

SITE C CLEAN ENERGY PROJECT

SITE C AT A GLANCE

The Site C project is a third dam and hydroelectric generating station on the Peace River in northeast British Columbia.

Site C received federal and provincial environmental approvals in 2014 and the Province of B.C. announced a final investment decision on December 16, 2014.

Construction of Site C is **more than three years underway**. It started on July 27, 2015, and the project will be in service in 2024.



An aerial view of south bank shows the spillways excavation (left) and the generating station well under construction (March 2019)

Benefits

- BC Hydro expects a growing need for both energy and capacity for the province, and Site C is the best option to meet those needs over the long term.
- Many renewable energy sources — such as wind and solar — are intermittent. This means they are not always available to generate electricity and may not be available at times of peak demand. Site C will always be available to provide electricity when needed and will add capacity to B.C.'s system.
- Site C will provide 1,100 megawatts of dependable capacity, and generate about 5,100 gigawatt hours of energy each year — enough to power the equivalent of 450,000 homes.
- The project benefits from the upstream storage of the W.A.C. Bennett and Peace Canyon dams – this means that the same water is used three times to generate electricity. The project will generate approximately one-third of the Bennett Dam's energy, with a reservoir about 5 per cent the size of Williston reservoir.

Construction highlights to date

- The project has substantially completed the excavation on the north bank slope and the components of the dam and powerhouse are starting to take shape.
- The first diversion tunnel was started from the inlet portal in August 2018; the second diversion tunnel was started in September 2018.
- The powerhouse buttress was completed in October 2018. On top of this concrete structure, the generating station will be built.
- The generating station and spillway civil works contractor mobilized to site in spring 2018 and began initial concrete placement for the generating station in August.
- The transmission line contractor mobilized to the transmission corridor in fall 2018.
- The turbines and generators parts continue to be manufactured and shipped to site by rail for final manufacturing at a specialized facility on the south bank.
- The substation is well under construction.
- Work is underway on the first realignment section of Highway 29 at Cache Creek West.

Updated project budget

- The budget has been revised to \$10.7 billion. This is a capital cost estimate of \$9.992 billion, which includes \$858 million in contingency, plus a \$708 million project reserve held by Treasury Board to account for events outside of BC Hydro's control (e.g., higher than forecast inflation or interest rates).
- Taken together, the contingency and the project reserve are in place to address potential risks to project costs.

- Financial commitments**
 - As of March 31, 2019 the project has spent approximately \$3.5 billion.
 - As of March 31 2019, BC Hydro has financial commitments — contracts and agreements — for the Site C project totalling \$6.6 billion.
 - Community agreements have been reached with the City of Fort St. John, District of Taylor, District of Chetwynd and District of Hudson’s Hope.
 - A 70-year Regional Legacy Benefits Agreement has also been signed with the Peace River Regional District and its member communities.
- Employment**
 - As of March 2019, there were 3,674 people are working on Site C, including 2,894 workers from B.C. (79% of workforce), with 794 from the Peace River Regional District.
- Indigenous relations**
 - BC Hydro has been consulting and engaging with Indigenous groups since 2007.
 - BC Hydro has reached agreements with a number of First Nations affected by the project. While specific agreements are confidential, they could include elements such as cash payments, land transfers, land protection measures, and business opportunities during construction.
 - In March 2019, there were 333 Indigenous workers on the Site C project.
- Agriculture**
 - More than 99 per cent of Class 1 to 5 agricultural lands (land capable of crop production) in the Peace Agricultural Region will not be affected by Site C.
 - Overall agricultural production in the region is expected to benefit from mitigation measures, including a \$20 million agricultural compensation fund that will support agricultural programs and projects such as irrigation and drainage improvements.
 - The project has started the process of setting up the fund, and recently named the fund administrator and board.
- Properties**
 - About 90% of the fee simple land required for the project is owned by BC Hydro and the Crown; the remaining 10 per cent is privately owned.
 - In most cases, only a small portion of the remaining properties that are privately owned need to be acquired. There are fewer than 20 homeowners who may not be able to remain on their property as a result of Site C.
- Procurement**
 - The majority of the major Site C contracts have been awarded, including the main civil works, generating station and spillway civil works, transmission line construction, and substation.
 - The procurement for the balance of plant contract is underway.
 - Future procurements include Highway 29 and various supporting works.