

NATURAL RESOURCES: MAJOR PROJECTS PLANNED OR UNDER CONSTRUCTION – 2020 TO 2030



ENERGY AND MINES MINISTERS' CONFERENCE
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Natural Resources: Major Projects Planned or Under Construction — 2020 to 2030

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INTRODUCTION: THE MAJOR PROJECTS INVENTORY

Canada has one of the largest and most diverse natural resource endowments in the world - one that positions the country favourably to meet global demand for energy, minerals, metals and forest products in a responsible and sustainable manner. Canadians have been successful in translating their resource advantage into an integral pillar of national, provincial and territorial economies.

In 2019, the energy, minerals and metals, and forest sectors directly and indirectly accounted for nearly 16.9 percent of Canada's nominal gross domestic product. In 2018, the sector provided over 1.9 million jobs.

Major natural resource projects are an important source of economic growth and job creation in all regions of Canada. Each year, the Government of Canada collaborates with provinces and territories to update the Major Projects Inventory to help monitor current and planned levels of investment in the energy, mining, and forest sectors.

Updates to the 2020 inventory were made between July and August of 2020 and reflect new public information available on project developments over the 14 months since the last update in May 2019. This report summarizes the updated inventory and examines trends in projects over the past five years.

To complement the public release of the report, project-level information has been shared through [Open Maps](#), a part of [Canada's Open Government](#) portal that provides one-stop access to the Government of Canada's geospatial information.

SCOPE AND 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 resources 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 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 only on information that is in the public domain.*

The inventory includes information on the value, timing and geographic location of projects. Projects included in the inventory are also categorized according to their stage of development. A project typically progresses through the following four stages:

- **Announced:** planned projects that have been publicly announced but where regulatory approvals have not been submitted;

- **Under Review:** planned projects that have submitted applications for regulatory approvals but are still under review;
- **Approval Received:** 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; and
- **Under Construction:** projects for which construction is underway.

Figure 1. Project Stages Included in the 2020 Major Projects Inventory



In order to highlight some of the key trends, the report also identifies projects that have been added, completed, suspended, cancelled, or removed since the previous annual update:

- **Added projects:** projects that have been announced since the previous update or 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;
- **Suspended projects:** projects (planned or under construction) that have been delayed for a long period or officially suspended by the proponents;
- **Cancelled projects:** projects (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).

OVERVIEW OF NATIONAL TRENDS AND ANALYSIS FOR 2020

As of the August 2020 update, there are 459 projects with a combined capital value of \$589 billion under construction or planned over the next ten years. The number of projects suspended or cancelled rose from last year's report. The current inventory also showed a reversal of 2019 trends with a larger number of project completions and fewer brand-new announcements. Of the projects added, over half are projects that had been previously removed, suspended or cancelled.

Notably,

- 105 projects were added, representing a gain of \$47 billion in potential investment;
- 59 projects were completed and began production, representing \$23 billion of actual investment;
- 25 projects were suspended/cancelled, representing a loss of \$64 billion in potential investment; and
- 17 projects representing \$5 billion of investment were removed.

The net effect of these changes is that between 2019 and 2020 the total number of projects increased by 4 (from 455 to 459), and the value of projects decreased by \$46 billion (from \$635 billion to \$589 billion).

Table 1: Total Projects and Changes from 2016 to 2020

Changes from previous year	2016	2017*	2018	2019	2020
Added	85 projects (\$63B)	126 projects (\$58B)	99 projects (\$48B)	117 projects (\$103B)	105 projects (\$47B)
Completed	56 projects (\$25B)	50 projects (\$33B)	80 projects (\$76B)	45 projects (\$25B)	59 projects (\$23B)
Suspended / Cancelled	62 projects (\$78B)	13 projects (\$41B)	37 projects (\$77B)	19 projects (\$33B)	25 projects (\$64B)
Removed	33 projects (\$20B)	13 projects (\$10B)	35 projects (\$15B)	16 projects (\$3B)	17 projects (\$5B)
Total Projects Included¹	421 projects (\$691B)	471 projects (\$684B)	418 projects (\$585B)	455 projects (\$635B)	459 projects (\$589B)

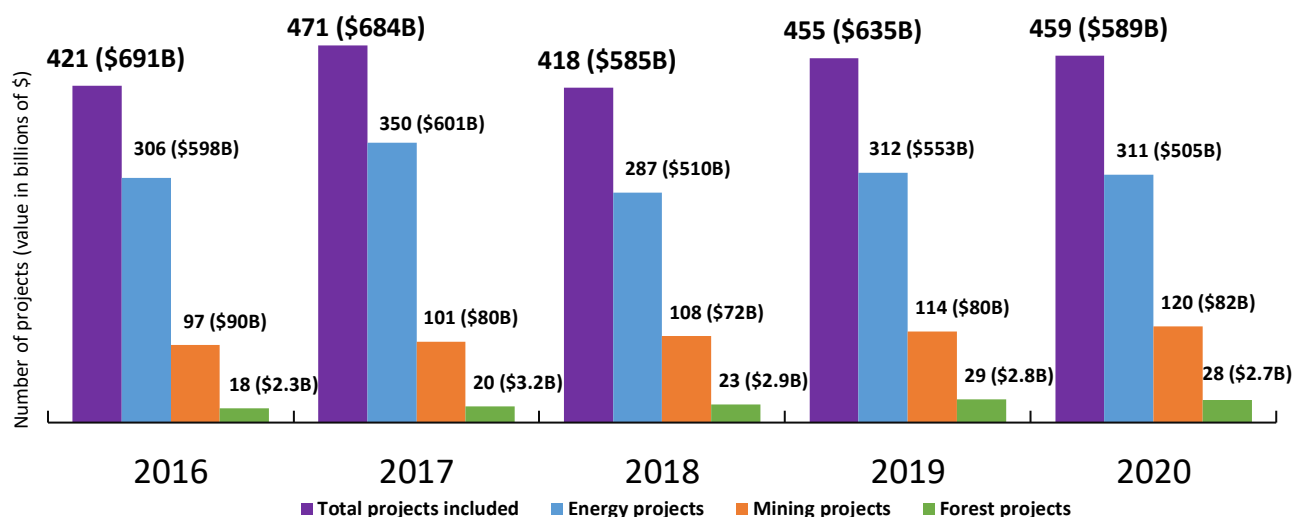
¹Totals may not add due to rounding.

Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

*Due to the \$10 million threshold for clean technology projects introduced in 2017, an extra 23 projects valued at \$347 million were added in 2017.

As shown in Figure 2, the decrease in the value of projects was driven primarily by the energy sector. Meanwhile, projects in the minerals and metals sector grew, and the forest sector remained relatively unchanged this year.

Figure 2. Total Projects Included from 2016 to 2020



A more detailed look at changes since the May 2019 update shows that:

- **Added Projects:** In the energy and forest sectors, the overall number and value of project additions declined, while in mining sector, projects saw gains in both aspects. Since the May 2019 update, 70 energy projects valued at \$33 billion, 30 mining projects valued at \$14 billion, and 5 forest projects valued at \$0.2 billion were added to the inventory.
- **Cancelled or Suspended Projects:** In 2020, project cancellations and suspensions increased, totalling \$64 billion compared to \$33 billion in 2019. . In total, 18 major energy projects with a combined potential capital investment of \$61 billion were cancelled or suspended over the past year.

- **Completed Projects:** This year, 59 projects were completed, up from 45 projects in 2019. Since the last update, 44 energy projects valued at \$18 billion, 10 mining projects valued at \$5 billion, and 5 forest projects valued at \$0.2 billion were completed.

Completed projects are removed from project inventory totals as they have progressed from investment potential into productive assets that benefit Canadians through employment of operational workforces and contributions to government revenues.

Table 2: Changes from 2019 by Sector

	Energy	Mining	Forest
2019 Inventory Totals	312 projects (\$553B)	114 projects (\$80B)	29 projects (\$2.8B)
Added	70 projects (\$33B)	30 projects (\$14B)	5 projects (\$0.2B)
Completed	44 projects (\$17B)	10 projects (\$5B)	5 projects (\$0.2B)
Suspended/Cancelled	18 projects (\$61B)	6 projects (\$3B)	1 project (\$0.1B)
Removed	9 projects (\$2.6B)	8 projects (\$2B)	0 projects (\$0.0B)
2020 Inventory Totals	311 projects (\$505B)	120 projects (\$82B)	28 projects (\$2.7B)

Note: Revisions to cost estimates of existing projects may influence changes in total potential capital investment between years.

New projects continued to come forward in all sectors. In contrast to previous years, the total value of energy projects added to the inventory declined, returning to a pre-2019 trend of two consecutive years of decline from 2017. On the mining front, the number and value of projects added to the inventory from one year to the next has now increased for five consecutive years. In the 2020 update, 30 mining projects with a combined capital worth of \$14 billion were added. In the forest sector, 5 new projects were added, markedly lower than previous year gains (see Table 3).

Table 3: Added Projects by Sector and Year

	Energy	Mining	Forest
2016	73 projects (\$61B)	6 projects (\$1B)	6 projects (\$0.9B)
2017	93 projects (\$52B)	18 projects (\$5B)	15 projects (\$1.9B)
2018	57 projects (\$35B)	31 projects (\$13B)	11 projects (\$0.5B)
2019	83 projects (\$91B)	20 projects (\$10B)	14 projects (\$1.0B)
2020	70 projects (\$30B)	30 projects (\$14B)	5 projects (\$0.2B)

Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Of the 105 projects added in 2020, 37 are classified as Clean Technology (Clean Tech) projects. These projects are captured as a subset of energy and forest projects identified in Table 3.

Table 3a: Added Energy and Forest Projects Classified as Clean Tech by year

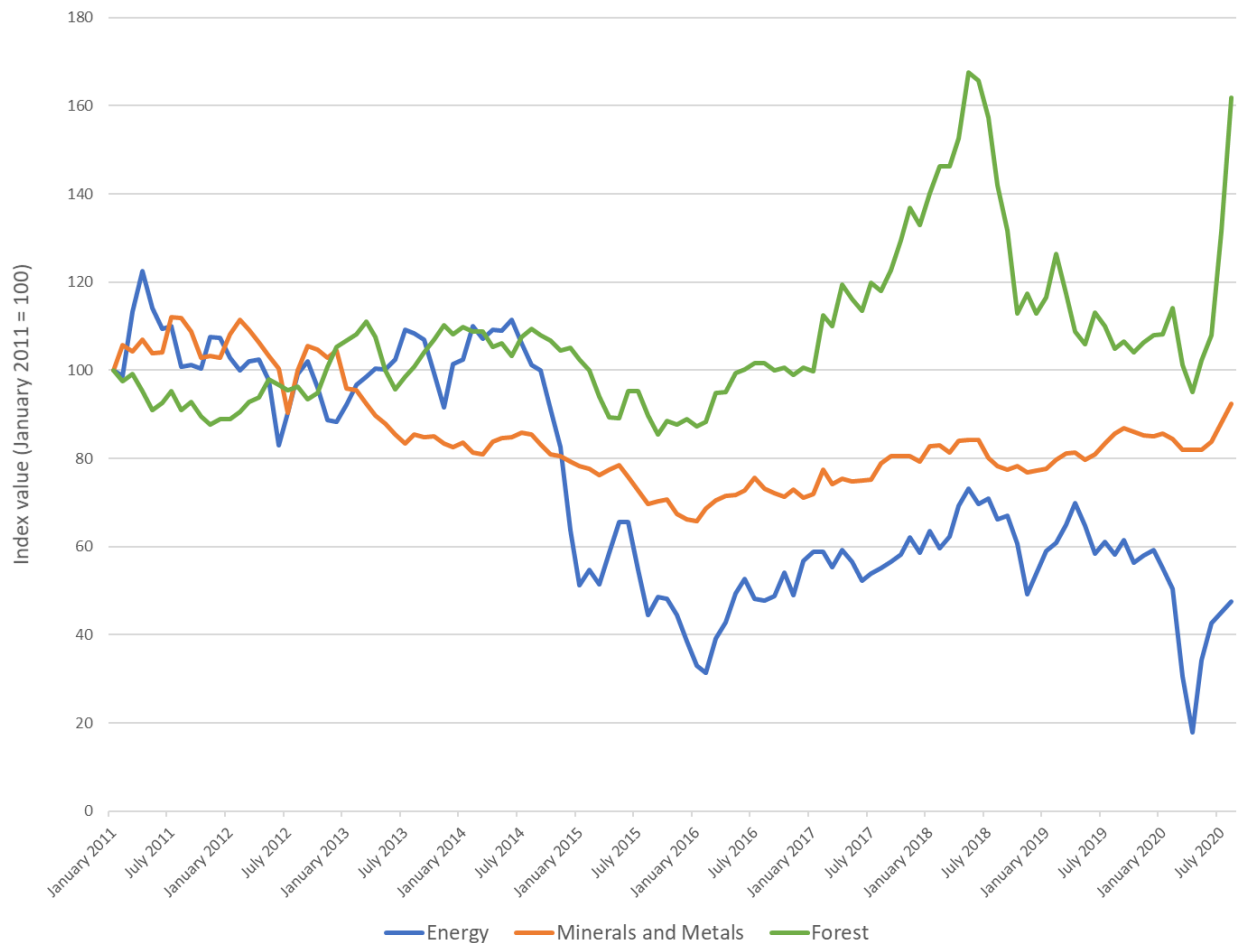
	Energy Clean Technology Projects	Forest Clean Technology Projects
2017*	66 projects (\$6B)	6 projects (\$1B)
2018	34 projects (\$6B)	5 projects (\$0.2B)
2019	37 projects (\$10B)	4 projects (\$0.2B)
2020	35 projects (\$3.6B)	2 projects (\$0.1B)

*2017 is the year that Clean Technology project started to be tracked. Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

ECONOMIC CONTEXT

Canadian natural resource producers act as price-takers in international markets and, as such, they are affected by price fluctuations associated with cycles in global supply and demand. Changes in the number, value and status of major resource projects over the years are often the result of a wide range of external economic factors.

Figure 3. Commodity Price Indices, 2011 to Present (Bank of Canada)



Note: The energy index reflects production and prices of Crude Oil [WTI, Brent, Western Canada Crude], Natural Gas, Coal. The metals and minerals index includes Potash, Aluminum, Gold, Nickel, Iron, Copper, Silver, Zinc and Lead. The forest index includes lumber, pulp and newsprint.

The specific factors affecting investment decisions vary by sector. For example:

Oil. In 2020, the global pandemic caused factory shut downs, lockdowns, and a major decline in travel. The plummeting demand coincided with a supply boost that resulted from a production cut dispute between Russia and Saudi Arabia in March 2020. With a huge imbalance between supply and demand for oil, US and Canadian crude oil prices fell to less than US\$5 per barrel. To boost crude oil prices, in May 2020, OPEC and its allied countries including Russia introduced 9.7 million barrels per day (mb/d) of production cuts – the largest output cuts ever recorded. Furthermore, with reduced demand for oil and low oil prices, Canadian oil producers responded by shutting in about 1 mb/d of production, and reduced capital spending intentions by nearly \$10.5 billion. In the U.S. oil output fell by 2.2 mb/d as tight oil production fell. Capital spending in Canada's oil and gas sector is expected to see a substantial drop in 2020 compared to 2019, according to the Canadian Association of Petroleum Producers. While forecasts at the beginning of the year estimated that 2020 capital spending would be at around \$37 billion, new estimates show that only \$23.3 billion is expected to be invested in the oil industry this year. In 2019, WTI and WCS averaged US\$57 per barrel and US\$43 per

barrel respectively. Over the first nine months of 2020, WTI averaged US\$38 per barrel (US\$19 per barrel or 33% lower than the average price for WTI in 2019). In 2020, WCS averaged US\$26 per barrel in the first nine months of the year (US\$17 per barrel or 40% lower than the average price for WCS in 2019).

Gas. The recent global oil price collapse combined with the reduced demand and behavioral changes resulting from COVID-19 had significant impacts on the North American natural gas market and exerted further pressure on an already oversupplied gas market. As a result of COVID and the oil price crash, natural gas producers have shut-in wells and reduced drilling activities, significantly cut capital spending, and cancelled or deferred projects, all of which have impacts that could be felt by natural gas producers for several years after the current crisis. Additionally, natural gas demand is significantly affected by oil sands production decisions. The oil sands are the single largest consumer of natural gas in Canada, accounting for more than half of the gas used in Alberta year-round and up to 37% of the gas used nationwide. The demand for condensate is heavily dependent on oil sands production. If oil sands were to increase shut-ins to 700 kb/d, then the drop in condensate demand is estimated to be 231 kb/d, which would significantly impact liquids focused producers. Dry natural gas demand is expected to be less affected than condensate since gas steam is needed to keep bitumen reservoirs active.

Although Canada's gas assets are better positioned than its oil assets in the short term, increases in North American natural gas prices are unlikely to be sustainable in the medium to long term. Once drilling activities resume, associated gas production will continue to feed into the oversupplied gas market, putting downward pressure on the natural gas prices in North America. Forecasts predict international gas markets to remain oversupplied until late 2020s. The long-term health of the natural gas industry will require increasing LNG and LPG exports, petrochemicals production, and other domestic demand to provide outlets for producers. LNG trade is expected to increase by 21% to 2025, with China, India and Southeast Asia driving that growth. Canada is also well positioned to capitalize on growth in demand for propane, particularly in Asia, with existing and proposed propane export facilities off the coast in B.C.

Metals. Metals prices are likely to increase in the coming decade due to growing populations, developing economies, and demand for clean technology materials. While the short-term outlook for some clean technology commodities is currently weak due to oversupply, rapid demand growth for electric vehicles (EVs) and EV charging infrastructure is expected to attract investment in minerals and metals to support a low-carbon economy. For example, demand for automotive batteries is forecast to grow 28% per year to 2030. This will result in increased demand for Canadian production of copper and nickel, and support development opportunities for other critical battery minerals such as lithium. The pandemic has also sent gold prices soaring (a 23.4% gain from February 2020), as investors sought safe investments. Gold accounts for 20% of Canada's total mineral production (by value) and almost 60% of Canada's exploration spending. This optimistic forecast is underscored by the fact that investment intentions in Canada's mining industry have largely weathered the COVID-19 pandemic, revised down by only 1% from pre-pandemic intentions (as of July 2020). However, growth in the sector depends on financially strong junior mining companies and exploration to access Canada's undeveloped mineral potential, and the 2020 exploration season was heavily impacted by the pandemic.

Non-metals. Canada is an important global producer of non-metallic minerals, especially potash, metallurgical coal (used in steelmaking), and diamonds. In 2019, Canada produced 32.4% of global potash supplies. The COVID-19 pandemic has weakened demand and price of potash; however, in the medium term, growing global food demand is expected to support demand for potash. Canada is also the world's fourth largest exporter of metallurgical coal, a key steelmaking raw material, with accounts for 97% of Canada's direct coal exports. Steel and metallurgical coal prices decreased in 2020, as the COVID-19 pandemic disrupted global manufacturing and construction activity. However, as economies rebound and invest in new infrastructure as stimulus, demand for steel and other mining products used in construction

are expected to rebound, pulling up prices. Finally, Canada is the third largest global producer of mined diamonds at about 15% of global production, with diamond exports in 2019 valued at \$2.4 billion. Reduced consumer spending and shutdowns from the COVID-19 pandemic have reduced demand for diamonds, though industry will likely recover as consumer demand returns.

Forest. In 2019, low prices across major forest products, compounded with the structural decline of demand for printing and writing papers, softwood lumber duties and reduced fibre supply availability, strained financial liquidity and hampered industry competitiveness. A modest turnaround started to take hold in early 2020 as prices for wood products rebounded, driven by strong demand for housing, pulp and packaging in the US. In March 2020, the COVID-19 pandemic led to a sudden demand decline for major products and supply chain disruptions, leading to mill closures and production curtailments. While the wood products sub-sector is recovering, the pulp and paper outlook remains weak, with the exception of packaging and some sanitary products. The uneven economic recovery is exacerbating regional imbalances. The irreversible decline of demand for newsprint and printing and writing paper disproportionately impacts Central and Eastern Canada, while a strong market recovery in solid wood product manufacturing is benefiting Western Canada's forest sector.

Electricity and low carbon energy sector. As economies around the world shift towards a low carbon economy, energy systems are transitioning to renewable and non-emitting electricity as a primary source of energy. Although Canada starts from a position of strength with 82% of electricity supplied from non-emitting sources, electricity represents only about 20% of its primary energy consumption and, as such, it has many hurdles to overcome in order to meet its ambitious emissions reduction target.

Overall, the electricity sector spends on average \$24 billion annually in capital expenditures, contributes \$11 billion annually to Canada's GDP, and employs over 110,000 Canadians. The sector is responsible for some of the largest capital projects across the country, such as the \$9 billion Site C project in BC, the \$8.7 billion Keeyask project in Manitoba, and Ontario's \$26 billion investment in the refurbishment of its nuclear capacity.

Despite the considerable investments within the electricity sector, reduced economic activity due to COVID-19 has resulted in lower demand and, in turn, lower revenues for businesses. This has created additional barriers for utilities to invest in the transformative projects needed to continue on the path towards deep decarbonisation. Reports from the International Energy Agency and the Canadian Joint Task Force for a Resilient Recovery cite investments in clean power generation as a key lever for a rapid and successful economic recovery.

OVERVIEW OF SECTOR AND PROJECT ANALYSIS FOR 2020

Energy Projects

As of August 2020, there are 311 energy projects in the inventory with a combined capital value of \$505 billion, down from 312 projects valued at \$553 billion in 2019. The decrease in total number and value of projects in the inventory in 2020 is due to fewer additions (70 projects valued at \$33 billion compared to 83 projects added in 2019 with a valuation of \$91B) and greater project completions than in 2019 (44 projects were completed in 2020 as opposed to 31 in 2019). The announcement of a \$5 billion petrochemical facility in British Columbia, owned by West Coast Olefins, was the largest new addition.

Energy projects span many sub-sectors, including those in the oil and gas industry (e.g., oil sands, offshore, LNG, export terminals, storage facilities, and pipelines) and in electricity generation and transmission (e.g.,

nuclear, renewables, and power lines). Oil and gas-related projects account for roughly 80 percent of the total value of energy projects in the inventory.

Table 4: Sub-sector trends in energy projects 2016-2020

	2016	2017	2018	2019	2020
Total Energy Projects	\$598B 306 projects	\$601B 350 projects	\$510B 287 projects	\$553B 312 projects	\$505B 311 projects
Oil and Gas	\$485B 147 projects	\$478B 143 projects	\$393B 125 projects	\$434B 126 projects	\$392B 127 projects
Electricity	\$108B 155 projects	\$117B 197 projects	\$111B 152 projects	\$115B 173 projects	\$109B 159 projects
Other¹	\$5B 4 projects	\$5B 10 projects	\$6B 10 projects	\$4B 13 projects	\$4B 25 projects

¹ Other primarily includes biomass/biofuel/geothermal production activities. Totals may not add due to rounding/ Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Oil Sands

There are 46 oil sands-related projects (e.g., in situ, mining, upgrading and refining) in the inventory, representing \$105 billion in potential investment. This compares with the 50 projects valued at \$130 billion in the 2019 inventory. Seven new oil sands-related projects with a combined capital worth of \$11 billion were added since the May 2019 update. At the same time, four existing oil sands-related projects, with a combined capital worth of \$27 billion, were cancelled or suspended. Most of the reduction in the total value of oil sands projects since 2019 was due to the cancellation of Teck's Frontier project with a capital cost of \$21 billion.

Table 5: Oil sands project trends 2016-2020

	2016	2017	2018	2019	2020
Oil Sands Projects¹	\$148B 47 projects	\$168B 53 projects	\$138B 52 projects	\$130B 50 projects	\$105B 46 projects

¹ Excludes pipeline projects. Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Natural Gas

There are 43 natural gas-related projects (e.g., natural gas pipelines, export facilities and gas-fired generators) in the inventory, representing \$159 billion in potential investment, including an investment decision on LNG Canada. This compares to 43 projects valued at \$193 billion in the 2019 inventory. Since the May 2019 update, ten new natural gas-related projects with a combined capital worth of \$5 billion were added to the inventory. Meanwhile, seven natural gas-related projects with a combined capital cost of \$2.5 billion were completed and three were suspended or cancelled with a combined capital value of \$29 billion.

Table 6: Natural gas project trends 2016-2020

	2016	2017	2018	2019	2020
Natural Gas Projects	\$217B 68 projects	\$193B 59 projects	\$158B 45 projects	\$193B 43 projects	\$157B 43 projects

Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Pipelines

There are 34 pipeline projects in the inventory, representing \$88 billion in potential investment. This compares to 26 pipeline projects valued at \$74 billion in the 2019 inventory. Since the May 2019 update, twelve new pipeline projects with a combined capital worth of \$6 billion were added to the inventory. Meanwhile, no pipeline projects were cancelled or suspended, and four existing projects with a combined capital cost of \$2 billion were completed.

Table 7: Pipeline project trends 2016-2020

	2016	2017	2018	2019	2020
Pipeline Projects	\$95B 41 projects	\$92B 33 projects	\$68B 24 projects	\$74B 26 projects	\$88B 34 projects

Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Mining Projects

There are 120 major mining-related projects (e.g., mine constructions, redevelopments, expansions and processing facilities) in the inventory, representing \$83 billion in potential investment. Metal mines (e.g., gold, copper, nickel, zinc) account for just over two thirds of the value of major mining-related projects. Non-metal mines (e.g., potash, diamonds) and coal mines account for most of the remainder.

As discussed above, the past year was a strong one for new mining investment: 30 new mining-related projects with a combined capital value of \$14 billion were added to the inventory, resulting in an increase in the total value and number of mining-related projects in the inventory. Projects in British Columbia account for 29 percent of the total value of all mining-related projects, Saskatchewan 22 percent, Quebec 17 percent, and Ontario for 15 percent. The remaining projects are spread across all provinces and territories, with the exception of Prince Edward Island.

Table 8: Mining project trends 2016-2020

	2016	2017	2018	2019	2020
Total Mining-related projects	\$90B 97 projects	\$80B 101 projects	\$72B 108 projects	\$80B 114 projects	\$82B 120 projects
Mines – Metals	\$49B 61 projects	\$48B 65 projects	\$48B 76 projects	\$51B 77 projects	\$56B 83 projects
Mines – Non-metals	\$24B 20 projects	\$26B 21 projects	\$20B 19 projects	\$19B 18 projects	\$15B 14 projects
Mines – Coal	\$5B 9 projects	\$3B 6 projects	\$4B 10 projects	\$8B 13 projects	\$8B 16 projects
Other¹	\$12B 7 projects	\$3B 9 projects	\$0.5B 3 projects	\$2B 6 projects	\$3B 7 projects

¹ Other primarily includes processing plants, smelters, refineries and export terminals. Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Forest Projects

The value of major forest projects (e.g., lumber, pulp and paper, biofuel production) has remained relatively stable for the past four years. Meanwhile, the number of forest projects in the inventory has been trending upward. As of the August 2020 update, there were 28 major forest projects across Canada, representing \$2.7 billion in potential investment. This compares to 29 forest projects valued at \$2.8 billion in the 2019 inventory.

Since last year's update, 5 new forest projects with a combined capital worth of \$0.2 billion were added to the inventory, while 5 projects with a combined capital cost of \$0.2 billion were completed. One major forest sector project in last year's inventory was suspended – a bioproduct mill by Fortress in Quebec. Projects added to the inventory this year include: a \$54 million High Level Wood Pellet Plan in Alberta owned by Pinnacle and Tolko; a \$50 million cross-laminated timber plant in Ontario owned by Element5 and a \$38 million cellulose filament plant in Quebec owned by Resolute Forest Products.

Eleven projects in Quebec account for 63 percent of forest projects value. The remaining forest projects are spread across British Columbia, New Brunswick, Newfoundland and Labrador, Ontario, Saskatchewan, and Alberta.

Table 9: Forest project trends 2016-2020

Total	2016	2017	2018	2019	2020
Forest Projects	\$2.3B 18 projects	\$3.2B 20 projects	\$2.9B 23 projects	\$2.8B 29 projects	\$2.7B 28 projects

Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

Clean Technology Projects

Clean technologies have a crucial role to play in Canada's transition to a low-carbon economy. In addition to reducing the environmental impact of resource development, clean technologies have the potential to strengthen the productivity and competitiveness of resource firms and allow them to enter new markets, including through the development of new and innovative products.¹ Resource firms across Canada are making significant investments in clean technology solutions, and these investments are expected to continue as progress is made toward the targets of the Pan-Canadian Framework on Clean Growth and Climate Change.

Since 2017, the *Major Projects Inventory Report* has reported on major clean technology projects using a \$10 million capital worth threshold. These projects are captured as subsets of the energy and forest sector totals and are not in addition to the sector totals reported in Table 3.

Clean technology projects included in the Major Projects Inventory are largely renewable electricity projects (e.g., hydro, wind, solar, biomass, tidal, and geothermal) and non-emitting energy projects (e.g., nuclear, biofuels, and carbon capture and storage) in the energy and forest sectors. While not necessarily captured here, several mining and oil and gas projects include significant clean technology components that will also help to reduce the overall environmental impact of resource development in Canada. It is also important to note that the inventory captures only clean technology investments made in the natural resources sector and does not include investments made in other sectors.

As of the August 2020 update, there are 144 energy and forest projects that are classified as clean technology projects, representing \$87.6 billion in potential investment. Hydro projects account for roughly

¹ According to [recent data](#) from Statistics Canada, the production of clean technologies, clean energy, and environmental goods and services accounted for 3.4 percent of Canada's gross domestic product and provided 317,085 Canadian jobs in 2018.

one-third the number and half the value of clean technology projects (55 projects valued at \$47 billion). The remaining clean technology projects are primarily wind projects (34 projects valued at \$7.8 billion) and biomass/biofuels projects (28 projects valued at \$4.5 billion). It should be noted that biomass or biofuel projects are classified under the energy sector.

	2017	2018	2019	2020
Total Clean Technology Projects	172 projects (\$107.5B)	135 projects (\$100.6B)	145 projects (\$90.8B)	144 projects (\$87.6B)
Hydro	80 projects (\$49.7B)	64 projects (\$45.9B)	66 projects (\$49.0B)	55 projects (\$47B)
Wind	42 projects (\$10.6B)	26 projects (\$8.8B)	29 projects (\$8.6B)	34 projects (\$7.8B)
Biomass/Biofuels	31 projects (\$8.2B)	28 projects (\$6.2B)	32 projects (\$3.0B)	28 projects (\$4.5B)
Solar	9 projects (\$0.6B)	6 projects (\$0.8B)	5 projects (\$0.7B)	7 projects (\$0.9B)
Nuclear	4 projects (\$28.5B)	4 projects (\$28.3B)	5 projects (\$28.5B)	3 projects (\$26.1B)
Carbon Capture and Storage	2 projects (\$9.1B)	2 projects (\$10.3B)	1 project (\$0.6B)	0 projects (\$0.0B)
Geothermal	2 projects (\$0.4B)	1 project (\$0.0B)	2 projects (\$0.2B)	3 projects (\$0.3B)
Tidal	1 project (\$0.1B)	0 projects (\$0.0B)	1 project (\$0.2B)	5 projects (\$0.3B)
Other*	1 project (\$0.2B)	4 projects (\$0.3B)	4 projects (\$0.4B)	9 projects (\$0.7B)

*Other includes micro-grid projects, battery storage projects, bioplastics, and a helium purification plant.

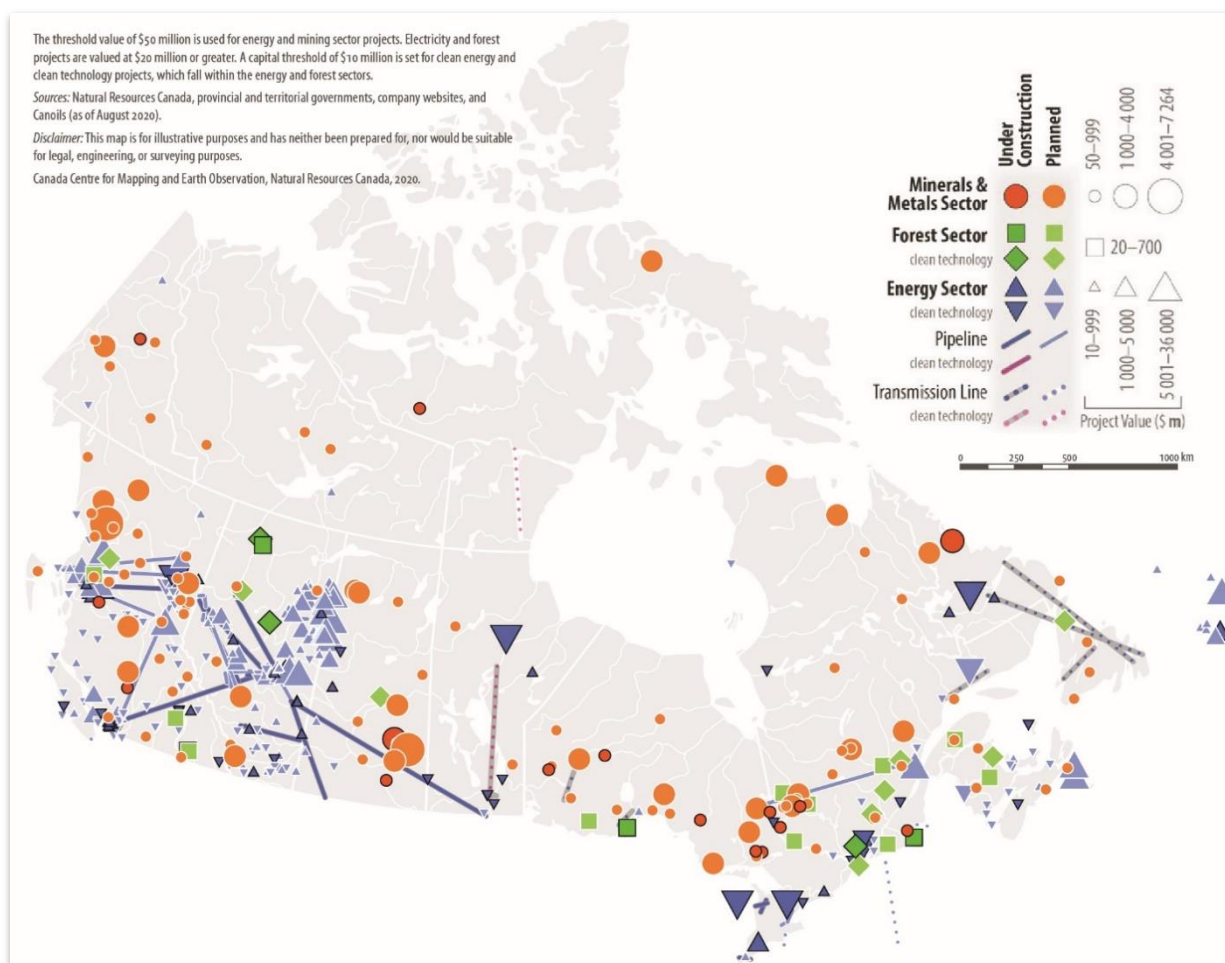
Note: Although tracking of clean technology projects for reporting purposes only began in 2017, prior to 2017 clean technology projects were included within the energy and forest sectors. Totals may not add due to rounding. Although estimates of potential capital investment for existing projects are not typically updated to reflect inflation, revisions to investment estimates for other reasons (e.g., cancellation of a project sub-component) may influence changes in total potential capital investment between years.

This year has seen a decrease in the number and value of clean technology projects in the inventory. Since the May 2019 update, 37 new clean technology projects with a combined capital value of \$3.5 billion were added to the inventory. Since the last report, 20 projects with a combined capital cost of \$4.8 billion were completed and became operational (8 hydro projects, 5 wind projects, 4 biomass/biofuels projects, 1 solar project, 1 nuclear project, and 1 carbon capture and storage project). Meanwhile, 12 projects valued at \$4.6 billion were suspended or cancelled (7 hydro projects, 2 wind projects, 2 biomass projects and 1 nuclear project). The opposing additions and removals almost cancel each other out and the high-valued projects which were suspended/cancelled accounted for the bulk of the project value decline in clean technology projects this year.

While clean technology investments are taking place in all ten provinces, Ontario and British Columbia continue to lead, each having around \$20-\$25 billion worth of major clean technology projects planned or under construction. Manitoba and Quebec each have around \$10-\$15 billion worth of major clean technology projects planned or under construction. Two nuclear plant refurbishment projects account for most of the clean technology investment planned in Ontario (\$25.8 billion). Similarly, one hydro project account for a significant portion of clean technology investment in British Columbia (\$10.7 billion). Since the May 2019 update, British Columbia added 7 new clean technology projects valued at over \$1.3 billion to the inventory with Alberta following closely behind with 9 clean technology projects valued at \$1.0 billion.

MAJOR NATURAL RESOURCE PROJECTS

Planned and Under Construction, 2020-2030



Highlights

- As of August 2020, there are 459 projects currently under construction or planned over the next 10 years, representing \$589 billion in potential capital investment.
- Energy projects accounted for 85.5 percent of the total value of major projects in the inventory, minerals and metals projects accounted for 14 percent, and forest projects accounted for 0.5%.
- 105 projects valued at \$47 billion were added to the inventory. In addition, 59 major projects valued at \$23 billion were completed and began production.
- 25 major projects worth a combined \$64 billion were cancelled or suspended. An additional 17 projects worth \$5 billion were removed from the inventory for various data quality reasons.
- These changes led to a net \$46 billion decrease in the value of projects in the inventory, with most of the decrease having occurred in the oil and gas sector.

Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	225	\$338	104	\$72	21	\$2	350	\$411
Announced	75	\$99	33	\$16	17	\$1	125	\$116
Under Review	71	\$98	51	\$41	1	\$0	123	\$139
Approval Received	48	\$119	17	\$14	0	\$0	65	\$132
Planned – Status Unknown	31	\$22	3	\$2	3	\$0	37	\$24
Under Construction	86	\$167	16	\$10	7	\$1	109	\$178
Total	311	\$505	120	\$82	28	\$3	459	\$589

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	319	\$510	342	\$534	297	\$465	332	\$471	350	\$411
Under Construction	152	\$174	145	\$178	121	\$120	123	\$164	109	\$178
Total	471	\$684	487	\$711	418	\$585	455	\$635	459	\$589

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Projects by Province/Territory

Province	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
British Columbia	94	\$188	35	\$24	5	\$0.2	134	\$212.6
Alberta	119	\$163	5	\$3	4	\$0.1	128	\$167
Saskatchewan	6	\$1	12	\$18	1	\$0.3	19	\$19.7
Manitoba	11	\$10	2	\$0	0	\$0.0	13	\$10.1
Ontario	17	\$34	22	\$12	4	\$0.2	43	\$45.7
Quebec	21	\$24	23	\$14	11	\$1.7	55	\$40.2
New Brunswick	4	\$3	2	\$1	2	\$0.1	8	\$4.1
Nova Scotia	10	\$17	2	\$0	0	\$0.0	12	\$17.3
Prince Edward Island	5	\$0	0	\$0	0	\$0.0	5	\$0.2
Newfoundland and Labrador	15	\$25	6	\$3	1	\$0.0	22	\$28.0
Yukon	3	\$0	6	\$4	0	\$0.0	9	\$4.3
Northwest Territories	1	\$1	3	\$1	0	\$0.0	4	\$2.0
Nunavut	0	\$0	2	\$1	0	\$0.0	2	\$1.4
Multi-jurisdictional	5	\$38	0	\$0	0	\$0.0	5	\$37.8

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

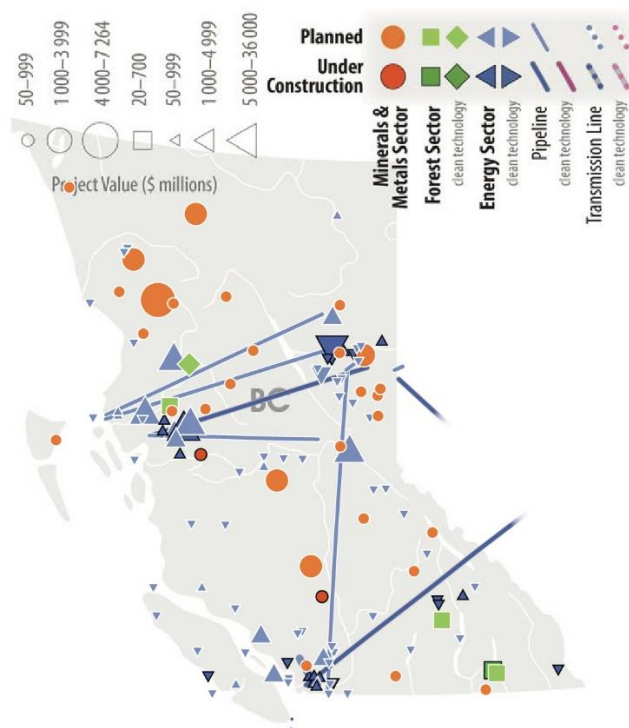
Planned and Under Construction, 2020-2030



British Columbia

Highlights

- A total of 134 projects are under construction or planned over the next 10 years in British Columbia, representing \$213 billion and 37 percent of total investment.
- Energy projects account for more than 88 percent of the value of major project investment in the province.
- In 2020, there were 57 clean technology projects included in the B.C. inventory, valued at \$23 billion.
- These included: 32 hydro projects valued at \$17 billion, 12 wind projects valued at \$4 billion, 11 biomass/biofuels projects valued at \$2.5 billion, and 2 geothermal projects valued at \$0.2 billion.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	73	\$134	33	\$23.3	4	\$0.1	110	\$157.6
Announced	13	\$39	5	\$1.7	4	\$0.1	22	\$40.5
Under Review	34	\$33	27	\$20.3	0	\$0.0	61	\$52.8
Approval Received	9	\$51	0	\$0.0	0	\$0.0	9	\$51.0
Planned – Status Unknown	17	\$9	1	\$1.3	0	\$0.0	18	\$10.3
Under Construction	21	\$55	2	\$0.3	1	\$0.0	24	\$55.0
Total	94	\$189	35	\$17.1	5	\$0.3	134	\$212.6

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	84	\$249	84	\$222	77	\$190	93	\$176	110	\$157.6
Under Construction	43	\$22	38	\$18	32	\$15	31	\$58	24	\$55.0
Total	127	\$271	122	\$240	109	\$206	124	\$234	134	\$212.6

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

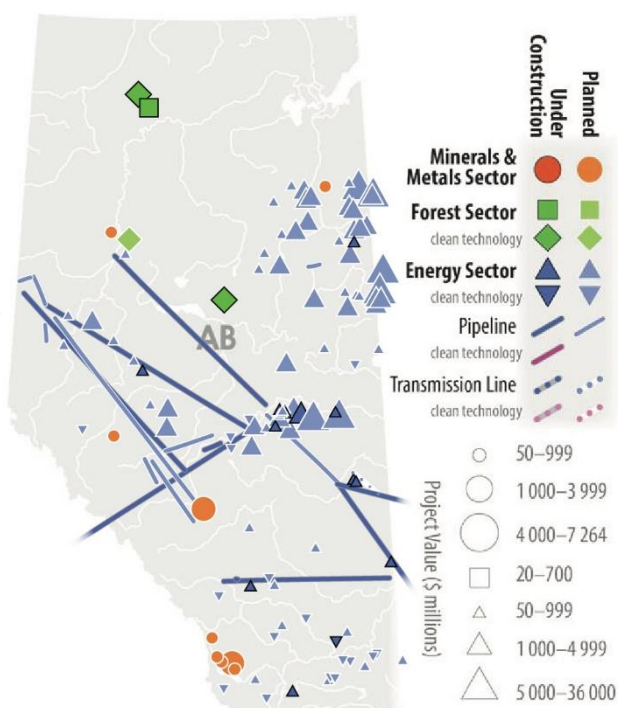
Planned and Under Construction, 2020-2030



Alberta

Highlights

- A total of 128 projects are currently under construction or planned over the next 10 years in Alberta, representing \$167 billion in investment.
- Energy projects account for more than 97 percent of the value of major project investment in the province. New energy projects have decreased the total value of projects in the province from \$190 billion to \$159 billion in 2020.
- In 2020, there were 25 clean technology projects included in the Alberta inventory, valued at \$4.1 billion.
- These include 12 wind projects valued at \$2.7 billion, six solar projects valued at \$0.8 billion, one hydro facility valued at \$0.2 billion, one geothermal facility valued at \$58 million, a low sulphur marine fuel plant estimated at \$100 million and four biofuels projects valued at \$0.1 billion.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	98	\$149	5	\$3	1	\$0.0	104	\$153
Announced	48	\$49	2	\$1	1	\$0.0	51	\$51
Under Review	13	\$35	2	\$1	0	\$0.0	15	\$36
Approval Received	31	\$57	0	\$0	0	\$0.0	31	\$57
Planned – Status Unknown	6	\$9	1	\$0	0	\$0.0	7	\$9
Under Construction	21	\$14	0	\$1	3	\$0.1	24	\$14
Total	119	\$163	5	\$4	4	\$0.1	128	\$167

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	73	\$114	73	\$148	77	\$146	95	\$166	104	\$153
Under Construction	45	\$74	34	\$59	25	\$31	30	\$24	24	\$14
Total	118	\$187	107	\$207	102	\$178	125	\$190	128	\$167

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

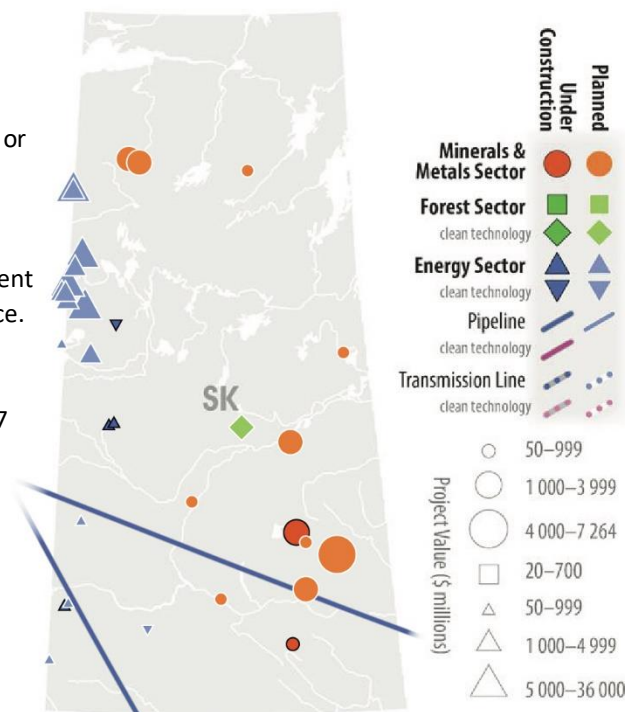
Planned and Under Construction, 2020-2030



Saskatchewan

Highlights

- A total of 19 projects are currently under construction or planned over the next 10 years in Saskatchewan, representing approximately \$20 billion in investment.
- Minerals and metals projects account for over 90 percent of the value of major project investment in the province.
- In 2020, there were four clean technology projects included in the Saskatchewan inventory, valued at \$0.7 billion.
- These included two biomass projects valued at \$0.4 billion, one wind project valued at \$0.3 billion and a helium purification plant worth almost \$40 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	2	\$0	10	\$14	1	\$0.0	13	\$14.8
Announced	2	\$0	4	\$3	0	\$0.0	6	\$4.2
Under Review	0	\$0	3	\$5	0	\$0.0	3	\$5.0
Approval Received	1	\$0	3	\$5	0	\$0.0	3	\$5.2
Planned – Status Unknown	1	\$0	0	\$0	1	\$0.3	1	\$0.3
Under Construction	4	\$1	2	\$4	0	\$0.0	6	\$4.8
Total	6	\$1	12	\$18	1	\$0.3	19	\$19.7

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	9	\$9	14	\$13	14	\$13	13	\$14	13	\$14.8
Under Construction	5	\$11	7	\$14	4	\$8	5	\$7	6	\$4.8
Total	14	\$20	21	\$27	18	\$21	18	\$21	19	\$19.7

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

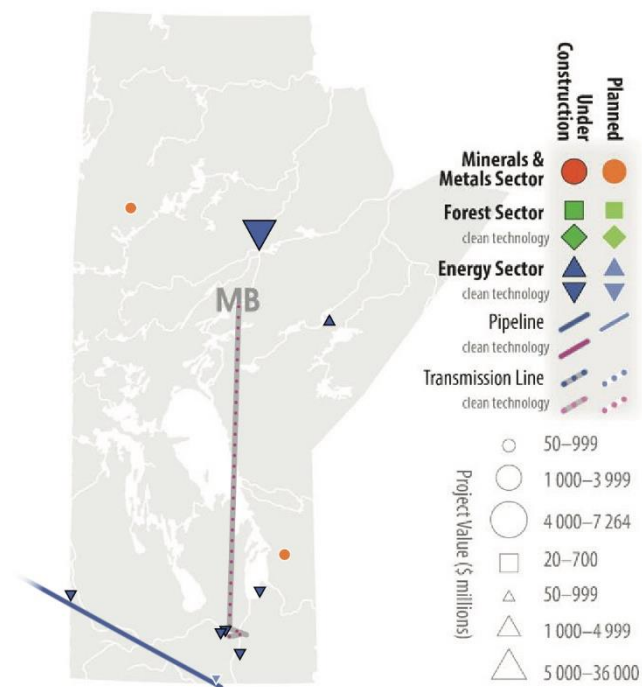
Planned and Under Construction, 2020-2030



Manitoba

Highlights

- A total of 13 projects are currently under construction or planned over the next 10 years in Manitoba, representing approximately \$10 billion in investment.
- Energy projects account for 95 percent of the value of major project investment in the province.
- In 2020, there were 11 clean technology projects included in the Manitoba inventory, valued at \$9.5 billion. All were hydroelectric generation and/or transmission projects.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	2	\$0	2	\$0	0	\$0.0	4	\$0.7
Announced	0	\$0	2	\$0	0	\$0.0	2	\$0.5
Under Review	0	\$0	0	\$0	0	\$0.0	0	\$0.0
Approval Received	1	\$0	0	\$0	0	\$0.0	1	\$0.0
Planned – Status Unknown	1	\$0	0	\$0	0	\$0.0	1	\$0.1
Under Construction	9	\$9	0	\$0	0	\$0.0	9	\$9.3
Total	11	\$9	2	\$0	0	\$0.0	13	\$10.1

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	2	\$1	3	\$1	5	\$1	5	\$1	4	\$0.7
Under Construction	2	\$10	10	\$14	9	\$9	10	\$9	9	\$9.3
Total	4	\$11	13	\$15	14	\$10	15	\$11	13	\$10.1

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

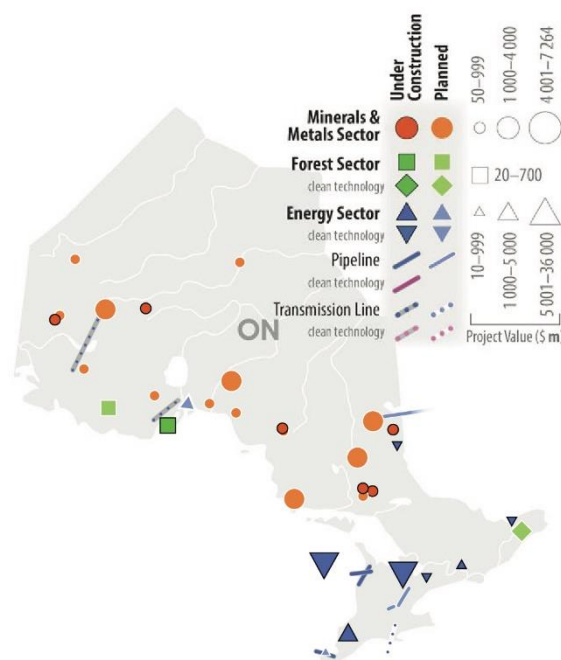
Planned and Under Construction, 2020-2030



Ontario

Highlights

- A total of 43 projects are currently under construction or planned over the next 10 years in Ontario, representing \$46 billion in investment.
- Energy projects account for 74 percent of the value of major project investment in the province.
- There were 5 clean technology projects included in the Ontario inventory, valued at \$26 billion.
- These included three nuclear projects valued at \$26 billion, one wind project valued at \$250 million, and one biomass project valued at \$73 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	6	\$2	15	\$10	3	\$0.1	24	\$11.9
Announced	0	\$0	6	\$2.6	1	\$0.0	7	\$2.7
Under Review	4	\$2	4	\$3	0	\$0.0	8	\$5.0
Approval Received	0	\$0	5	\$4	0	\$0.0	5	\$3.6
Planned – Status Unknown	2	\$0	0	\$0	2	\$0.1	4	\$0.5
Under Construction	11	\$31	7	\$2	1	\$0.0	19	\$33.8
Total	17	\$34	22	\$12	4	\$0.2	43	\$45.7

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	19	\$24	57	\$26	29	\$28	29	\$28	24	\$11.9
Under Construction	8	\$19	8	\$18	21	\$19	17	\$21	19	\$33.8
Total	27	\$43	65	\$44	50	\$48	46	\$49	43	\$45.7

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

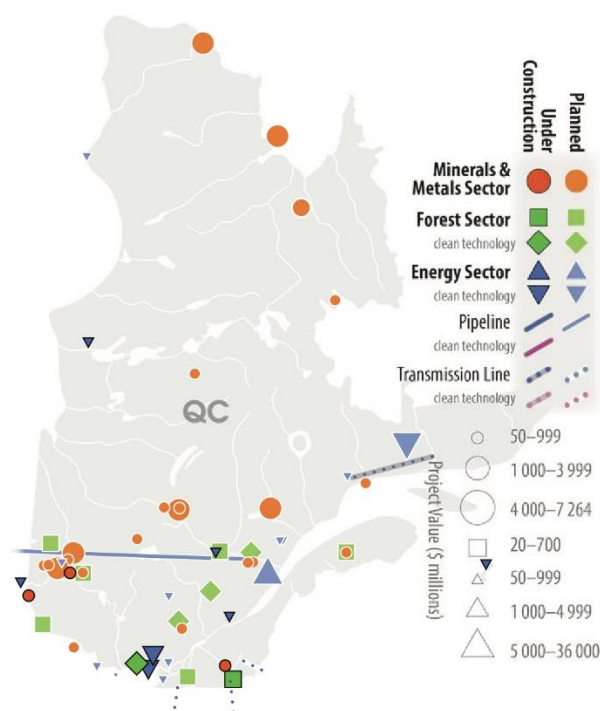
Planned and Under Construction, 2020-2030



Quebec

Highlights

- A total of 55 projects are currently under construction or planned over the next 10 years in Quebec, representing \$40 billion in investment.
- Energy projects account for 60 percent of the value of major project investment in Quebec, mining projects account for 35 percent, and forest projects account for 5 percent.
- In 2020, there were 21 clean technology projects included in the Quebec inventory, valued at \$13 billion.
- These included: eight hydro projects valued at \$10.5 billion, seven biomass projects valued at \$1.3 billion, five wind projects valued at \$0.9 billion, and a fiber extraction plant for bioplastics valued at \$25 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	12	\$12	21	\$14	9	\$1	42	\$27
Announced	4	\$3	11	\$5	9	\$1	24	\$10
Under Review	6	\$9	6	\$5	0	\$0	12	\$14
Approval Received	1	\$0	4	\$3	0	\$0	5	\$3
Planned – Status Unknown	1	\$0	0	\$0	0	\$0	1	\$0
Under Construction	9	\$12	2	\$0	2	\$1	13	\$13
Total	21	\$24	23	\$14	11	\$2	55	\$40

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	35	\$28	39	\$24	44	\$26	48	\$27	42	\$27
Under Construction	22	\$18	28	\$16	12	\$12	10	\$13	13	\$13
Total	57	\$46	67	\$40	56	\$38	58	\$40	55	\$40

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

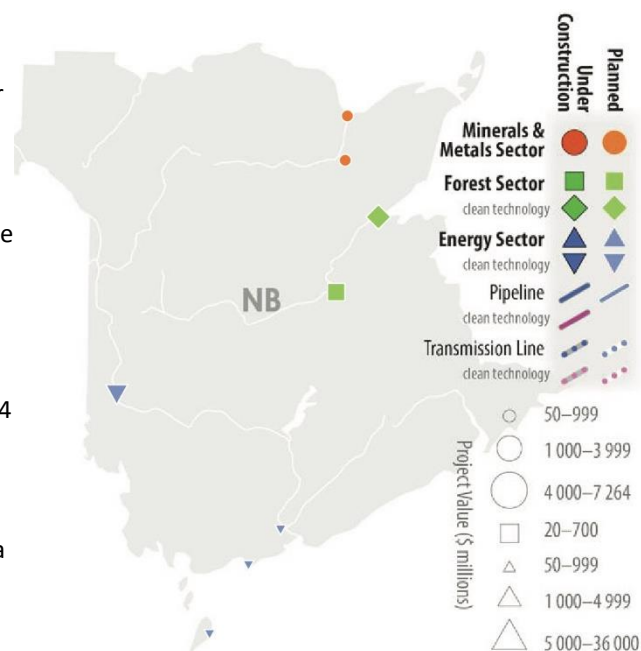
Planned and Under Construction, 2020-2030



New Brunswick

Highlights

- A total of 8 projects are currently under construction or planned over the next 10 years in New Brunswick, representing approximately \$4 billion in investment.
- Energy projects account for over 80 percent of the value of major project investment in the province, whereas mining projects account for most of the remainder.
- In 2020, there were five clean technology projects included in the New Brunswick inventory, valued at \$3.4 billion.
- These included a hydro dam upgrade valued at \$2.9 billion, two smart grid projects valued at \$333 million, a wood pellet project valued at \$70 million and a wind project valued at \$60 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	4	\$3.3	2	\$0.7	2	\$0.0	8	\$4.1
Announced	0	\$0.0	0	\$0.0	1	\$0.0	1	\$0.0
Under Review	4	\$3.3	1	\$0.6	1	\$0.0	6	\$3.9
Approval Received	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Planned – Status Unknown	0	\$0.1	1	\$0.2	0	\$0.0	1	\$0.2
Under Construction	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Total	4	\$3.3	2	\$0.7	2	\$0.1	8	\$4.1

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	6	\$1.0	5	\$1.2	8	\$1.2	4	\$3.7	8	\$4.1
Under Construction	2	\$0.6	2	\$0.4	0	\$0.0	2	\$0.1	0	\$0.0
Total	8	\$1.6	7	\$1.6	8	\$1.2	6	\$3.8	8	\$4.1

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

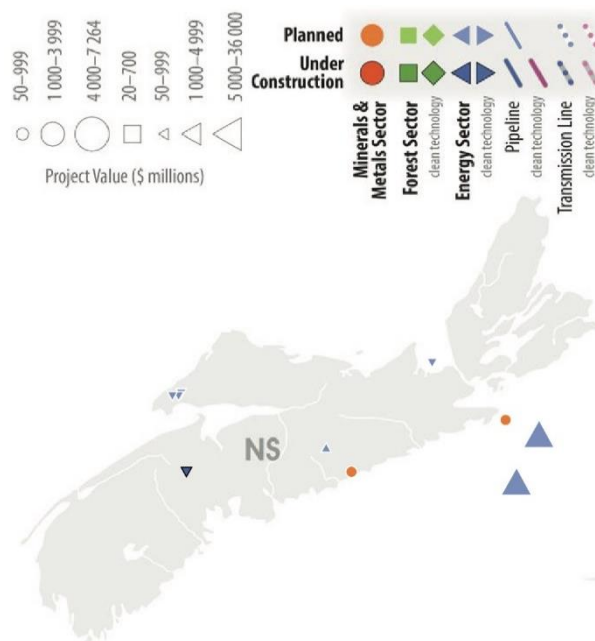
Planned and Under Construction, 2020-2030



Nova Scotia

Highlights

- A total of 12 projects are currently under construction or planned over the next 10 years in Nova Scotia, representing \$17 billion in investment.
- Energy projects account for over 97 percent of the value of major project investment in the province.
- In 2020, there were seven clean technology projects included in the Nova Scotia inventory, valued at \$0.5 billion. Five of these are novel tidal energy projects with a combined value of \$317 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	9	\$16.9	2	\$0.4	0	\$0.0	11	\$17.3
Announced	4	\$0.2	1	\$0.3	0	\$0.0	5	\$0.5
Under Review	2	\$8.1	0	\$0.0	0	\$0.0	2	\$8.1
Approval Received	2	\$8.4	1	\$0.1	1	\$0.1	3	\$8.5
Planned – Status Unknown	1	\$0.1	0	\$0.0	0	\$0.0	1	\$0.1
Under Construction	1	\$0.0	0	\$0.0	0	\$0.0	1	\$0.0
Total	10	\$16.9	2	\$0.4	0	\$0.0	12	\$17.3

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	10	\$20	8	\$20	8	\$20	8	\$20	11	\$17.3
Under Construction	6	\$2	6	\$3	2	\$1	1	\$0	1	\$0.0
Total	16	\$22	14	\$23	10	\$21	9	\$20	12	\$17.3

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

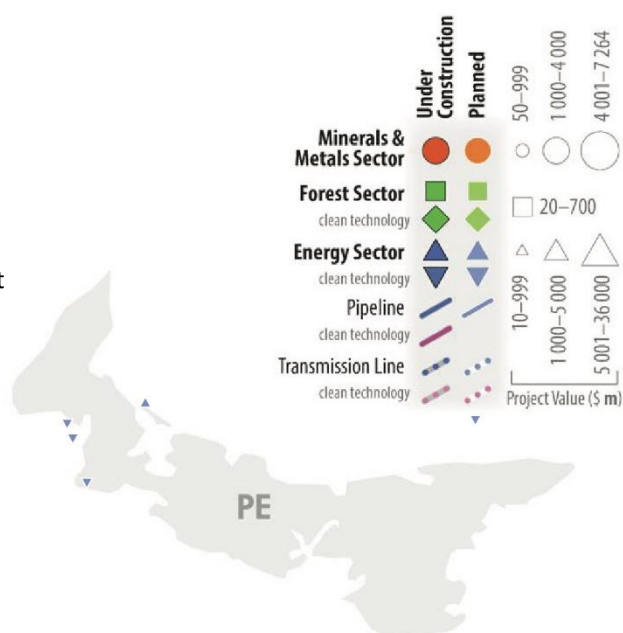
Planned and Under Construction, 2020-2030



Prince Edward Island

Highlights

- A total of 5 projects are currently under construction or planned over the next 10 years in Prince Edward Island, representing approximately \$0.2 billion in investment.
- All five were energy projects, where four of them are clean tech projects including a wind farm project valued at \$60 million, a solar farm worth \$69 million, a battery park project with capital cost of \$35 million and a micro-grid project valued at an estimated \$18 million.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	5	\$0.2	0	\$0.0	0	\$0.0	5	\$0.2
Announced	2	\$0.1	0	\$0.0	0	\$0.0	2	\$0.1
Under Review	3	\$0.1	0	\$0.0	0	\$0.0	3	\$0.1
Approval Received	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Planned – Status Unknown	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Under Construction	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Total	5	\$0.2	0	\$0.0	0	\$0.0	5	\$0.2

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	0	\$0.0	1	\$0.1	2	\$0.1	3	\$0.1	5	\$0.2
Under Construction	1	\$0.1	1	\$0.1	0	\$0.0	0	\$0.0	0	\$0.0
Total	1	\$0.1	2	\$0.2	2	\$0.1	3	\$0.1	5	\$0.2

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

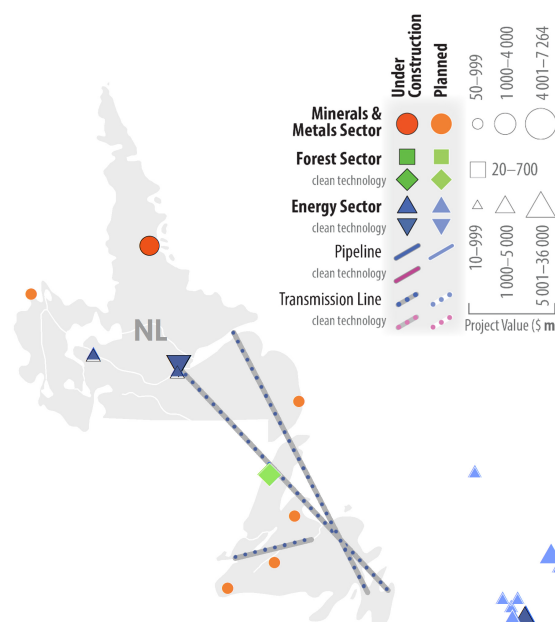
Planned and Under Construction, 2020-2030



Newfoundland and Labrador

Highlights

- A total of 22 projects are currently under construction or planned over the next 10 years in Newfoundland and Labrador, representing \$28 billion in investment.
- Energy projects accounted for just over 89 percent of the value of major projects in the province.
- In 2020, there were two clean technology projects included in the Newfoundland and Labrador inventory, a hydroelectric project valued at \$5.5 billion² and a wood pellet plant worth \$20 million.



Summary Table

Status	Energy*		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	8	\$11	5	\$1	1	\$0	14	\$12
Announced	1	\$7	0	\$0	1	\$0	2	\$7
Under Review	4	\$3	4	\$1	0	\$0	8	\$4
Approval Received	3	\$2	1	\$0	0	\$0	4	\$2
Planned – Status Unknown	0	\$0	0	\$0	0	\$0	0	\$0
Under Construction	7	\$14	1	\$2	0	\$0	8	\$16
Total	15	\$25	6	\$3	1	\$0	22	\$28

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	10	\$10	12	\$10	15	\$12	16	\$14	14	\$12
Under Construction	11	\$27	14	\$29	10	\$16	10	\$16	8	\$16
Total	21	\$37	26	\$39	25	\$28	26	\$30	22	\$28

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

² Muskrat Falls Hydroelectric Generating Station

MAJOR NATURAL RESOURCE PROJECTS

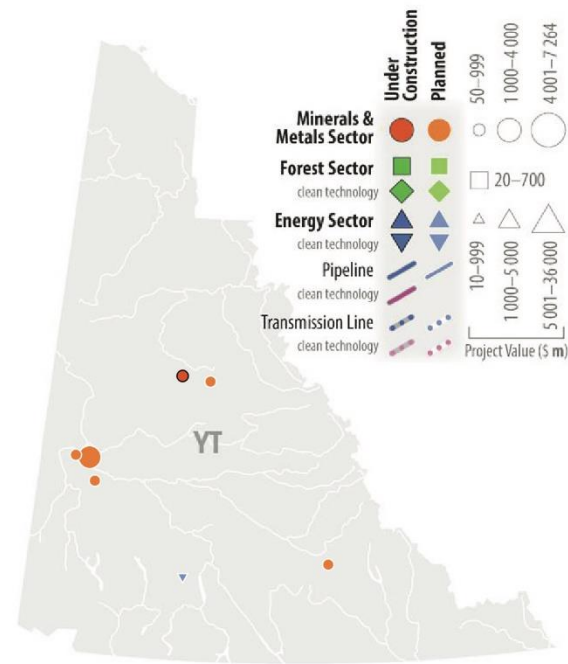
Planned and Under Construction, 2020-2030



Yukon

Highlights

- A total of 9 projects are currently under construction or planned over the next 10 years in the Yukon, representing \$4 billion in investment.
- Mining projects account for over 97 percent of the value of major projects investment in the territory.
- As of the August 2020 update, there were two clean technology projects in the territory, a \$20 million wind power project and a \$30 battery storage project, both in Whitehorse.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	3	\$0.1	5	\$3.7	0	\$0.0	8	\$3.8
Announced	1	\$0.0	2	\$0.4	0	\$0.0	3	\$0.4
Under Review	0	\$0.0	2	\$3.0	0	\$0.0	2	\$3.0
Approval Received	0	\$0.0	1	\$0.3	0	\$0.0	1	\$0.3
Planned – Status Unknown	2	\$0.1	0	\$0.0	0	\$0.0	2	\$0.1
Under Construction	0	\$0.0	1	\$0.5	0	\$0.0	1	\$0.5
Total	3	\$0.1	6	\$4.2	0	\$0.0	9	\$4.3

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	9	\$7.0	8	\$4.5	8	\$4.6	9	\$4.5	8	\$3.8
Under Construction	0	\$0.0	0	\$0.0	1	\$0.3	1	\$0.5	1	\$0.5
Total	9	\$7.0	8	\$4.5	9	\$4.9	10	\$5.0	9	\$4.3

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

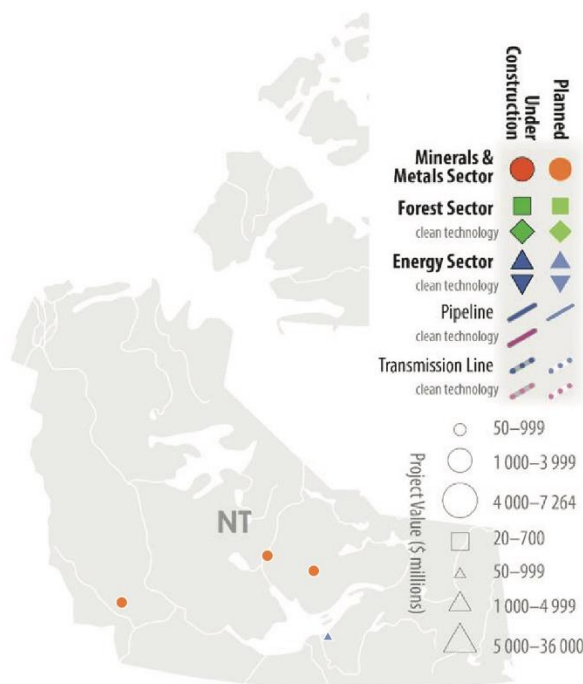
Planned and Under Construction, 2020-2030



Northwest Territories

Highlights

- A total of 4 projects are currently under construction or planned over the next 10 years in the Northwest Territories, representing approximately \$1.9 billion in investment.
- Mining projects account for over 50 percent of the value of major projects investment in the territory.
- As of the August 2020 update, there were no major clean technology projects in the territory.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	1	\$0.9	3	\$1.0	0	\$0.0	4	\$1.9
Announced	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Under Review	0	\$0.0	1	\$0.2	0	\$0.0	1	\$0.2
Approval Received	1	\$0.9	2	\$0.8	0	\$0.0	3	\$1.8
Planned – Status Unknown	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Under Construction	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Total	1	\$0.9	3	\$1.0	0	\$0.0	4	\$1.9

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	4	\$2.0	5	\$4.0	5	\$4.5	4	\$2.7	4	\$1.9
Under Construction	2	\$1.0	1	\$0.4	3	\$0.6	3	\$0.6	0	\$0.0
Total	6	\$3.0	6	\$4.5	8	\$5.2	7	\$3.3	4	\$1.9

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

MAJOR NATURAL RESOURCE PROJECTS

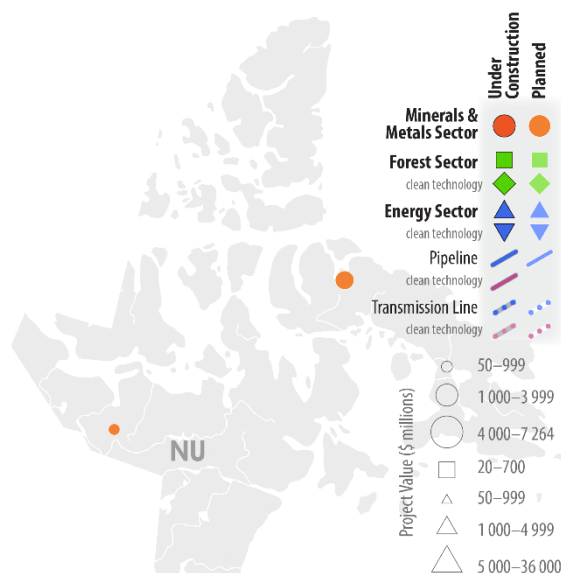
Planned and Under Construction, 2020-2030



Nunavut

Highlights

- A total of 2 projects are currently under construction in or planned over the next 10 years in Nunavut, representing approximately \$1.4 billion in investment.
- One of the projects is a gold mine valued at \$1 billion, and the other, an iron ore project valued at \$0.4 billion.
- In 2020, there were no major clean technology projects in the territory.



Summary Table

Status	Energy		Minerals and Metals		Forest		Total	
	#	\$B	#	\$B	#	\$B	#	\$B
Planned	0	\$0.0	1	\$1.0	0	\$0.0	1	\$1.0
Announced	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Under Review	0	\$0.0	1	\$1.0	0	\$0.0	1	\$1.0
Approval Received	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Planned – Status Unknown	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0
Under Construction	0	\$0.0	1	\$0.4	0	\$0.0	1	\$0.4
Total	0	\$0.0	2	\$1.4	0	\$0.0	2	\$1.4

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.

Trends in Project Status 2016-2020

Status	2016		2017		2018		2019		2020	
	#	\$B	#	\$B	#	\$B	#	\$B	#	\$B
Planned	3	\$2.0	2	\$0.8	2	\$0.8	2	\$1.4	1	\$1.0
Under Construction	0	\$0.0	1	\$1.2	1	\$1.2	1	\$0.4	1	\$0.4
Total	3	\$2.0	3	\$2.0	3	\$2.0	3	\$1.8	2	\$1.4

Source: Major Projects Inventory, as of Aug 2020.

Note: Totals may not add up due to rounding.