



## Renewable Energy Project Profile

# Kwadacha Nation Brings Solar Power to Aatse Davie School

### Project Context

The Kwadacha Nation is located approximately 570 km north of Prince George, British Columbia, at the confluence of the Fox, Kwadacha, and Finlay rivers in the Rocky Mountain Trench. The village, also known as Fort Ware, has a population of approximately 270 people.

Kwadacha is accessible by plane from Prince George or by logging road. It takes between eight and 12 hours to drive from Prince George to Kwadacha depending on weather and road conditions. This makes Kwadacha one of the most isolated communities in BC. Facilities in the village include a health clinic, recreation centre, hockey rink, Aatse Davie School for grades K-12, a general store, a daycare centre and visitor accommodations.

Kwadacha is in a non-integrated area, meaning that it is not connected to the BC Hydro electric grid. Power in Kwadacha is generated by a BC Hydro diesel power plant along with a biomass generator. Prior to 2021, the community consumed approximately 594,148 litres of diesel per year.

The Aatse Davie School Solar Project (“the Project”), completed in the summer of 2021, generates clean solar energy to power the Aatse Davie School. The Project reduces greenhouse gas emissions, air pollution and noise pollution from diesel power generation in the community.

Kwadacha Nation members received training from the project contractor, Green Sun Rising, on installing and operating the solar system. The project has helped increase awareness of clean energy and sustainability within the community, especially among the students at Aatse Davie School.



Kwadacha Nation members working on project installation  
Credit: Kwadacha Nation

### Project Funders

CleanBC Renewable Energy for Remote Communities - Administered by the Fraser Basin Council

### Project Partners

Kwadacha Nation

### Project Lead

Andreas Rohrbach  
Director of Education,  
Kwadacha Nation

### Project Milestones

June 2021

Material procurement and transportation

September 2021

Installation and inspection

September 2021

Project commissioning





## Quotes from Angela Hocken, Band Councillor & Teacher

*"Having this solar power installed at school will allow the students to further their knowledge in energy efficiency and support the Indigenous ideology of protecting Mother Earth within a global perspective."*

*"The project allows the students to monitor the amount of energy being produced and being used by the school. The students will get to learn that having the solar power limits the amount of CO<sub>2</sub> pollution in our atmosphere and having this solar power saves 85,000 kilograms of CO<sub>2</sub> pollution [per year]."*



Kwadacha Nation Members working on project installation  
Credit: Kwadacha Nation

Aatse Davie School during solar project installation  
Credit: Kwadacha Nation



## Project Description

In 2021, the Kwadacha Nation installed a 100kW AC solar photovoltaic (PV) system on the rooftop of Aatse Davie School to produce clean energy to directly power the school. A net-metering agreement is in place with BC Hydro. When the Project generates more electricity than the school needs, it will feed power back into the community grid.

The Project directly displaces 32,300 litres of diesel per year, saving the community \$12,400 per year. These cost savings allow school funds to be allocated to other services benefiting students and parents.

The Project also results in an annual reduction of 85.3 tonnes carbon dioxide equivalent (CO<sub>2</sub>e) each year. The reduction in diesel usage means that less fuel will need to be transported to Kwadacha Nation, resulting in further emissions reductions and a lower risk of fuel spills.

Students at Aatse Davie School are actively engaged in monitoring the amount of energy being produced and used by the school. This provides an opportunity for students to learn about solar energy and its potential for limiting carbon emissions. Students can also see the positive impact of energy-saving behaviours on the school's energy consumption.

The Project created two temporary jobs during installation, and two additional community members have been trained on how to operate the solar system. Other First Nations communities have reached out to Kwadacha to learn about the project, and Kwadacha Nation members have been happy to share their experience.

## Lessons Learned

1. From a technical perspective, Kwadacha Nation found the solar PV system very straightforward to operate for the end user.

## References

Kwadacha Nation (2022)  
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<https://kaskadenacouncil.com/kwadacha-nation/>

FirstVoices (2022), Kwadacha Tsek'ene Home Page  
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