operates thermal plants in Prince Rupert (46 MW) and in Fort Nelson (73 MW).

Prince Rupert Thermal Generating Station primarily serves as a local backup for the integrated system in Northwest British Columbia.

Fort Nelson Thermal Generating Station (FNG) serves the local Fort Nelson area load and is connected to the Alberta Electric System Operator (AESO) grid—it is not part of our integrated grid. Fort Nelson operates to meet local load and serves the AESO Alberta Power Pool.

Due to transmission lines being burnt down by wildfires, FNG was isolated from the Alberta power grid and had to be run at very low output to carry local loads from May to October. Therefore, FNG operated less in 2023 and as a result emissions were lower than in 2022 and planned generation. The operation returned to normal in March 2024 once all the damaged transmission lines were repaired. Through the standard operation of our facility, in conjunction with the emission strategies of other business units, we are aligned to achieve BC industrial GHG reduction targets for both 2025 and 2030.

Prince Rupert Thermal Generating Station

Fort Nelson Thermal Generating Station

3.5 SF_6 and CF_4 insulating gases

SF_6/CF_4 emissions were 88% below baseline

Sulphur hexafluoride (SF_6) and carbon tetrafluoride (CF_4) are potent greenhouse gases used in electrical equipment worldwide. SF_6 and CF_4 have 23,500 and 6,630 times more global warming potential than CO_2, respectively. Equipment leaks can result in the release of these gases to the atmosphere.

Since 2007, SF_6 and CF_4 releases have decreased by 88% through established maintenance programs and targeted equipment repair and replacements. Through the use of the SF_6 tracking app by our station operations team, leaks are identified sooner to prioritize repairing or replacing leaking equipment.

Our practice is to seek alternatives to SF_6 and CF_4 insulated equipment by using more environmentally friendly solutions where these are viable, reliable, safe and at a reasonable cost. Some examples from 2023 include:

- At our Capilano substation replacement project in North Vancouver, we installed and are testing new medium-voltage gas-insulated switchgear (GIS) that uses industrial dry air (a processed air that has no water vapour) in place of SF_6. The new switchgear replaces equipment that would use approximately 275 kg of SF_6. Commissioning of the equipment was successful, and the substation went into service in April 2024. The use of dry air GIS is a relatively new development in our industry. We intend to use learnings from our pilot to examine the feasibility of incorporating this equipment into future substations. Further details are available in our **Fiscal 2024 ESG Report***.
- Through a structured decision-making process, an SF_6-alternative technology (ester oil) was selected for use in the transformers at the new West End Substation avoiding the addition of 3,000kg of SF_6 to the system.
- We established a program to replace 72 kV circuit breakers with a dry air model, and an existing program continues to replace 25kV/15kV circuit breakers with a dry air model.
- We have supply contracts in place and in progress for the procurement of non-SF_6 alternatives like vacuum/dry air technologies.

We currently have non-SF_6 equipment in applications up to 287 kV. Looking ahead, there are proposed regulations in Europe and California that we expect to expedite the availability of non-SF_6 equipment. There are also a range of technologies currently available and emerging to replace SF_6 equipment including high voltage applications. Non-SF_6 equipment alternatives are expected to be more widely available from multiple suppliers for up to 145 kV by 2025 and up to 550 kV by 2030.

SF_6/CF_4 emissions were 88% below baseline. The decrease from 2022 was attributed to improved gas tracking and on-going leak repairs and equipment replacements.

Capilano Substation
Dry-air medium-voltage switchgear system

A 230 kV Gas Insulated Switchgear (GIS) unit in Horsey Substation

* Available by August 2024.

3.6 Paper

Emissions from paper were 75% below baseline

Although GHG emissions from paper use account for a small fraction of our emissions, we continue to implement improvement actions. In 2023, we continued with network printers and photocopiers set to double-sided printing by default and held online workshops, accessible to all employees, to promote electronic forms and planners. The paper we use is produced from post-consumer fibre. It's processed in a facility that primarily uses renewable gas as its energy source.

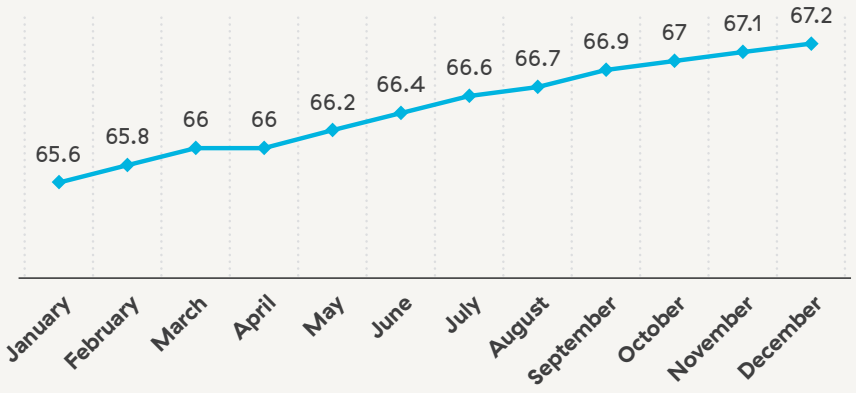
Our efforts to reduce paper use extend beyond our own operations; we also encourage our customers and suppliers to use less paper. For instance, we have outsourced our customer invoicing services to a third-party company and have launched paperless billing campaigns to motivate customers to reduce their paper consumption. In 2023, we observed a rise in customers adopting paperless billing from 65.5% to 67.2% compared to the previous year, this percentage demonstrates our ongoing leadership role among utilities in Canada. This increase means that an additional 56,491 accounts opted for paperless billing throughout the year.

In 2023, we continued with our campaigns to reduce paper consumption related to our business. Examples include:

- Messages distributed with bills to encourage customers to go paperless to reduce waste.
- Agents promoted paperless billing during targeted inbound calls.

In 2023, our emissions from direct paper use dropped to 75% below the baseline, although they were slightly higher than the previous year, 2022. This reduction from the baseline in 2023 is largely due to our office-based employees transitioning to a more digital environment, facilitated by our flexible work model.

Figure 3—Percentage of paperless adoption accounts in 2023



3.7 Corporate travel

Air travel emissions were 41% below baseline

In 2023, our GHG emissions from corporate air travel remained low at 41% below the baseline. Throughout the pandemic, we embraced new technologies, skills, and practices that facilitated virtual connections with colleagues, First Nations, regulators, and stakeholders provincially, nationally, and internationally. As we integrate these learnings into our operations, our goal is to optimize our travel expenses while reducing our carbon footprint. Our emissions have risen compared to the pandemic period (2020 to 2022), but they remain significantly lower than the baseline. This rise aligns with an overall increase in flights, reflecting the easing of pandemic restrictions in 2023.

Our travel guidelines ask employees and contractors to consider virtual meeting options in lieu of travel to reduce GHG emissions. We will persist in prioritizing these virtual options before resorting to travel, acknowledging that some travel will remain necessary due to th e nature of our work.

Although air travel emissions in 2023 were higher than in 2022, they were still 41% below the baseline due to the effective implementation of virtual meetings and training sessions.

3.8 Independent Power Producers

IPP emissions were 66% below baseline

In 2023, emissions from Independent Power Producers (IPPs) represented 69% of our total direct and indirect GHG emissions as summarized in Table 1 on page 11. Although we do not own or operate IPP facilities, our electricity purchase agreements with IPPs can directly influence the use and operation of these facilities, which presents a key opportunity for reducing GHG emissions.

The McMahon gas-fired thermal cogeneration facility is the largest source of GHG emissions within BC Hydro's portfolio of IPP contracts. McMahon Cogeneration operates as a baseload facility which means it is continually operating to produce steam for an adjacent industrial facility and electricity for sale to BC Hydro, and as a result it is a significant source of GHG emissions. Island Generation, located on Vancouver Island, operates as a dispatchable on-demand power supply facility and was only operated for maintenance purposes in 2023.

Between 2007 and 2023, GHG emissions related to purchases of electricity from IPPs were reduced by 66%, from approximately 1.34 million tCO_2e to approximately 0.46 million tCO_2e. Emissions from these sources are anticipated to decrease further as we work to achieve our 2030 reduction goal. The forecast reduction in emissions from IPPs contributes significantly to achieving our overall GHG reduction target.

We have set an objective to reduce GHG emissions from IPPs. As IPP contracts expire, we will look to acquire electricity from clean or renewable resources to replace electricity from existing higher emitting resources. On April 3rd 2024, BC Hydro issued the 2024 Call for Power to acquire approximately 3,000 gigawatt-hours (GWh) per year of clean or renewable energy from new resources.

In calendar year 2023, the GHG performance of our IPP portfolio is summarized as follows:

- GHG emissions from IPPs were reduced by 66% compared to baseline.
- Reported emissions from IPPs were 19% lower than in 2022, for two primary reasons:
  - The Climate Action Secretariat recalculated the emissions factor for thermal cogeneration IPPs based on the actual efficiency of each cogeneration facility rather than an assumed efficiency. This resulted in lower estimated emissions as compared to previous estimates.
  - A GHG-emitting IPP was offline for an extended period.

SunMine, in Kimberley B.C., provides 1 megawatt peak production, enough to power about 250 homes, and was the first solar project in B.C. to sell power to the BC Hydro grid.

4. Climate risk management

What we're experiencing and how we're adapting

The climate in British Columbia is changing. Weather events are becoming more extreme, more frequent, and are having real impacts on our assets, customers, operations, capital planning and challenging our ability to provide reliable power. In 2023, the province of B.C. experienced the most destructive wildfire season on record, one of the worst storms, and sustained severe drought.

Our approach of balancing reliability, risk, and affordability includes adapting our business practices and modifying our electricity infrastructure to address climate and weather-related risks. Where appropriate, we have assessed the impacts and adapted our planning, design, operational practices and emergency preparedness planning to consider both the observed and potential impacts of climate change. Some examples of how we're adapting to key climate-related risks we are experiencing today include:

Unusual weather patterns

Unusual weather patterns related to climate change are expected to continue in the years ahead and we're constantly adapting to these evolving conditions. Our system is designed and operated to perform safely across a wide range of conditions and extreme events, and our employees are highly trained and experienced to adapt quickly to changing conditions. Our report **How BC Hydro is Adapting** identifies some of the ways we've been preparing for climate change impacts and how we are continually adapting our operations, maintenance and investment decisions, including:

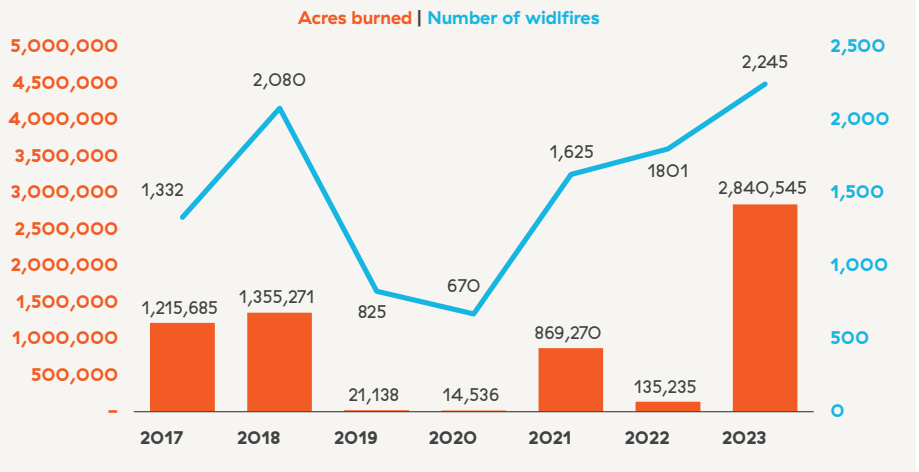
- **Continuously working to improve our weather and inflow forecasting**—for example, all coastal watersheds can now be forecasted down to the hour, which improves the forecast accuracy for extreme events. Our hydrology team, including meteorologists, provide weather and inflow forecasts to our planners to prepare for these situations.
- **Expanding our hydroclimate monitoring technology**—this includes upgrading manual snow survey and climate stations to automated, real-time data and installing alternative water monitoring technologies (e.g., radar water level sensors) to improve resiliency and redundancy during severe events. Recent BC Hydro hydroclimate data is published in near-real time on our website at **Hydrometeorologic Data**, and historic climate data is published in the Pacific Climate Impacts Consortium's Data Portal at **pacificclimate.org/data**.
- **Assessing our system for preparedness**—this includes assessing for extreme weather event preparedness and operation (for both extreme cold and extreme heat).
- **Investing in capital projects**—such as upgrades to spillway gates for improved reliability—that will increase the resiliency of the system to climate change.
- **Updated design standards**—Transmission and Distribution engineering design takes into account a wide variety of operating conditions. For instance, the Canadian Standards Association has revised its design criteria for transmission lines to include high wind and ice loadings to reflect climate change impacts. Wind loadings include setting appropriate right of way clearance widths to avoid contact with trees.
- **Deploying crews early**—this includes sending crews into areas projected to be impacted by extreme weather events ahead of a storm to improve restoration response.

Wildfires

In 2023, wildfires burned more than 2.84 million hectares of forest and land—the most hectares burned in a wildfire season in B.C.'s recorded history. Wildfires have the largest impact on our transmission and distribution assets and crews. To mitigate these impacts, we have:

- **A wildfire risk management program**—that includes monitoring fire risk and adapting our work procedures and equipment to reduce risk of wildfires starting or spreading.
- **A robust vegetation management program**—which includes regularly inspecting vegetation located near our wires and other infrastructure, removing dead or diseased vegetation, and pruning back anything growing too closely to our equipment.
- **Pole protection practices**—in some high-risk areas, we use steel or fiber-reinforced polymer (FRP) steel, or treat wooden poles with fire retardant. Read more in our **fiscal 2024 Environment, Social and Governance Report** about fire retardant and trialing an innovative pole wrap to reduce the impact on wooden poles.
- **Wildfire risk modelling**—to identify locations on our system that are most at risk from wildfires, and are used to assist with identifying and prioritizing asset management activities.
- **Our Wildfire Danger Class rating mobile application**—to prevent causing fires through our own activities, our crews use this app to determine whether it is safe to proceed with maintenance work (which may involve welding, using a power saw, or other high-risk activities) during wildfire season, and take appropriate mitigative measures to manage risk when performing work.
- **Remote sensing technologies (e.g., LiDAR and satellite imagery)**—to assess risks to the powerlines such as declining health of trees adjacent to powerlines using hyperspectral imaging, drought stress, etc. which can increase risk of wildfires.

Figure 4—B.C. Wildfires



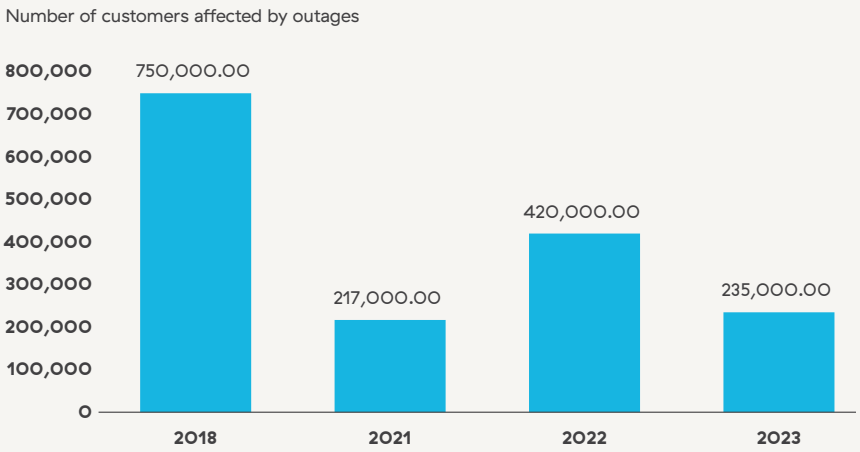
Storms

In B.C., storm season traditionally stretches from November to March; however, recent weather patterns show a trend of storms beginning earlier in the fall and extending later into the spring. We measure the severity of a storm based on damage to our system and the number of customer outages. We have experienced our worst storms in the last five years (read about the 2021 atmospheric river event in our **Fiscal Year 2023 ESG Report**). Wind and falling branches or trees impact our transmission and distribution assets, causing up to half of all power outages in our system each year.

BC Hydro prepares year-round for storm season and works to improve power outage response times by using:

- **Our improved meteorological models**—we improved our weather forecasting by incorporating weather models from the European Centre for Medium-Range Weather Forecasts (ECMWF) to the suite of North American weather models already in use. The ECMWF is more accurate at providing more advanced notice of significant weather events. The combination of the full suite of weather models provides a probabilistic ensemble forecast of the full range of possible weather scenarios for a specific event. Together, these models provide greater insight into storm intensity and also where and when a storm might hit so we can ensure crews are ready to respond quickly.
- **Our vegetation management practices**—we spend more than $75–100 million annually identifying and removing trees and vegetation that could pose a problem during storm season. This also supports wildfire mitigation.
- **Our smart meter technology**—we use smart meters to confirm all restoration is complete before our crews leave an area.
- **Our customer notification processes**—we work to make improvements to our customer notification processes including more accurate estimated restoration times and muti-platform technologies.

Figure 5—BC Hydro's worst storms

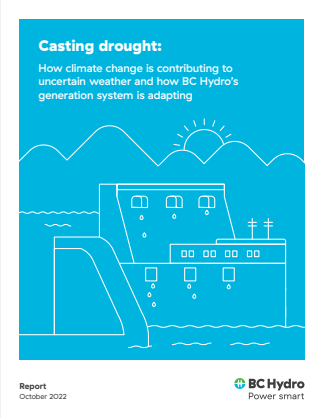


Recent History: Most of BC Hydro's worst storms happened in the past five years

Drought

British Columbia has been experiencing a severe drought that has impacted communities and posed additional risks to ecosystems across the province, as well as our reservoirs. The greatest impacts of drought are reduction in our ability to generate power, and risks to fish and wildlife that depend on water levels and flows. Reduced water levels and flows can pose a threat to fish and habitat; however, there are also instances where we are able to carefully plan our reservoir management operations to maintain flows that allow fish to survive thus helping to mitigate the potential negative impacts of drought. Drought and low water levels result in greater exposure of reservoir shoreline and beaches which may result in increased dust emissions and community concerns. We fund an annual dust management program on Williston reservoir; and, this year in February and March 2023, we undertook a sizable operation on the Arrow Lakes Reservoir to remove old material and debris that had been exposed due to the drought and the resulting historic low water levels. In total we removed over 29 tonnes of material from the Arrow Lakes reservoir. As a hydroelectric-based utility, the variability of water conditions and related impacts on our reservoir levels is an expected part of our business. As such, we have the tools in place to manage drought conditions, including:

- **Multi-year storage in our reservoirs and regional diversity in our generating facilities**—this means that when it's dry in one region, we can ramp up operations in another region.
- **Continuous planning and monitoring**—our Generation System Operations team works closely with the Environment and Indigenous Relations teams, external agencies and others to communicate and inform decision making.
- **Contracts for power**—we have more than 120 contracts with independent power producers that provide additional geographic diversity.
- **Our ability to import and export power through the Western Interconnection**—we're part of a network of high-voltage transmission lines that connects B.C. with other utilities in western North America.
- Fish monitoring and mitigation based on risk assessments.
- Establishing drought resilient plants and shrubs at our facilities.



Casting drought (2022)

Improving our risk identification and assessment

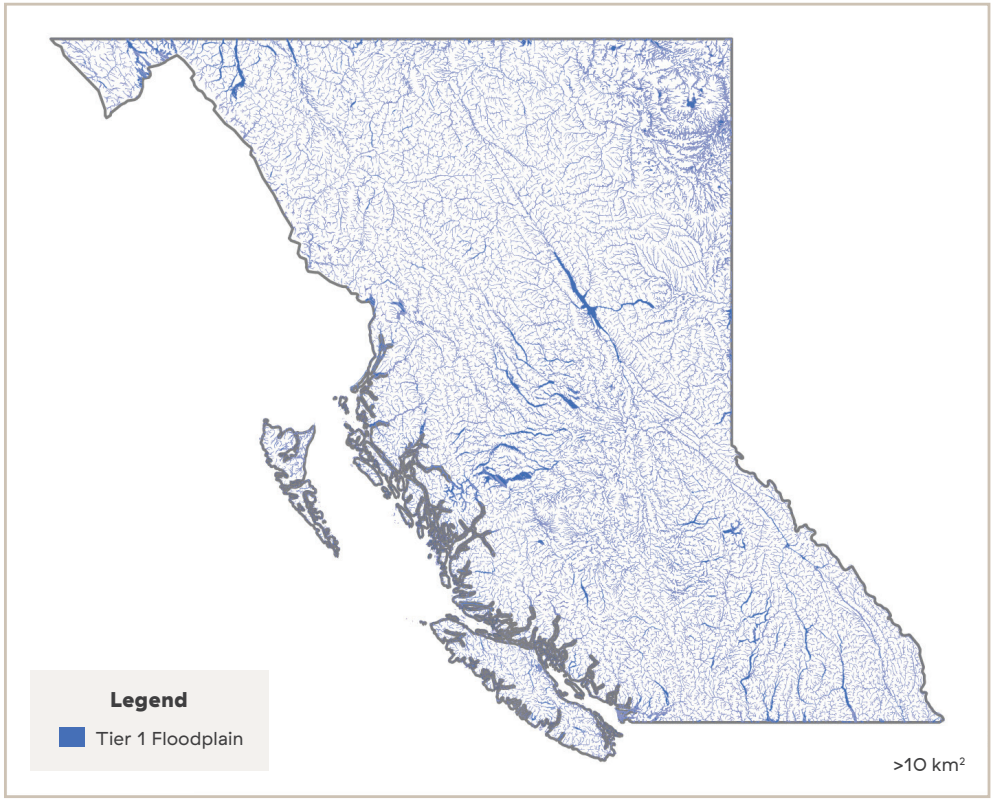
Climate change is considered one of our enterprise-level risks and is identified in our risk profile as a stand-alone item as well as a risk that impacts and exacerbates other risks (e.g., our emergency preparedness, water management). We have embedded the risk assessment and responsibility for implementing required actions within existing roles at BC Hydro, drawing on external expertise where we have gaps. Recognizing adaptation as a continuous and evolving need, we're working to integrate it into existing business processes and asset and resource planning disciplines. Refer to our **How BC Hydro is Adapting** report for more details on the adaptation strategy framework used to identify climate change risks and adaptation actions.

Given the complexity and interrelatedness of climate-related risks, we're refining our identification, assessment, and mitigation processes to engage more individuals across the company, integrating learnings from the extreme weather events we've experienced in the past few years, and incorporating insights from new climate models. In 2024, teams across the company are taking part in a more detailed climate risk assessment that will be summarized in a future report.

Collaboration

Climate science and modelling is complex. In order to make informed decisions and obtain access to high-quality climate information, we fund climate-related research. One of our most important climate partnerships is with the Pacific Climate Impacts Consortium (PCIC), a non-profit research organization housed at the University of Victoria, which conducts independent, peer-reviewed quantitative studies on the impacts of climate change and climate variability in the Pacific and Yukon region. BC Hydro has been a funding partner in the Consortium since 2007 and we renewed our support agreement with PCIC for another four years to continue the development of future projections of climate and hydrology, incorporating the latest climate change science and research. The peer-reviewed science provided through our partnership with the Consortium provides a solid foundation to continue to grow our understanding of how climate change may impact our business in a way that is transparent to regulators, governments, stakeholders, and customers.

In 2023, we engaged with the Provincial Flood Safety team and Ministry of Emergency Management and Climate Readiness to share information. Based on our discussions, we recognized that both the province and BC Hydro could benefit from a good screening level flood map. We commissioned a screening level flood map that was integrated into our Geographic Information System (GIS) to assist planners in identifying areas of flood risk to existing assets and areas to avoid for new assets.



We issued a Request for Information in 2023 to understand the market capabilities to model terrain stability including impacts from sea level rise, riverine movement, and erosional ground loss from extreme precipitation.

We're also a working participant in a successful Natural Resources Canada's Climate Adaptation Call for Proposal led by McMaster University. Canada's National Adaptation Strategy calls for all infrastructure systems in Canada to be "climate-resilient and undergo continuous adaptation to adjust for impacts to deliver reliable, equitable and sustainable services to all of society." Climate projections and methodologies are needed to build adaptation and mitigation into planning and design processes. This project's objective is to facilitate incorporating climate change projection data and analysis into electricity sector planning and design processes and meet the intent of the National Adaptations Strategy.

The study has four sub-objectives, to:

- Understand the opportunities, limits, and gaps of climate projection data to support investments in adaptation.
- Provide clarity and transparency on the reliability, uncertainty, and suitability of climate projection data.
- Complete a gap analysis.
- Provide guidance for decision making under deep uncertainty.

The study is a collaboration between utilities (BC Hydro, Hydro Quebec, Manitoba Hydro, Hydro One, Independent Electricity System Operation (IESO) and Ontario Power Generation), climate science researchers (Ouranos) and academia (McMaster University).

Looking Forward

Unusual weather patterns related to climate change are expected to continue in the years ahead and we're constantly adapting to these evolving conditions. Our system is designed and operated to perform safely across a wide range of conditions and extreme events, and our employees are highly trained and experienced in adapting quickly to changing conditions. A few of our focus areas include:

- Evolving our mitigation practices to reflect the latest observed and predicted conditions.
- Continuing to collaborate with PCIC and other organizations to help us model the wide range of climate variables.
- Continuing to undertake a climate assessment that is collaborative, cross-functional, and iterative.
- Refining our understanding of climate-related risks over the next few years, including through the use of climate scenarios.

5. Electrification

Electrification will help the B.C. switch from fossil fuels and reduce greenhouse gas emissions.

Electrification means using low carbon and renewable electricity instead of fossil fuels such as gasoline, diesel and natural gas. The provincial government has set ambitious targets of reducing greenhouse gas emissions to 40 percent below 2007 levels by 2030, 60 percent below 2007 levels by 2040, and to 80 percent below 2007 levels by 2050. Electrification in all sectors can help us meet these targets.

Launched in 2021, our **Electrification Plan** covers five fiscal years (Fiscal 2022 to 2026) and describes the actions that we are taking to support climate action by encouraging existing customers to switch from fossil fuels, and attract new businesses—mostly those who have their own climate targets and are looking at where their source electricity can be cleaner. We're also looking at ways to make it easier and faster to connect customers to our grid. The Plan allocates $263 million for incentives, studies, and supporting internal resource requirements. More detail on our Electrification Plan can be found at: **Electrification plan (bchydro.com)**

Highlights include:

- **Electric vehicle charging infrastructure:** We are committed to meeting customers' needs with more fast charging stations around the province. We've installed 159 charging ports at 85 sites as of December 2023, representing an increase of 70% in charging ports and 18% in locations since 2021. Our goal is to grow the number of charging ports to 550 in Fiscal 2025 and 800 in Fiscal 2026, which includes both fast charging and Level 2 ports. We are actively expanding our network of public electric vehicle chargers. This expansion will ensure reliable charging stations for people in communities across B.C., along travel corridors, and provide extra support in busy urban areas. Locations and more information about this program can be found at: **Network of public electric vehicle (EV) chargers**.
- **Investment in grid infrastructure:** Our 10-year Capital Plan outlines $36 billion in community and regional infrastructure investments across B.C. from 2024 to 2034. This represents an increase of about 50 percent in investment over our previous capital plans. We continually monitor and upgrade our distribution system to meet our customer's growing needs for electricity. In the past five years, we constructed 35 new distribution feeders and over 30 new feeders are under design or construction. We're implementing measures to address localized capacity constraints including updates to our feeder loading planning criteria in high growth areas, advancing major underground infrastructure projects to service upcoming load growth, implementing feeder level Demand-Side Management, and advancing voltage conversion work to 25 kV in 12 kV areas.
- **Customer connections:** Our 10-year Capital Plan outlines $5 billion in investments to support new customer connections, particularly in high growth areas of B.C. such as the Lower Mainland and Vancouver Island. We're also working to improve customer connections. New customer connection requests have remained high over the past several years due to strong population growth in B.C. On the distribution side we've been implementing process improvements, a review of our extension policy, hiring more people, and looking at different ways to deliver work. On the transmission side, we're advancing planning of new transmission infrastructure in northwest B.C. in partnership with First Nations to address the increased demand for electricity. Electrifying the operations of our current and future industrial customers helps support economic growth in B.C. while avoiding or reducing greenhouse gas emissions and also provides an opportunity to advance reconciliation with Indigenous communities.
- **Electricity rates:** An important part of our plan is to offer electricity rate choices to support the diverse energy needs of our customers, including those who want to switch from using fossil fuels to cleaner energy. In December 2023, the British Columbia Utilities Commission approved our application for an Optional Residential Time-of-Day rate that encourages customers to shift their electricity from on-peak hours to other times of day when system capacity is more available.
- **Customer programs:** We also have 17 active programs and initiatives that we either fund or manage on behalf of the province to help encourage residents, businesses, and industry to switch from fossil fuels to cleaner electricity, locate their business in B.C., and connect to our grid.

6. Energy efficiency

We increased our efforts to support energy efficiency and to help our customers make smart choices in managing their energy consumption.

Our energy efficiency initiatives help customers to reduce their electricity use and/or shift the timing of their electricity consumption. Through these activities, we provide customers with bill saving opportunities, while also helping to offset the need for future energy and capacity resources, lowering the demand on our transmission and distribution infrastructure, and reducing our overall costs.

Energy efficiency has long been an important component of our approach to long-term energy planning and a valuable component of our overall customer offering, helping customers save energy and money for over 30 years. In fiscal 2024, we spent approximately $107 million on demand-side management initiatives, saving over 620 GWh per year—the equivalent of powering approximately 62,000 homes. Energy efficiency is an important component of our **Integrated Resource Plan** and the Province's **CleanBC plan**, and supporting these initiatives continues to be a priority for us. We plan to increase energy efficiency activity further over the coming years.

Some fiscal 2024 highlights include:

- Our Peak Saver program grew to more than 30,000 participating customers. This program challenges customers to shift their electricity consumption out of our peak period, during specific peak events. In addition, there are close to 8,000 devices (thermostats, EV chargers, water heater load controllers) enrolled in our Peak Rewards program where customers opt in to allow us to make small adjustments to their energy use through their connected devices during short-duration peak events.
- Our large commercial & industrial programs provide customers an opportunity to strategically manage their electricity consumption and costs through a suite of integrated offers including training tools, coaching and funding to help implement and sustain energy management activities, as well as financial incentives to implement energy saving capital projects. In fiscal 2024, the programs helped large commercial and industrial customers save over 170 GWh per year of energy.
- Our residential home renovation rebate program, which continues to help customers reduce their home heating costs by improving their home's envelope and upgrading their electric resistance heating to a heat pump, saw over 3,500 participants in fiscal 2024. The program also saw significant growth in the expansion of a qualified contractor list to ensure quality installation of heat pumps, working with industry to grow that list from approximately 400 heat pump installer companies to now over 550.
- In fiscal 2024 we spent over $15 million on our low-income conservation program to help low-income customers save about 5 GWh of electricity, which allows them to save money on their annual electricity bills. The program expanded this year to add an offer for ductless air source heat pumps in manufactured homes in some regions.
- We signed a partnership agreement with the New Relationship Trust to administer energy efficiency incentives to Indigenous Communities in our Non-Integrated Areas through the Community Energy Diesel Reduction (CEDR) program, a partnership with the Province of B.C. This partnership will enable Nation-led implementation of energy efficiency projects that can lower GHG emissions by reducing reliance on diesel-generated electricity.

7. 2023 GHG emissions and offsets summary table

Under the B.C.'s Carbon Neutral Government program, all provincial public sector organizations (PSOs) are required to offset their remaining GHG emissions to achieve carbon neutrality. Table 2 provides a summary of the offsets that need to be retired for emissions originating from our buildings, fleet, and direct paper use.

Table 2—BC Hydro 2023 GHG emissions and offsets summary	
GHG emissions created in calendar year 2023	
Total Emissions (tCO_2e)	31,745
Total $BioCO_2$	774
Total Offsets (tCO_2e)	30,971
Adjustments to offset required GHG emissions reported in prior years	
Total Offsets Adjustment (tCO_2e)	0
Grand total offsets for the 2023 reporting year	
Grand Total Offsets (tCO_2e) to be Retired for 2023 Reporting Year	30,971
Offset Investment ($25 per tCO_2e)	$774,275

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, BC Hydro is responsible for arranging for the retirement of the offsets obligation reported above for the 2023 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to $25 per tonne of offsets retired on its behalf plus GST.

CS-4764

BC Hydro
Power smart