



Natural Resources: Major Projects Planned or Under Construction

2023 to 2033



Natural Resources
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Natural Resources: Major Projects Planned or Under Construction 2023 to 2033



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CONTENTS

- Executive Summary 4**
- National Major Project Trends 5**
- Energy Sector 9**
- Mining Sector12**
- Forest Sector15**
- Clean Technologies18**
- Methodology21**
- Appendix23**
 - National Profile 23
 - Provincial and Territorial Profiles 25

EXECUTIVE SUMMARY

As of May 2023, there are **493 major projects¹ under construction or planned over the next ten years in Canada**, which have a combined potential capital value of \$572B. This is an increase from 2022 in both the overall project count (from 470 projects in 2022) and capital value (+10% from \$520B).

There are 343 **energy projects** in the 2023 inventory with a combined value of \$474B.

- This is an increase of 23 energy projects and **\$47B (+11%)** in total capital value since 2022.
- Approximately two thirds (224 projects) of energy projects are classified as using **clean technology²**, for a total of \$156B in potential investment.

There are 129 **mining projects** with a combined value of \$93.6B.

- This is an increase of 5 mining projects and \$5.3B (+6%) in total capital value since 2022.
- About half (63) of mining projects process or extract some form of critical minerals, worth \$60.9B in potential investment.

There are 21 **forest projects** with a combined value of \$4.6B.

- There are 5 fewer forest projects than in 2022, but the total capital value of active forest projects has increased by \$0.6B.
- Nine forest projects are classified as using **clean technology²**, for a total of \$3.1B in potential investment.

Of all 493 projects, nearly half (233) are classified as using **clean technology²**, for a total of \$159B in potential investment.

- This is an increase of 36 clean technology projects and an increase of \$40.8B (+35%) in total project capital value since 2022.

¹ For a detailed definition and scope of Major Projects, please see the Methodology section.

² See the Clean Technology section for a breakdown of the various sub-technologies.

NATIONAL MAJOR PROJECT TRENDS

The Major Projects Inventory (MPI) is an ongoing ledger where projects enter and exit based on their status. New projects enter the inventory upon announcement and the completion of a pre-feasibility assessment where an initial cost estimate is determined. Projects remain in the inventory throughout the federal and provincial review processes and while they are under construction. Projects are removed from the inventory tally when they are completed and begin production. Projects are also withdrawn from the inventory when they become inactive due to being put on hold, suspended, cancelled, or removed due to ineligibility³. The 2023 iteration of the MPI was updated between April and May 2023, with public information newly available since the 2022 MPI update in April 2022. Please refer to the “Methodology” section for further details.

Between 2022 and 2023, there were more projects added to the inventory than projects removed, leading to an increase in the overall project count.

In summary, between 2022 and 2023:

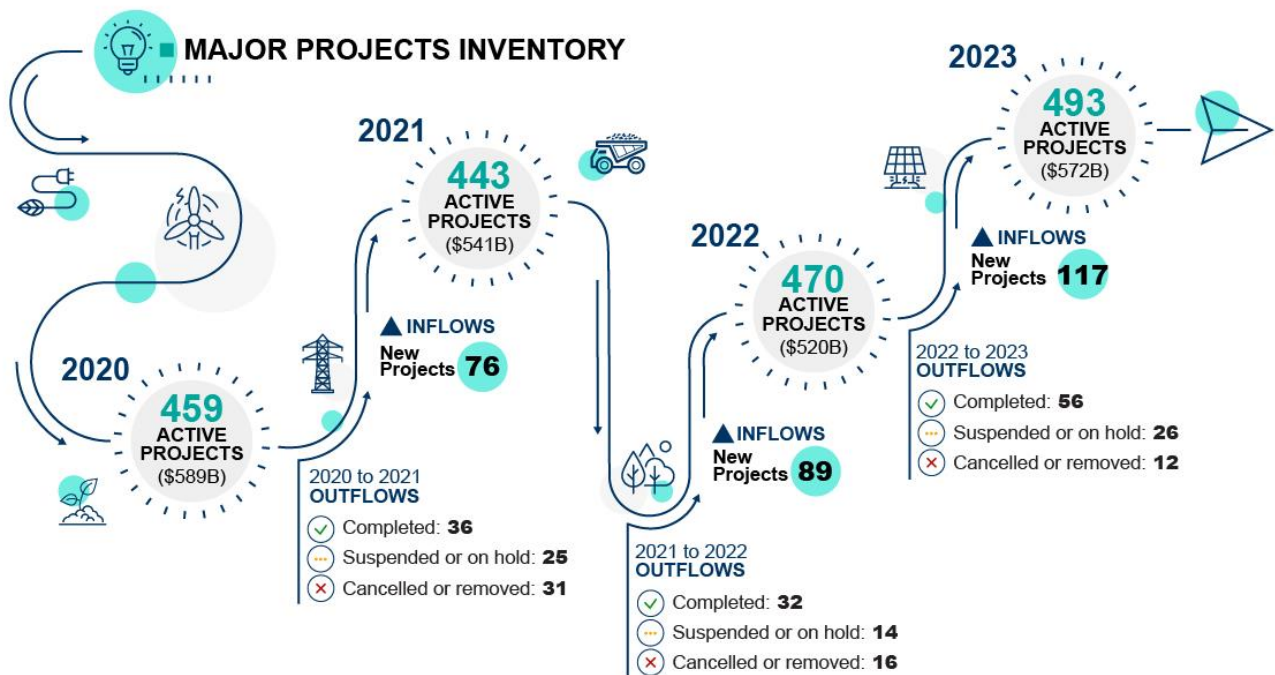
- 117 projects were added to the inventory⁴, representing an increase of \$115B in potential capital investment;
- 56 projects were removed from the inventory because they were completed and began production, representing \$25.9B of actual investment;
- 32 projects were removed from the inventory because they were put on hold, suspended, or cancelled, representing \$73.1B in potential investment; and
- 6 projects representing \$7.0B of investment were removed because updated information put them out of scope³ for this inventory.

Between 2022 and 2023, the total number of major projects in Canada increased by 23 (from 470 to 493), and the total potential value of projects increased by \$52B (from \$520B to \$572B).

³ Projects may be removed from the inventory due to cost revisions falling under the threshold (see cost thresholds in the Methodology section) or other updated information rendering them ineligible for inclusion in the inventory.

⁴ Includes newly announced projects, projects which provided a potential capital value estimate for the first time, and previously inactive projects that were restored to active in the inventory.

Figure 1: Inflow and Outflow of Projects and Value in the Major Projects Inventory, 2021 to 2023



A detailed breakdown of changes between 2022 and 2023 shows that:

- New projects continued to come forward in all sectors. The energy and mining sectors saw more new projects added in 2023, with larger increases in potential capital value relative to projects added in 2022. The forest sector saw fewer new additions in 2023 than in the previous year. Additions to the inventory in 2023 include:
 - **92 new energy projects** valued at \$103B (compared with 61 new projects worth \$45B in 2022)
 - **23 new mining projects** valued at \$11.7B (compared with 20 new projects worth \$10.2B in 2022)
 - **2 new forest projects** valued at \$0.3B (compared with 8 new projects worth \$1.6B in 2022)
 - These figures include **70 new projects** classified as using clean technology valued at \$52.8B added in 2023 (In 2022, 36 clean technology projects added a combined value of \$12.4B).

- More projects were completed, and therefore removed from the inventory, in 2023, compared with completions in 2022. In 2023, 56 projects worth \$25.9B were completed, following the completion of 32 projects worth \$14.9B in 2022.
 - In 2023, these include 47 energy projects valued at \$22.8B, 3 mining projects valued at \$2.8B, and 6 forest projects valued at \$0.2B.
 - These figures include 30 projects worth \$12.4B, classified as using clean technology, which were completed and therefore removed from the inventory in 2023.
- In 2023, more projects became inactive (due to being put on hold, suspended, cancelled, or otherwise removed) than in 2022, but the combined value of outgoing inactive projects was lower. In 2023, 38 projects became inactive and were therefore removed from the inventory, totalling \$80.1B in potential investment, compared with 30 projects worth \$86.5B that became inactive in 2022.
 - 22 energy projects valued at \$69.6B and 15 mining projects valued at \$10.4B were put on hold, cancelled, or suspended over the past year.
 - These figures include 4 projects that became inactive, worth \$0.7B and classified as using clean technology.

Between 2022 and 2023, the total number of active projects (planned or under construction) increased in the energy and mining sectors and declined in the forest sector, while the total potential value of active projects increased in all sectors. Between 2022 and 2023:

- The number of active energy projects increased by 23 (from 320 projects in 2022 to 343 projects in 2023), and the total potential value of these projects increased by \$47B (from \$427B to \$474B).
- The number of active mining projects increased by 5 (from 124 to 129), and the total potential value by \$5.3B (from \$88.3B to \$93.6B).
- The number of active forest projects fell by 5 (from 26 to 21), and the total potential value increased by \$0.6B (from \$4.1B to \$4.6B).
- These figures include an increase of 36 clean technology projects (from 197 to 233), representing an increase of \$41B in investment (from \$118B to \$159B).

The table below summarizes the annual changes in the inventory from 2022 to 2023. The second row highlights revisions to potential investment since the previous update to account for more recent project financials. Next, new projects are added to the existing tally and completed projects are subtracted. This is followed by also subtracting inactive projects to arrive at 2023 totals. Clean technology projects are shown at each calculation step where applicable.

Table 1: Sectoral Changes from 2022 to 2023

	Energy	Mining	Forest	Total
2022 Inventory totals	320 (\$427B)	124 (\$88.3B)	26 (\$4.1B)	470 (\$520B)
Potential capital revisions [Revised total]	+ \$35.6B [\$463B]	+ \$6.8B [\$95.1B]	+ \$0.6B [\$4.7B]	+ \$43.0B [\$563B]
<i>Of which: Clean technology</i>	187 (\$115B)		10 (\$2.7B)	197 (\$118B)
Potential capital revisions [Revised total]	+ \$0.6B [\$116B]		+ \$439M [\$3.1B]	+ \$1.1B [\$119B]
Add:				
New projects	92 (\$103B)	23 (\$11.7B)	2 (\$0.3B)	117 (\$115B)
<i>Of which: Clean technology</i>	69 (\$52.7B)		1 (\$0.04B)	70 (\$52.8B)
Subtract:				
Completed projects	47 (\$22.8B)	3 (\$2.8B)	6 (\$0.2B)	56 (\$25.9B)
<i>Of which: Clean technology</i>	28 (\$12.3B)		2 (\$0.06B)	30 (\$12.4B)
On hold, suspended; cancelled, or removed	22 (\$69.6B)	15 (\$10.4B)	1 (\$0.1B)	38 (\$80.1B)
<i>Of which: Clean technology</i>	4 (\$0.7B)			4 (\$0.7B)
2023 Inventory totals	343 (\$474B)	129 (\$93.6B)	21 (\$4.6B)	493 (\$572B)
<i>Of which: Clean technology</i>	224 (\$156B)		9 (\$3.1B)	233 (\$159B)

ENERGY SECTOR

Transition to net-zero will require major investments in non-emitting electricity generation, transmission, distribution, storage, and grid modernization, in large part to meet demands from increasing electrification in other sectors. In Canada, a series of regulations, policies, deployment programs, collaborative cross-jurisdictional initiatives, and provincial and territorial initiatives influence investment decisions. Recent examples include the coal phase out by 2030, natural gas performance standards, a revenue-neutral carbon tax, net zero 2050 legislation, the upcoming Clean Electricity Regulations, and efforts related to electric vehicle deployment and a net-zero electricity grid by 2035. These are complemented by regional strategies, interties, provincial regulatory environments, market structures and business models, policies such as net-metering arrangements, and fiscal measures like tax credits and equipment rebates.

An important current growing area of investment for Canada is new net-zero petrochemical facilities, including Dow Chemical's proposed \$10B net-zero ethylene and derivatives complex. There is also growing interest in ammonia production as a means to export hydrogen to international markets, as demonstrated by a proposed partnership between Gentari (a Petronas subsidiary), Inter Pipeline, and ITOCHU Corp. to export low-carbon ammonia primarily to Japan. Canada's abundant supply of low-cost and lower emitting petrochemical feedstock (e.g., propane, natural gas) results in lower operational costs and petrochemical products life-cycle emissions, which is Canada's key competitive advantage to other petrochemical producing jurisdictions worldwide. Canada's chemistry industry avoided layoffs or shutdowns during the pandemic in light of continued demand for chemical products and plastics. Russia's invasion of Ukraine has also increased global interest in Canada as a potential future supplier of products, including petrochemicals, to displace reliance on Russian supplies.

Canada's greatest competition for the attraction of new petrochemical investments is the United States, which offers a larger selection of financial incentives to attract projects through the 2022 Inflation Reduction Act. In an effort to level the playing field, Canada announced a suite of investment tax credits in Budget 2023. The impact of these tax measures may be affected by a shorter construction season and limited availability of specialized contractors needed to support the construction of petrochemical facilities, resulting in higher initial capital costs and longer investment return period for investments in Canada as compared to the US. Other factors that have

hindered the competitiveness of Canada’s oil and gas sectors as compared to some global jurisdictions include inflation, federal and provincial policy uncertainty, environmental compliance requirements, and limited pipeline infrastructure.

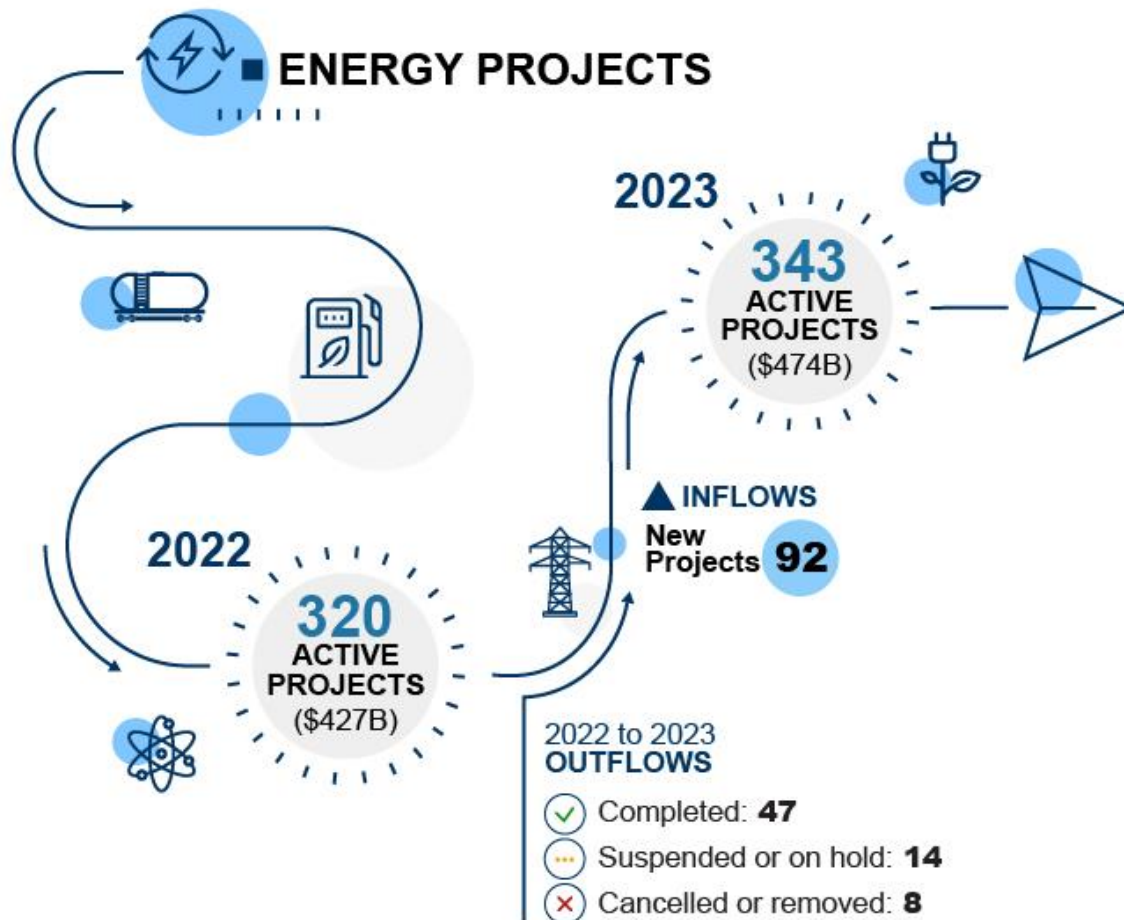
There are 344 energy projects in the 2023 inventory with a combined capital value of \$474B, up from 320 projects worth \$427B in 2022. Energy projects span many sub-sectors, including those in the oil and gas industry (e.g., oil sands, offshore, natural gas, LNG, export terminals, storage facilities, and pipelines) and in electricity generation and transmission (e.g., clean technologies, nuclear, and power lines).

Table 2: Energy Project Trends, 2020 to 2023

	2020	2021	2022	2023
Total Energy Projects	311 (\$503B)	305 (\$450B)	320 (\$427B)	343 (\$474B)
Oil and Gas-related	129 (\$390B)	106 (\$339B)	96 (\$294B)	87 (\$319B)
Electricity Generation and Transmission	169 (\$111B)	176 (\$102B)	179 (\$106B)	182 (\$98.9B)
Other*	13 (\$3.0B)	23 (\$8.9B)	45 (\$26.6B)	74 (\$56.2B)

* “Other” includes biomass/biofuel/geothermal production activities and some of the novel clean technologies listed in Table 5.

Figure 2: Inflow and Outflow of Energy Projects, 2022 to 2023



In terms of potential investment, the inflow of 92 projects in 2023 valued at \$103B was greater than the outflow of 69 projects valued at \$92.4B. The most significant incoming projects in terms of potential value included Phase 2 of LNG Canada’s export facility in Kitimat, British Columbia (\$25.0B) and Phase 1 of the Pathways Alliance Carbon Capture and Storage Hub in Alberta (\$16.5B). The largest outgoing items included the Eagle Spirit Energy Synthetic Crude Pipeline in Prince Rupert, British Columbia (\$18.0B) and the Bay du Nord Offshore Oil Project offshore Newfoundland and Labrador (\$16.0B) which were put on hold since the 2022 inventory update.

Cost increases in everything from materials to labour impact major project construction costs across the board. The three largest upward revisions to potential investment included Phase 1 of LNG Canada export facility in Kitimat, British Columbia (revised from \$36.0B to \$47.9B), the Trans Mountain Pipeline Expansion (from \$21.4B to \$30.9B), and the TC Energy Coastal Gaslink Project (from \$6.2B to \$14.5B).

MINING SECTOR

Metal prices are likely to rise in the next decade due to growing populations, expanding incomes and consumption in developing economies, and increasing demand for clean technology materials. In the near term, metal markets will also continue to adjust to the disruptions caused by Russia's invasion of Ukraine.

The energy transition or decarbonization will be the key driver of long-term metal demand and prices. Zero-emission vehicles will be the main driver of demand for the three critical cathode battery metals (lithium, cobalt, and nickel), as well as anode materials (graphite and rare earth elements). Global battery markets have entered a period of extremely rapid growth. Canada, the US, and Europe are moving ahead with ambitious long-term plans to develop domestic critical minerals supply chains to seize economic opportunities, responsibly source battery materials, and mitigate risks associated with the geographical concentration of supply of some materials.

Canada is a leading global producer of gold and is anticipated to remain the world's fifth-largest producer. Gold prices rallied in 2022 due to rising inflation in advanced economies and strong safe-haven demand (following the Russian invasion of Ukraine). However, gold prices are expected to fall in 2023-24 due to pressure from high interest rates, as the opportunity cost of holding gold increases. From 2025 onwards, gold prices are projected to stabilize due to a structural shift in official sector purchasing by emerging market central banks.

In terms of non-metallic minerals, Canada is the leading global producer of potash. Global potash production is geographically concentrated in Canada, Belarus, and Russia and markets were heavily disrupted following Russia's invasion of Ukraine. Following an initial rally, potash prices have since receded in the first half of 2023 due to ample supply. For the rest of this decade, global potash capacity is expected to continue to exceed supply.

There are 129 mining-related projects (e.g., mine constructions, redevelopments, expansions, and processing facilities) in the 2023 inventory, representing \$93.6B in potential investment. Metal mines (e.g., gold, copper, nickel, zinc) account for just over three quarters of the value of major mining-related projects. Non-metal mines (e.g., potash, diamonds) and coal mines account for most of the remainder.

Table 3: Mining Project Trends, 2020 to 2023

	2020	2021	2022	2023
Total Mining Projects	120 (\$82B)	119 (\$89B)	124 (\$88B)	129 (\$94B)
Metals	82 (\$54.9B)	80 (\$54.9B)	91 (\$65.6B)	99 (\$73.6B)
Non-Metals	15 (\$16.4B)	15 (\$17.9B)	12 (\$13.8B)	13 (\$11.7B)
Coal	16 (\$8.2B)	16 (\$12.8B)	15 (\$6.2B)	12 (\$6.5B)
Other (processing, smelters, etc.)	7 (\$2.8B)	8 (\$3.3B)	6 (\$2.6B)	5 (\$1.8B)

Figure 3: Inflow and Outflow of Mining Projects, 2022 to 2023



An inflow of 23 projects valued at \$11.7B largely offset the outflow of 18 projects worth \$13.2B, leading to an increase of 5 projects which, combined with upward revisions to the value of existing projects, brought the overall capital value to \$93.6B. The highest valued projects include the Kerr-Sulphurets-Mitchell (KSM) project in British Columbia (\$8.2B) and the Jansen Potash project in Saskatchewan (\$7.5B).

Projects in British Columbia accounted for the largest share of the combined value of mining projects across the country at nearly one third (30%), followed by Quebec (23%), Ontario (18%), and Saskatchewan (13%). The remainder is distributed across all provinces and territories, with the exception of Prince Edward Island.

FOREST SECTOR

Investment decisions in Canada's forest sector are heavily impacted by the current and forecasted state of the sustainable wood supply and evolving regulations and policies amidst shifting governmental priorities. Canada's forest laws are among the strictest in the world and vary by province, so investment decisions consider how these policies affect the industry's access to wood fibre. As Canada continues to adapt to climate change and more frequent natural disturbances, and to prioritize the protection of old-growth forests and species at risk, investors are assessing the regulatory burdens required to access timber.

Investors also consider the fluctuating prices of forest products, several of which have been subject to significant volatility in recent times. After experiencing near-record high lumber prices in the first half of 2022 which led to robust profits, lumber producers have since encountered several challenges. Declining demand, as well as subsequently lower lumber prices coupled with inflationary cost pressures and higher interest rates, have adversely affected overall production and investments. Moreover, as the leading global supplier of northern bleached softwood kraft pulp, Canada has taken a significant hit, with prices at or near bottom line for pulp facilities operating and exporting out of British Columbia.

Other factors influencing investment decisions include the availability of skilled workers needed to ensure sector growth. In Canada, the forest industry is grappling with shortages of skilled labour and an aging workforce, as evidenced by the fact that 31% of those employed in the sector are 55 years and older. Looking ahead, widespread wildfires across Canada in the summer of 2023 could have further negative impacts on wood supply and the forest products industry as a whole in several provinces, particularly in Quebec and Western Canada. Long-term fibre supply challenges, high production costs, and unfavourable market conditions have already resulted in a growing number of production curtailments and mill closures across the country.

Despite the challenges faced by Canada's forest sector, the outlook remains optimistic. The sector is driving new economic activity through value-added products and maintaining a focus on innovation within the bioeconomy. The paper subsector has been responding to shifting consumer demand by upgrading machines and facilities and transitioning where possible to alternate grades or products to seize new market opportunities. Moreover, strong market fundamentals and forecasted growth in the

housing segment, as well as continued strength in the repair and remodeling sector support the already strong solid wood products subsector.

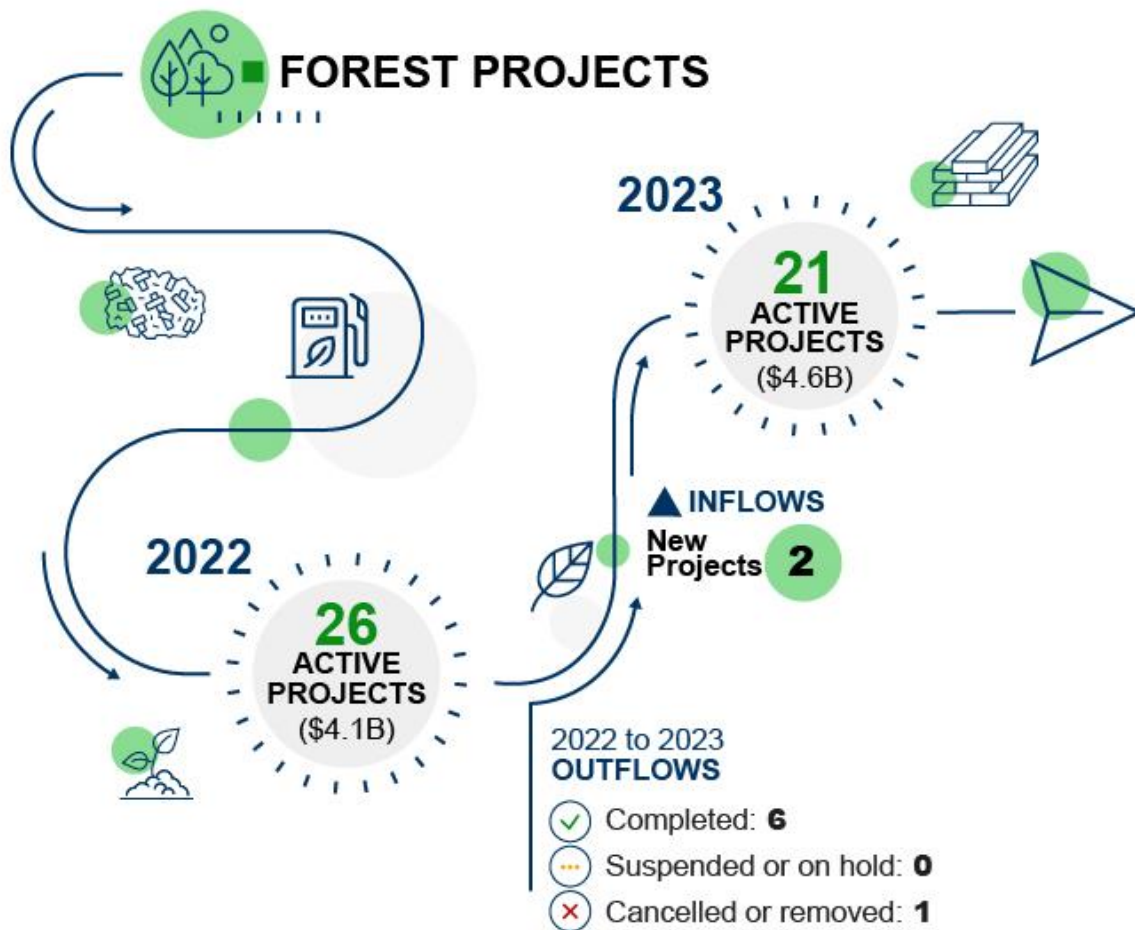
In the 2023 inventory, there are 21 major forest projects across Canada, representing \$4.6B in potential investment.

Table 4: Forest Project Trends, 2020 to 2023

	2020	2021	2022	2023
Total Forest Projects	28 (\$2.7B)	19 (\$2.5B)	26 (\$4.1B)	21 (\$4.6B)

Some of the larger projects include the Vision La Tuque biorefinery plant in Quebec (\$1.2B), a biofuel facility under construction in Varennes, Quebec (\$1.1 B), and a pulp mill and new biomass power generation plant in Saskatchewan (\$0.55B).

Figure 4: Inflow and Outflow of Forest Projects, 2022 to 2023



Since last year's update, the number of forest projects declined by 5, but the combined capital value of all active forest projects increased by \$0.6B.

In the 2023 inventory, 2 new forest projects were added, totalling \$0.3B in potential capital investment. The largest project was a new mill modernization project in Val d'Or, Quebec (\$250M). Seven projects were removed from the inventory this year, of which 6 had been completed and gone into production.

Six projects in Quebec account for nearly two thirds (65%) of the combined value of active forest projects in Canada. The remainder of the value is spread across Saskatchewan (21%), British Columbia (6%), Ontario (5%), New Brunswick (2%), Northwest Territories, and Newfoundland and Labrador.

CLEAN TECHNOLOGIES

Clean power and low-carbon fuels are crucial for Canada to meet climate goals. The majority of electricity generation in Canada comes from non-greenhouse gas emitting sources and Canada is a world leader in hydroelectricity, nuclear power, and hydrogen. Wind and solar photovoltaic energy are the fastest growing sources of electricity in Canada, while biofuels and electric vehicles also play an important role in reducing the climate impact of transportation in the country.

The growth of the clean technology market presents opportunities for Canada, as well as global competition to attract investments, notably the US Inflation Reduction Act and the EU Green Deal. Canada is responding through measures such as Investment Tax Credits and continues to advance opportunities for collaboration in clean technology and innovation, thus seizing the generational opportunities afforded by the ongoing transition to low-carbon economies both here and abroad.

Clean technology projects included in the Major Projects Inventory are largely renewable electricity projects (e.g., hydro, wind, solar, biomass, tidal, geothermal) and non-emitting energy projects such as nuclear, biofuels, and carbon capture and storage. These projects are subsets of the energy and forest sector totals, shown in Table 1.

Larger projects include the Pathways Alliance Carbon Capture Storage Hub Phase 1 project in Alberta (\$16.5B), Peace River Site C Hydro project in British Columbia (\$16B), two nuclear refurbishment projects in Ontario (\$13B and \$12.8B), and the Dow Net-Zero Polyethylene and Ethylene Derivatives Facility in Alberta (\$10B).

Table 5: Clean Technology Project Trends, 2020 to 2023

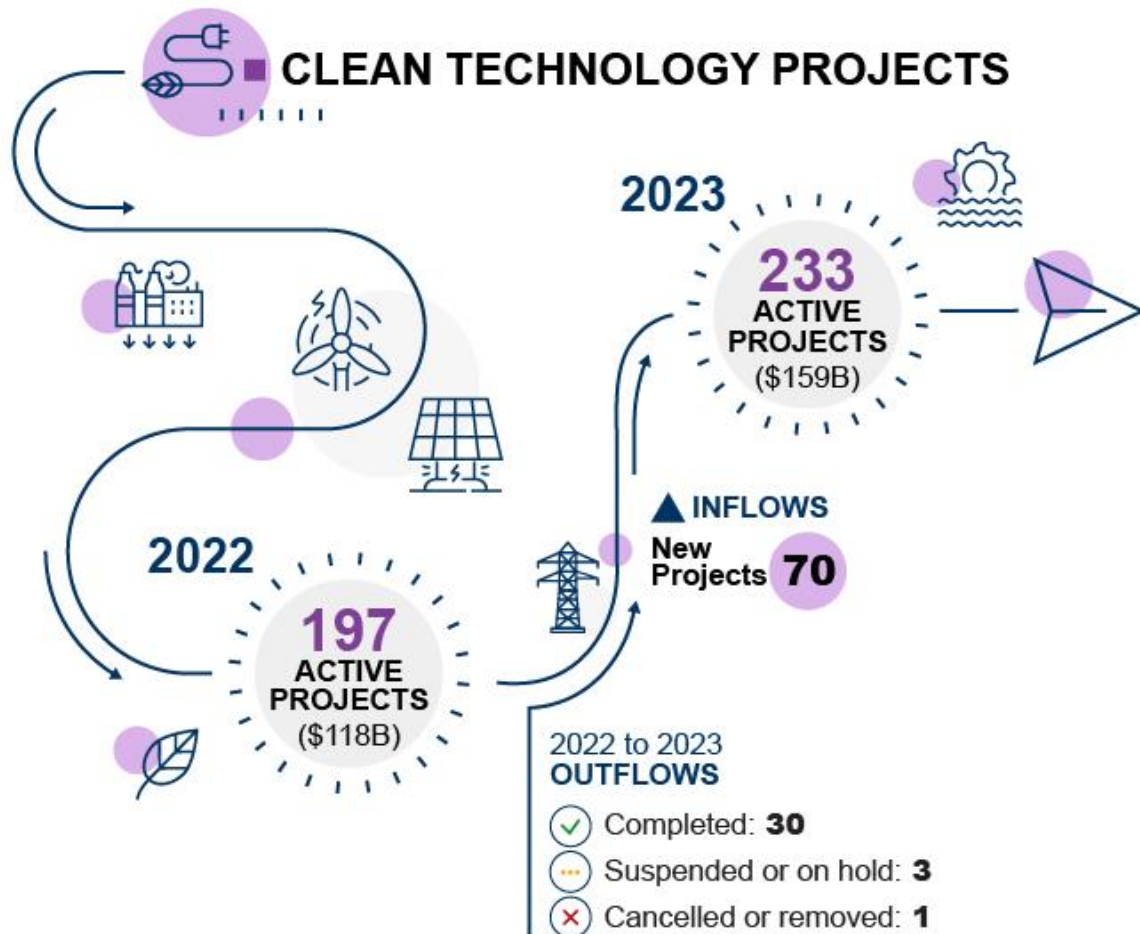
	2020	2021	2022	2023
Total Clean Technology	159 (\$99.4B)	178 (\$104B)	197 (\$118B)	233 (\$159B)
Hydro	61 (\$52B)	58 (\$39.2B)	63 (\$44.8B)	78 (\$38.9B)
Wind	36 (\$8.3B)	41 (\$14.6B)	35 (\$13.4B)	31 (\$12.3B)
Biomass/Biofuels	29 (\$4.6B)	31 (\$8B)	35 (\$9.4B)	42 (\$13.8B)
Solar	13 (\$1.4B)	22 (\$2.2B)	30 (\$3B)	31 (\$6.2B)
Nuclear	3 (\$26.1B)	4 (\$27.4B)	3 (\$26.1B)	2 (\$25.8B)
Carbon Capture and Storage	1 (\$6B)	2 (\$11.3B)	6 (\$15.5B)	9 (\$38.3B)
Geothermal	3 (\$0.3B)	5 (\$0.4B)	4 (\$0.4B)	4 (\$0.4B)
Tidal	6 (\$0.3B)	6 (\$0.3B)	7 (\$0.4B)	7 (\$0.4B)
Multiple		1 (\$0.03B)	1 (\$0.03B)	1 (\$0.03B)
Other ¹	7 (\$0.4B)	8 (\$0.5B)	13 (\$5.3B)	28 (\$22.6B)

¹ “Other” includes initiatives such as hydrogen projects and battery storage projects.

In the 2023 MPI, there are 233 energy and forest projects that are classified as clean technology projects, representing \$159B in potential investment.

- One in three clean technology projects are hydro projects, accounting for one quarter of the potential capital value of clean technology projects (78 projects valued at \$38.9B).
- The remaining clean technology projects are primarily biomass/biofuel projects (42 projects valued at \$13.8B), wind projects (31 projects valued at \$12.3B), solar projects (31 projects valued at \$6.2B), and 28 projects classified in the inventory as “other” worth \$22.6B (e.g., hydrogen projects and battery storage projects).

Figure 5: Inflow and Outflow of Clean Technology Projects, 2022 to 2023



Project counts and potential capital costs for clean technology projects both increased between 2022 and 2023.

Seventy projects valued at \$52.8B in potential investment were added: 22 hydro, 11 solar, 9 biomass/biofuels, 6 wind, 4 carbon capture and storage, and 18 “other.”

In 2023, 30 clean technology projects valued at \$12.4B were completed and therefore removed from the 2023 inventory counts: 9 wind, 9 solar, 5 hydro, 2 biomass/biofuels, 1 carbon capture and storage, 1 nuclear, and 3 “other.”

Four other clean technology projects worth a combined \$0.7B became inactive in 2023 and were removed from the inventory: 2 hydro, 1 solar, and 1 wind.

METHODOLOGY

The Major Projects Inventory captures information on major natural resource projects in Canada that are either currently under construction or planned in the next 10 years. The inventory includes projects that increase, extend, or improve natural resource production (e.g., new extraction and infrastructure projects, major processing facilities, and large expansion projects). Spending on exploration and general-purpose infrastructure projects (e.g., multi-purpose highways) is excluded.

To be included in the inventory, projects must meet minimum capital thresholds:

- \$50 million for projects in energy and mining;
- \$20 million for electricity and forest sector projects; and
- \$10 million for clean energy and clean technology projects.

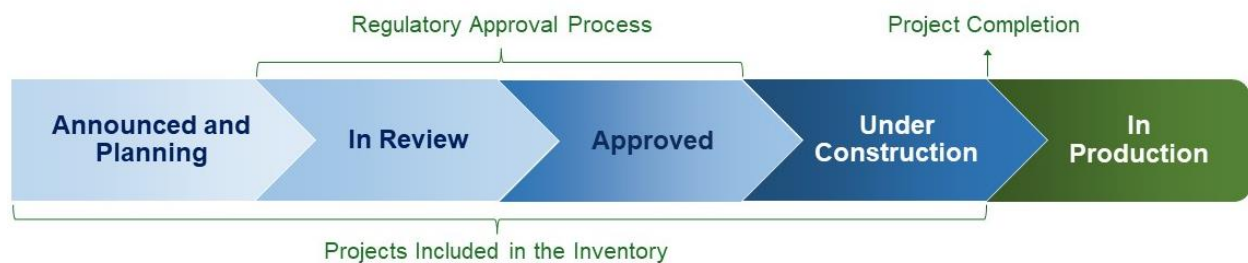
Projects with capital estimates below the thresholds, while recognized as important contributions to overall investment, are excluded due to limited data availability. A variety of data sources are used to update the inventory, including databases maintained by Natural Resources Canada and other federal, provincial, and territorial government departments, company releases, and publicly accessible websites. **The inventory is based solely on information that is in the public domain.**

The inventory includes information on the value, timing, and geographic location of projects. Potential capital costs are presented in current dollars. These are estimates of the project's total cost as reported by the project proponent and are not intended to represent the project's actual or yearly spending figures. These capital valuations are validated annually by provincial and territorial counterparts in nominal terms as per project finance reporting. Projects included in the inventory are also categorized according to their stage of development. A project typically progresses through the following stages:

- **Announced and Planning:** planned projects that have been publicly announced but where regulatory approvals have not been submitted;
- **In Review:** planned projects that have submitted applications for regulatory approvals but are still under review;
- **Approved:** planned projects that have received all major regulatory approvals, i.e., the approvals required to start construction but for which construction has not yet begun;

- **Under Construction:** projects for which construction is underway; and
- **Post-Review Planning:** an additional stage to account for projects which have been rejected and returned to a planning phase in order to submit revised documents for further review.

Figure 6: Project Stages Included in the 2023 Major Projects Inventory



Projects are classified as having been added, completed, put on hold, suspended, cancelled, or removed since the previous annual update by the following definitions:

- **Added projects:** new projects that have been announced since the previous update or older projects that have come within the scope for inclusion based on newly available data;
- **Completed projects:** projects that have moved past the construction phase and into the production phase, or have otherwise been completed;
- **On hold projects:** projects which have been temporarily interrupted and are expected to resume progression within a short period of time, typically 2 to 6 months;
- **Suspended projects:** projects (previously planned or under construction) that have been delayed for a long period or officially suspended by the proponents;
- **Cancelled projects:** projects (previously planned or under construction) that have been officially cancelled by the proponents; and
- **Removed projects:** projects that are no longer within the inventory’s scope due to newly available information (e.g., because they no longer meet the minimum capital thresholds).

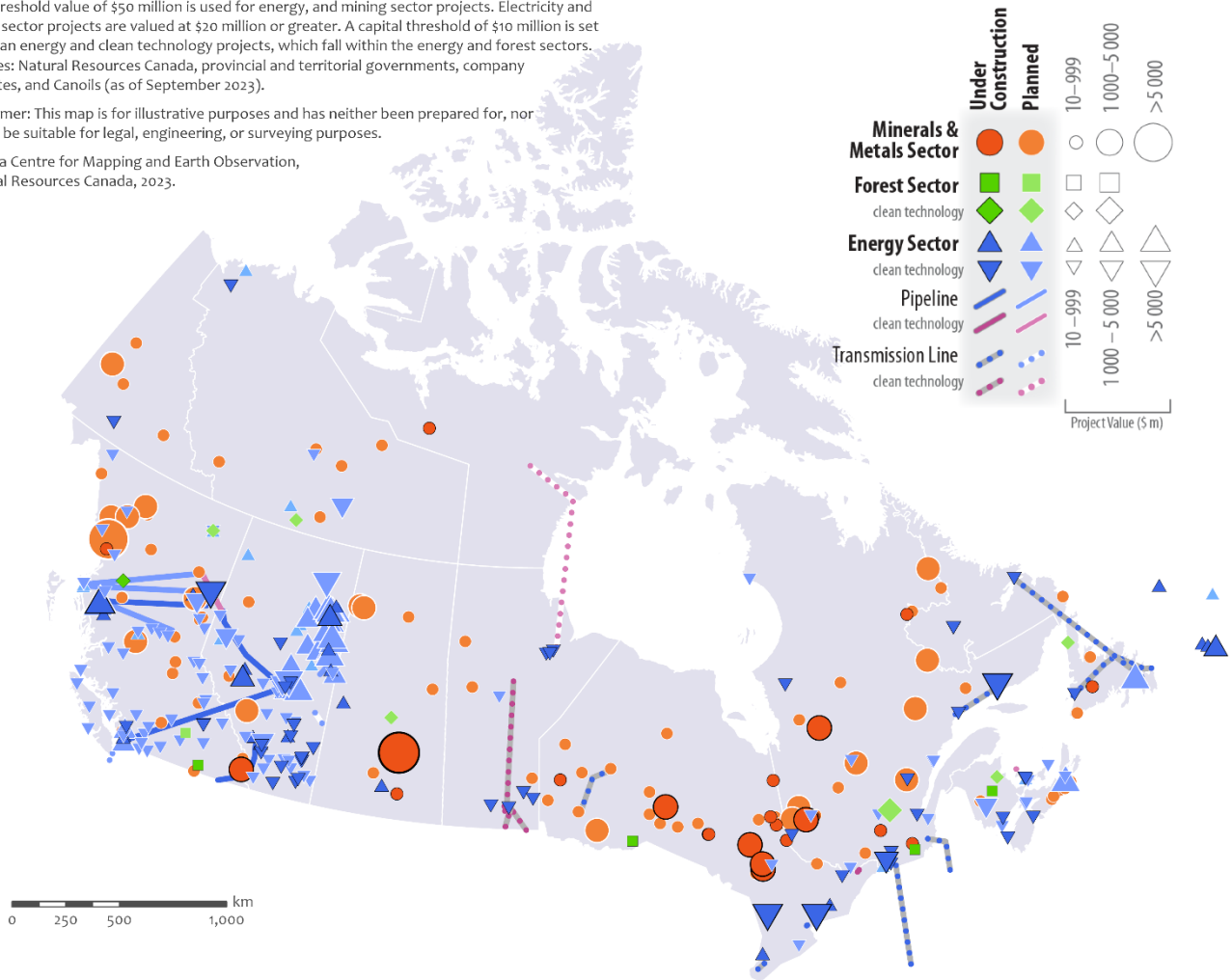
Updates to the 2023 inventory were made between April and May 2023, and reflect public information newly available since the 2022 inventory update in April 2022.

APPENDIX

The threshold value of \$50 million is used for energy, and mining sector projects. Electricity and forest sector projects are valued at \$20 million or greater. A capital threshold of \$10 million is set for clean energy and clean technology projects, which fall within the energy and forest sectors. Sources: Natural Resources Canada, provincial and territorial governments, company websites, and Canoils (as of September 2023).

Disclaimer: This map is for illustrative purposes and has neither been prepared for, nor would be suitable for legal, engineering, or surveying purposes.

Canada Centre for Mapping and Earth Observation, Natural Resources Canada, 2023.



National Profile

- As of May 2023, there are 493 projects currently under construction or planned over the next 10 years, representing \$572B in potential capital investment.
- Energy projects accounted for 83% of the total value of major projects in the inventory, mining projects accounted for 16%, and forest projects for 1%.

Table A1: Inventory Summary by Detailed Project Status, 2023

	Energy	Mining	Forest	Total
2023 Inventory Totals	343 (\$474B)	129 (\$93.6B)	21 (\$4.6B)	494 (\$572B)
Announced and Planning	120 (\$167B)	38 (\$21.1B)	12 (\$2.7B)	170 (\$191B)
In Review	48 (\$48.7B)	40 (\$25.8B)	1 (\$70.0M)	89 (\$74.6B)
Post-Review Planning	1 (\$60.0B)			
Approved	54 (\$77.7B)	26 (\$21.7B)		80 (\$99.5B)
Under Construction	120 (\$180B)	25 (\$25.0B)	8 (\$1.8B)	153 (\$207B)

Table A2: Inventory Summary by Province and Territory, 2023

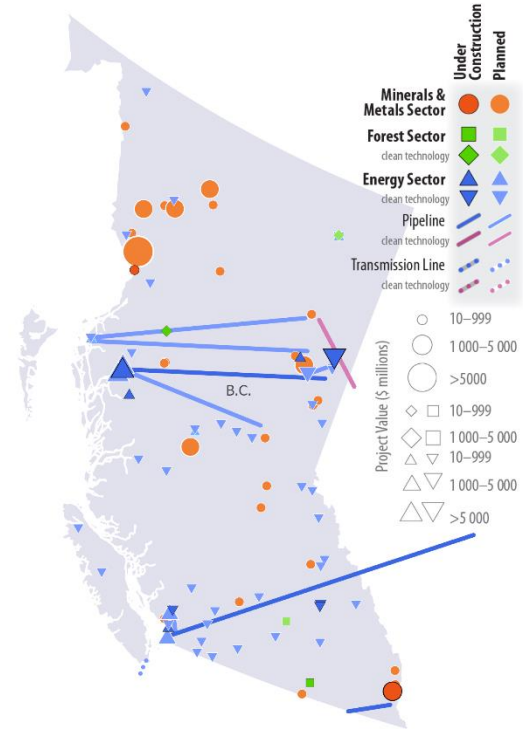
	Energy	Mining	Forest	Total
2023 Inventory Totals	343 (\$474B)	129 (\$93.6B)	21 (\$4.6B)	493 (\$572B)
Newfoundland and Labrador	20 (\$21.9B)	7 (\$2.8B)	1 (\$0.02B)	28 (\$24.7B)
Prince Edward Island	7 (\$0.5B)			7 (\$0.5B)
Nova Scotia	10 (\$8.6B)	5 (\$0.7B)		15 (\$9.3B)
New Brunswick	4 (\$3.6B)	1 (\$0.6B)	2 (\$0.1B)	7 (\$4.3B)
Quebec	29 (\$19.8B)	30 (\$21.6B)	6 (\$3.0B)	65 (\$44.4B)
Ontario	20 (\$34.9B)	30 (\$17.1B)	2 (\$0.2B)	52 (\$52.2B)
Manitoba	27 (\$1.5B)	3 (\$0.6B)		30 (\$2.1B)
Saskatchewan	13 (\$6.5B)	8 (\$12.6B)	3 (\$1.0B)	24 (\$20.0B)
Alberta	114 (\$158B)	4 (\$2.7B)		118 (\$160B)
British Columbia	89 (\$183B)	30 (\$27.9B)	6 (\$0.3B)	125 (\$212B)
Yukon	2 (\$0.06B)	5 (\$4.4B)		7 (\$4.4B)
Northwest Territories	5 (\$2.8B)	5 (\$2.0B)	1 (\$0.02B)	11 (\$4.8B)
Nunavut		1 (\$0.6B)		1 (\$0.6B)
Multi-jurisdictional	3 (\$32.9B)			3 (\$32.9B)

Provincial and Territorial Profiles

Individual profile sheets can be found on pages 25-37. These include annual highlights and maps showing project locations.

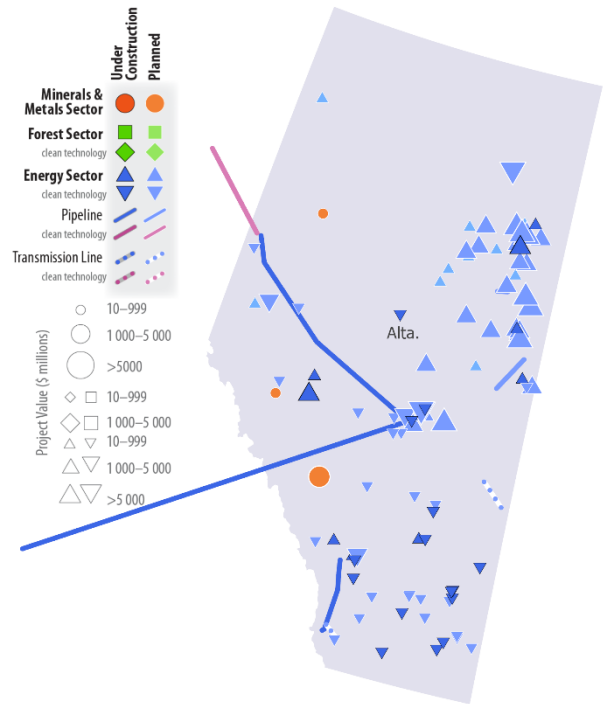
British Columbia

- In 2023, a total of 125 projects are under construction or planned over the next 10 years in British Columbia, representing \$212B and 37% of total national-level investment in the inventory.
- Energy projects are valued at \$183B and account for 87% of the value of potential investments in the province.
- The largest projects include LNG Canada Phase 1 (\$47.9B) and Phase 2 (\$25B), Kitimat Clean Oil Refinery (\$22B), the Peace River Site C Hydroelectric Project (\$16B), and the TC Energy Coastal GasLink Pipeline Project (\$14.5B).
- In 2023, 63 of the 125 projects in British Columbia were clean technology projects valued at \$38B.
- A year earlier, in 2022, the total number of active projects in British Columbia was 125 (\$182B). In summary, between the 2022 and 2023 inventory updates:
 - 20 new projects (17 energy, 3 mining) were added;
 - 9 energy projects were completed and therefore removed from the inventory; and
 - 11 projects (7 energy, 4 mining) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



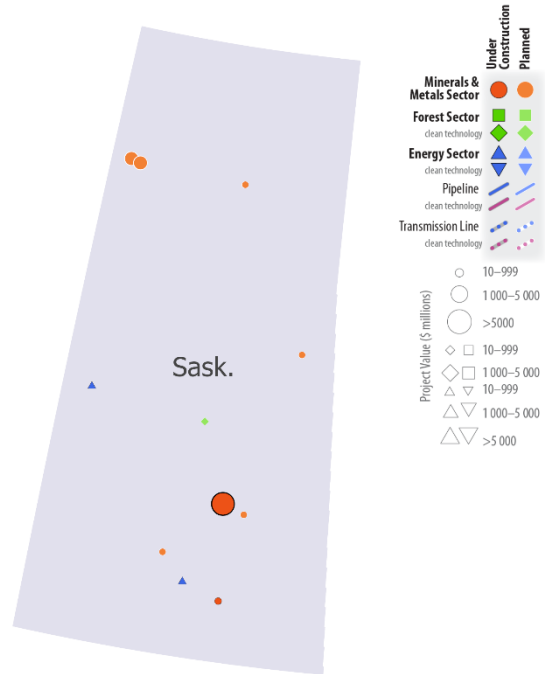
Alberta

- In 2023, a total of 118 projects are under construction or planned over the next 10 years in Alberta, representing \$160B and 28% of total national-level investment in the inventory.
- Energy projects are valued at \$158B and account for 98% of the value of potential investments in the province.
- The largest projects include the Pathways Alliance Carbon Capture Storage Hub Phase 1 (\$16.5B), Athabasca Oil Sands Project at Jackpine (\$12B), and Dow Net-Zero Polyethylene and Ethylene Derivatives Facility (\$10B).
- In 2023, 59 of the 118 projects in Alberta were clean technology projects valued at \$52B.
- A year earlier, in 2022, the total number of active projects in Alberta was 132 (\$152B). In summary, between the 2022 and 2023 inventory updates:
 - 24 new energy projects were added;
 - 29 projects (28 energy, 1 forest) were completed and therefore removed from the inventory; and
 - 9 projects (8 energy, 1 mining) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



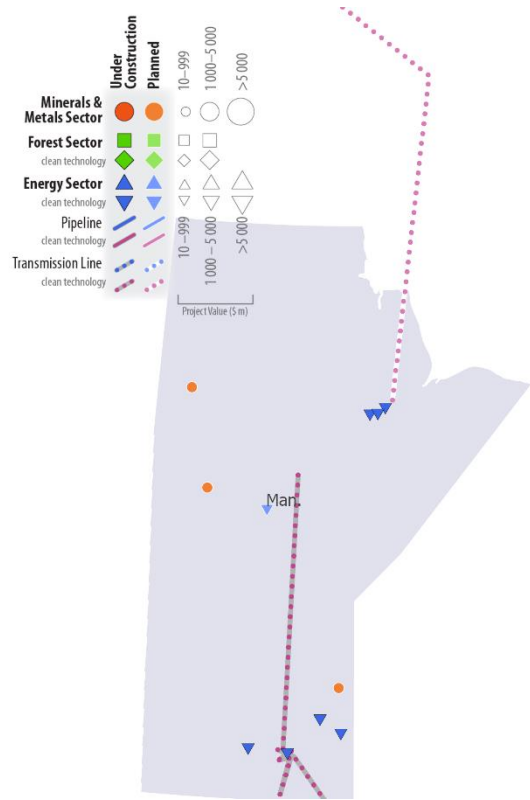
Saskatchewan

- In 2023, a total of 24 projects are under construction or planned over the next 10 years in Saskatchewan, representing \$20.0B and 3.5% of potential investment in the inventory.
- Mining projects are valued at \$12.6B and account for 63% of the value of potential investments in the province.
- The largest projects include the Jansen Potash Project (\$7.5B), FCL Renewable Diesel Plant (\$2B), NexGen Energy Rook I uranium project (\$1.3B), and Aspen Power Station (\$1.3B).
- In 2023, 5 of the 24 projects in Saskatchewan were clean technology projects valued at \$2.8B.
- A year earlier, in 2022, the total number of active projects in Saskatchewan was 23 (\$18.6B). In summary, between the 2022 and 2023 inventory updates:
 - 9 new projects (8 energy, 1 mining) were added;
 - 6 projects (5 energy, 1 mining) were completed and therefore removed from the inventory; and
 - 2 projects (1 energy, 1 mining) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



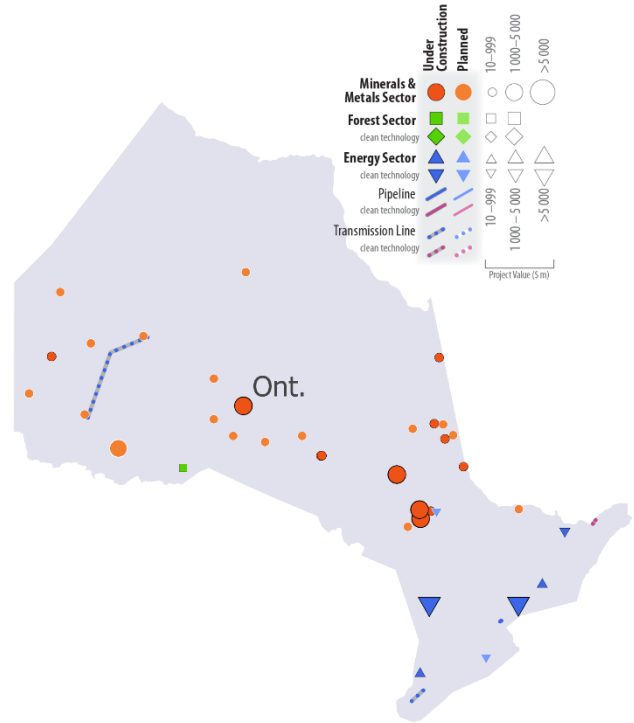
Manitoba

- In 2023, a total of 30 projects are under construction or planned over the next 10 years in Manitoba, representing \$2.1B of investment.
- Energy projects are valued at \$1.5B and account for 70% of the value of potential investments in the province. The remainder consists of mining projects.
- The largest projects include Lynn Lake Mine (\$0.4B) and Pointe du Bois Renewable Energy Project (\$0.4B). Since the 2022 inventory update, the \$8.2B Keeyask Hydro Project was completed.
- In 2023, 27 of the 30 projects in Manitoba were clean technology projects valued at \$1.5B.
- A year earlier, in 2022, the total number of active projects in Manitoba was 20 (\$10.3B). In summary, between the 2022 and 2023 inventory updates:
 - 13 new energy projects were added;
 - 3 projects (2 energy, 1 mining) were completed and therefore removed from the inventory; and
 - no projects were removed due to becoming inactive (on hold, suspended, cancelled or removed).



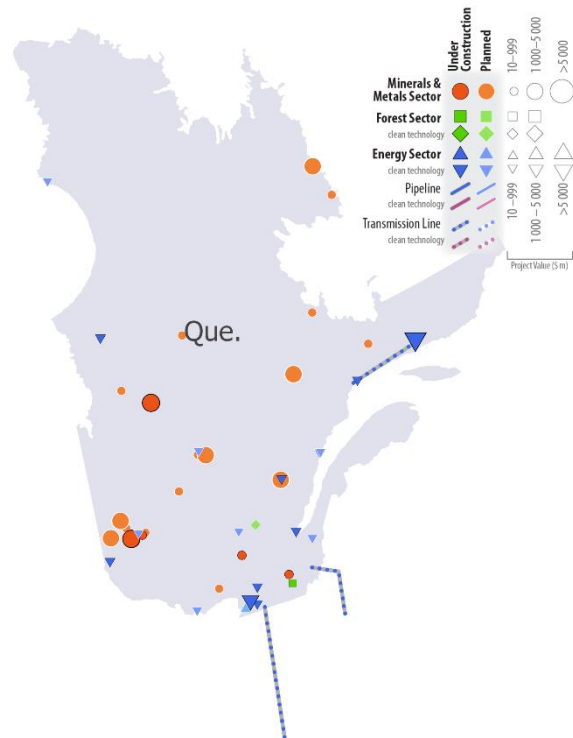
Ontario

- In 2023, a total of 52 projects are under construction or planned over the next 10 years in Ontario, representing \$52.2B and 9% of total investment in the inventory.
- Energy projects are valued at \$34.9B and account for 67% of the value of potential investments in the province.
- The largest projects include the Bruce Nuclear Refurbishment (\$13B), Darlington Nuclear Refurbishment (\$12.8B), and the Ontario Pumped Storage Project (\$4.3B).
- In 2023, 11 of the 52 projects in Ontario were clean technology projects valued at \$31.4B.
- A year earlier, in 2022, the total number of active projects in Ontario was 49 (\$54.7B). In summary, between the 2022 and 2023 inventory updates:
 - 9 new projects (6 energy, 3 mining) were added;
 - 3 energy projects were completed and therefore removed from the inventory; and
 - 3 projects (1 energy, 2 mining) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



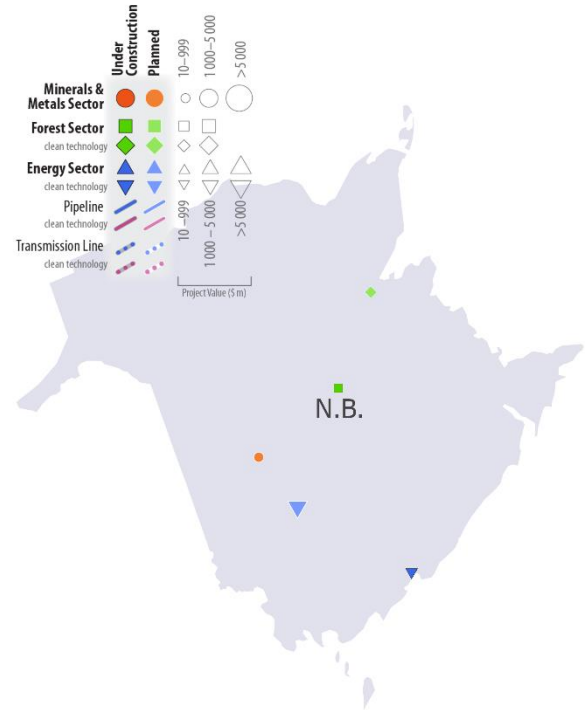
Quebec

- In 2023, a total of 65 projects are under construction or planned over the next 10 years in Quebec, representing \$44.4B and 8% of total investment in the inventory.
- Energy projects are valued at \$19.8B and mining projects are valued at \$21.6B, respectively accounting for 45% and 49% of the value of potential investments in the province.
- The largest projects include the La Romaine Hydroelectric Complex (\$6.5B), Champlain Hudson Power Express Transmission Line (\$2.2B), the Odyssey mine extension project (\$1.7B), and Whabouchi Lithium Project (\$1.7B).
- In 2023, 28 of the 65 projects in Quebec were clean technology projects valued at \$17.6B.
- A year earlier, in 2022, the total number of active projects in Quebec was 57 (\$35.5B). In summary, between the 2022 and 2023 inventory updates:
 - 20 new projects (6 energy, 12 mining, 2 forest) were added;
 - 6 projects (1 mining, 5 forest) were completed and therefore removed from the inventory; and
 - 6 projects (1 energy, 4 mining, 1 forest) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



New Brunswick

- In 2023, a total of 7 projects are under construction or planned over the next 10 years in New Brunswick, representing \$4.3B and 1% of total investment in the inventory.
- Energy projects are valued at \$3.6B and account for 84% of the value of potential investments in the province.
- The largest projects include the Mactaquac Dam upgrades (\$3.3B), Sisson Project (\$0.6B), and a Smart Grids Investments Phase Project (\$0.2B).
- In 2023, 5 of the 7 projects in New Brunswick were clean technology projects valued at \$3.7B.
- A year earlier, in 2022, the total number of active New Brunswick projects was 7 (\$4.3B). Between the 2022 and 2023 inventory updates, no projects were added or removed.



Nova Scotia

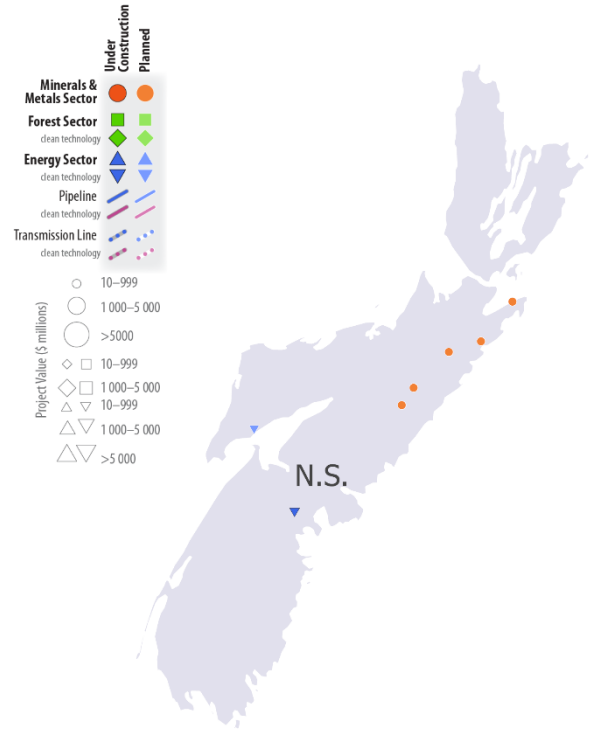
- In 2023, a total of 15 projects are under construction or planned over the next 10 years in Nova Scotia, representing \$9.3B and 2% of total investment in the inventory.

- Energy projects are valued at \$8.6B and account for 92% of the value of potential investments in the province. The remainder is fully made up of mining projects.

- The largest projects include Bear Head Energy (\$8.0B), the Goldboro Gold Mine (\$0.3B), and Goose Harbour Lake Wind Farm (\$0.2B).

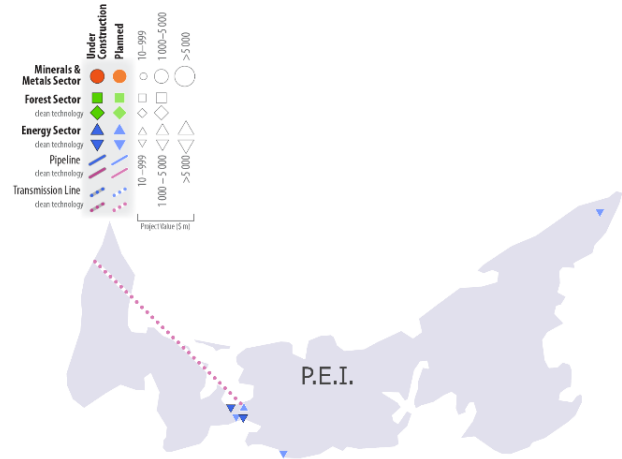
- In 2023, 9 of the 15 projects in Nova Scotia were clean technology projects valued at \$0.6B.

- A year earlier, in 2022, the total number of active projects in Nova Scotia was 12 (\$1.1B). In summary, between the 2022 and 2023 inventory updates:
 - 3 new projects (2 energy, 1 mining) were added; and
 - no projects were removed.



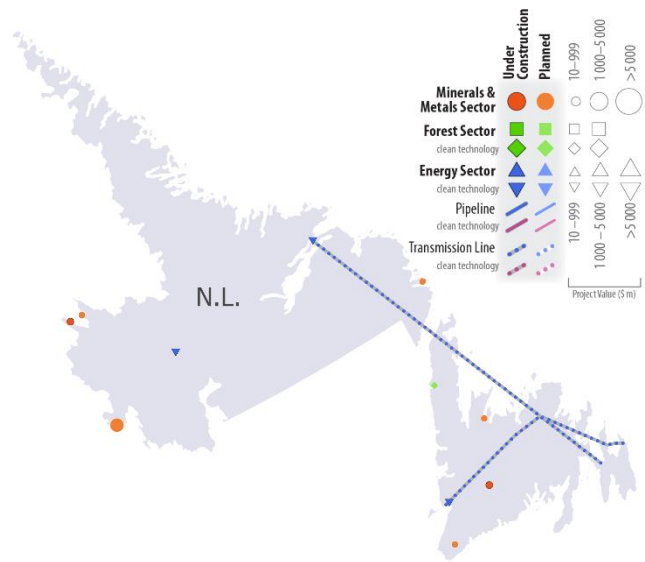
Prince Edward Island

- In 2023, a total of 7 projects are under construction or planned over the next 10 years in Prince Edward Island, representing \$0.5B and 1% of total investment in the inventory.
- Energy projects accounted for the full value of potential investments in the province.
- Projects include the Summerside Solar and Storage Integration Project (\$0.1B), Skinners Pond Transmission Line (\$0.09B), Summerside Solar Farm (\$0.07B), and PEI Energy Corporation Wind Farm #5 (\$0.06B).
- In 2023, 6 of the 7 projects in Prince Edward Island were clean technology projects valued at \$0.4B.
- A year earlier, in 2022, the total number of active projects in Prince Edward Island was 5 (\$0.2B). In summary, between the 2022 and 2023 inventory updates:
 - 2 new energy projects were added; and
 - no projects were removed.



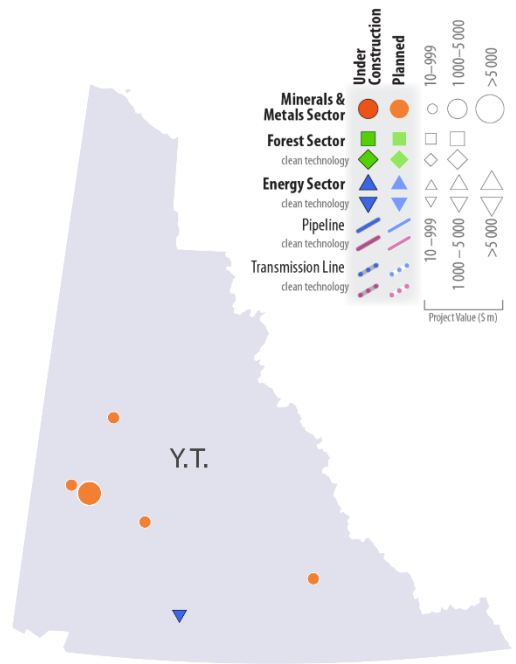
Newfoundland and Labrador

- In 2023, a total of 28 projects are under construction or planned over the next 10 years in Newfoundland and Labrador, representing \$24.7B and 4% of total investment in the inventory.
- Energy projects are valued at \$21.9B and account for 89% of the value of potential investments in the province.
- The largest projects include Grassy Point LNG (\$10.0B), Argentia Renewables (\$5.3B), and the West White Rose oil expansion project (\$3.8B).
- In 2023, 12 of the 28 projects in Newfoundland and Labrador were clean technology projects valued at \$6.3B.
- A year earlier, in 2022, the total number of active projects in Newfoundland and Labrador was 18 (\$23.6B). In summary, between the 2022 and 2023 inventory updates:
 - 14 new projects (13 energy, 1 mining) were added;
 - no projects were removed due to being completed; and
 - 4 projects (3 energy, 1 mining) became inactive (on hold, suspended, cancelled or removed) and were therefore removed.



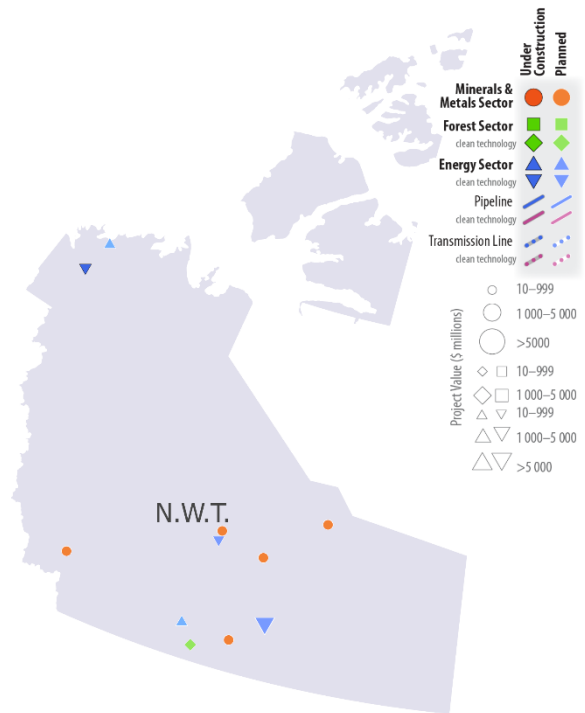
Yukon

- In 2023, a total of 7 projects are under construction or planned over the next 10 years in Yukon, representing \$4.4B and 1% of total investment in the inventory.
- Mining projects are valued at \$4.4B and account for 99% of the value of potential investments in the territory.
- The largest projects include the Casino Mine (\$3.3B), Kudz Ze Kayah Mine (\$0.5B), and the Coffee Gold Mine (\$0.3B).
- In 2023, 2 of the 7 projects in Yukon were clean technology projects valued at \$0.06B.
- A year earlier, in 2022, the total number of active projects in Yukon was 5 (\$4.1B). In summary, between the 2022 and 2023 inventory updates:
 - 2 new mining projects were added; and
 - no projects were removed.



Northwest Territories

- In 2023, a total of 11 projects are under construction or planned over the next 10 years in the Northwest Territories, representing \$4.8B and 1% of total investment in the inventory.
- Energy projects are valued at \$2.8B and mining projects at \$2.0B, accounting respectively for 59% and 41% of the value of potential investments in the territory.
- The largest projects include the Taltson Hydroelectric Expansion Project (>\$1.0B), the Pine Point Mine (\$0.7B), and the NICO Cobalt-Gold-Bismuth Mine (\$0.6B).
- In 2023, 4 of the 11 projects in the Northwest Territories were clean technology projects valued at \$2.6B.
- A year earlier, in 2022, the total number of active projects in Northwest Territories was 10 (\$3.2B). In summary, between the 2022 and 2023 inventory updates:
 - 1 new energy project was added; and
 - no projects were removed.



Nunavut

- In 2023, a total of 1 project, the Back River Gold Project, is under construction in Nunavut, representing \$0.6B in investment in the mining sector.
- A year earlier, in 2022, the total number of active projects in Nunavut was 3 (\$2.5B). In summary, between the 2022 and 2023 inventory updates:
 - no new projects were added;
 - no projects were removed due to being completed; and
 - 2 mining projects became inactive (on hold, suspended, cancelled or removed) and were therefore removed.

