

## 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 started on July 27, 2015.



#### 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.
- 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.
- 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.
- 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 five per cent the size of Williston reservoir.

#### Construction highlights to date

- Site preparation, including on site access road.
- Clearing of the left and right banks at the dam site and clearing of the lower reservoir area.
- Left and right bank cofferdams.
- Construction of the worker accommodation lodge and Peace River construction bridge.
- Powerhouse excavation, and placement of 414,000 cubic metres of roller compacted concrete in the powerhouse buttress.
- Spillways excavation, and the placement of 586,000 cubic metres of roller compacted concrete in the spillways buttress.
- Clearing activities in the lower reservoir.
- Completion of the Peace Canyon 500 kV gas insulated switchgear expansion to enable connection of Site C to the BC Hydro electrical system.
- Fish habitat enhancements downstream of the dam site.
- Completion and commissioning of the temporary upstream fishway.
- Completion of two 750-metre-long tunnels into the north bank of the river, through which the entire Peace River is now flowing.
- Diversion of the Peace River through two diversion tunnels, allowing the earthfill dam to be built on dry land.

- Completion of the upstream and downstream cofferdams required to seal off the main channel of the river. Construction of the main earthfill dam has started between the two cofferdams.
- Completion and energizing of the Site C substation.
- Completion and energizing of the first of two new transmission lines between Peace Canyon generating station and the Site C substation.
- Construction is underway for all 30 kilometres of Highway 29 that need to be realigned to accommodate the future reservoir.

### Community Benefits

- [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.
- Additional benefits to local communities include \$13 million for new affordable housing, \$1.5 million in skills and trades training, \$1.3 million for daycare, \$1.1 million in non-profit funding, and upgraded boat launches and recreational sites.

### Employment

- As of [March 2021](#), there were 4,321 people working on Site C, including workers from B.C. (73% of workforce), with 900 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 several 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 2021, there were 346 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.

### Properties

- About 90 per cent 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, substation, Highway 29 and various supporting works.
- The procurement for the balance of plant contracts are underway.