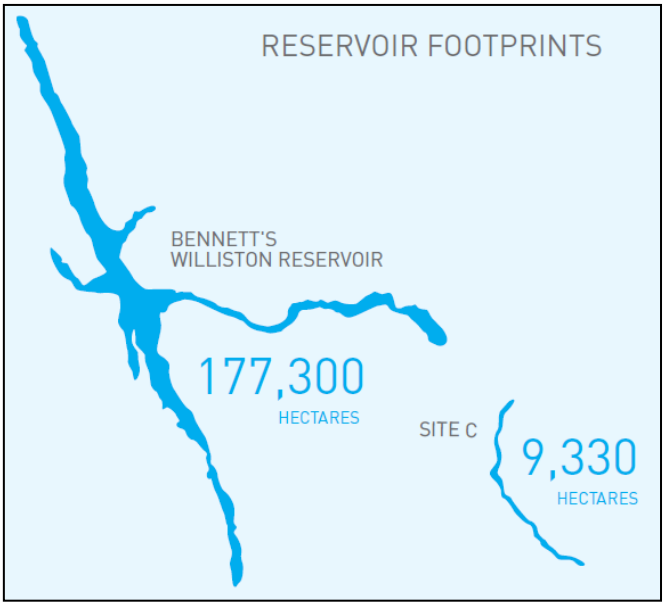
# BACKGROUNDER

## ABOUT SITE C

The Site C Clean Energy Project will provide 1,100 megawatts of capacity, and produce about 5,100 gigawatt hours of electricity each year – an eight-per-cent increase in energy supply to BC Hydro's system and enough to power about 450,000 homes per year.

As the third project on the Peace River, Site C will gain significant efficiencies by taking advantage of water already stored behind the existing W.A.C. Bennett Dam in the Williston Reservoir. This means that Site C will generate approximately 35% of the energy produced at the W.A.C. Bennett Dam with five per cent of the reservoir area.




| Dam | | Reservoir | |
|---|---|---|---|
| Type | Earthfill dam | Surface Area: | 9,330 ha |
| Height | 60 meters above riverbed | Flooded Land: | 5,557 ha<br>93% public; 7% private |
| Length | 1,050 meters | | |
| Capacity | 1,100 MW | Length: | 83 kilometers |
| Energy | 5,100 GWh / year | Width: | 2-3 times current river |

Construction is scheduled to begin in summer 2015, with project completion expected in 2024.

**Affordable Electricity**

Once built, Site C will be a source of affordable, reliable and clean electricity for more than 100 years.

Over the first 50 years of Site C's project life, ratepayers will save an average of $650 to $900 million each year, compared to a portfolio of Independent Power Projects (IPPs) backed up by natural gas.

This amounts to average annual savings of approximately six to eight per cent for the typical household, compared to alternatives.

**Economic Development and Labour**

Site C will provide approximately 10,000 direct construction jobs. Construction will also provide significant opportunities for businesses of all sizes.

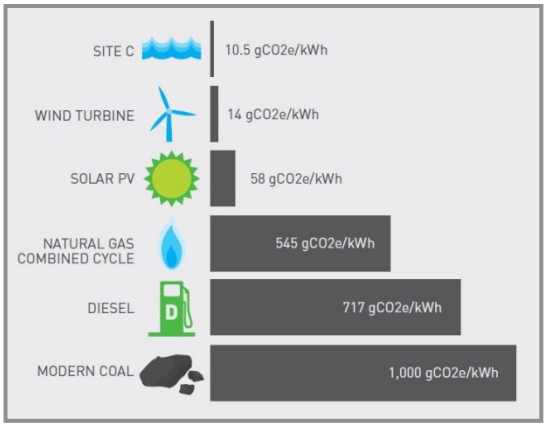
The construction of Site C is expected to result in an increase of $3.7 billion to provincial gross domestic product (GDP), including a $130 million increase in regional GDP during construction. Construction of Site C will result in increased government revenues at the regional, provincial and federal levels, including a total of $40 million in tax revenues to local governments.

BC Hydro's labour strategy for Site C will promote local and Aboriginal hiring and BC Hydro has supported opportunities for skills training through funding to: Northern Lights College Foundation, Northeast Native Advancing Society, Northern Opportunities Apprenticeship Program, School District No.60, and the College of New Caledonia.

**Low Greenhouse Gas Emissions**

Site C will produce among the lowest greenhouse gas emissions (GHGs), per gigawatt hour, when compared to other forms of electricity generation. The project will produce significantly less GHGs than fossil fuel sources such as natural gas, diesel or coal.

Emissions from Site C will fall within the ranges expected for wind, geothermal and solar energy.




**Integrating Intermittent Energy**

Site C will help integrate intermittent energy resources by quickly increasing or decreasing generation to match the availability of resources such as wind and run-of-river. For example, Site C generation could be increased when intermittent resources are not available (e.g., when the wind is not blowing), and decreased when intermittent resources are available.

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