

Life Is On

Schneider  
Electric



Partnering with Solvest: Powering Snowline Gold with  
**Sustainable and Cost-efficient  
Off-grid Solar System**

Snowline improves employees' work environment with an off-grid solar and storage system while increasing efficiency and delivering on their commitment to the environment.

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Na-Cho Nyäk Dun Development Corporation (NNDDC)'s priority for their community is clean energy and reducing the reliance on diesel. Snowline Gold was searching for a renewable energy source to power their seasonal operations from May to October in the remote Yukon wilderness, which sits on the traditional territory of the First Nation of Na-Cho Nyäk Dun. NNDDC connected all parties to accomplish mutual objectives.

### Challenges

Na-Cho Nyäk Dun Development Corporation and Snowline Gold sought the expertise of Solvest Inc. to achieve their mutual goal to lessen the environmental impact in the mining exploration sector and to simultaneously reduce noise pollution from generators, which were required to run twenty-four hours a day, for employees and wildlife. Snowline Gold's project was in a remote site with no road access, which made it difficult to transport solar and storage equipment. Thus, the system was built and designed in Whitehorse and transported by sling under a helicopter. With the location and transportation challenges, Solvest required reliable products to ensure the overall success of the project.

### Solution

Solvest selected the XW Pro inverters that were able to support the base and peak load of the camp with a capacity of 50 people. InsightFacility from Schneider Electric was easily integrated with PylonTech batteries, which was another critical aspect of Solvest's objectives. Additionally, four MPPT 100 600 charge controllers were provided to allow for a large ground mount 27kW DC PV Array.

Because the exploration camp was in a remote location, Solvest required robust and reliable products to ensure the overall success of the project. Solvest previously had extensive experience using Schneider Electric's solar equipment in remote off-grid installations,

## Customer Profile

Snowline Gold focuses on district-scale greenfield gold exploration that delivers value and prosperity to shareholders, employees, indigenous partners, and the communities in which they operate.

## Installer Profile

Solvest Inc. specializes in the generation and storage of renewable energy in remote locations, providing exceptional services for a broad range of clients.

## Goal

The goal was to reduce environmental impact of their exploration camp located in the remote Yukon wilderness. This camp was operated exclusively on generators, that required all diesel to be flown into the site.

## Solution

Solvest developed a solution consisting of four Schneider Electric XW Pro 6848 inverters, four MPPT 100 600 charge controllers, and one InsightFacility.

## Results

This project is expected to save upwards of 12,572 liters of diesel per season, reducing carbon dioxide emissions from the camp generator by up to 90%.



which made for an easier selection. Solvest's confidence in the equipment and technical service was why Schneider was chosen for the remote deployment.

## Results

The energy system is wholly owned by NNDDC and leased to Snowline Gold, an example of co-creation and the meaningful progress that results from it. "Indigenous businesses are leading the way in accelerating the green economy, and innovations such as this provide opportunities for such entities to become increasingly engaged in the mineral resource sector," says Jani Djokic, CEO of Na-Cho Nyäk Dun Development Corporation.

With the help of Schneider Electric inverters, charge controllers, and energy management products, the generator runtime was lessened significantly, leading to a better living environment for employees onsite. Subsequently, diesel fuel usage was also reduced by a considerable amount, leading to fewer greenhouse gas emissions. "This project is a tangible example of how Snowline realizes our corporate vision," said Steve Rennalls, Operation Manager of Snowline. "The solar energy storage system increases efficiency while creating financial and environmental value. It improves our employees' work environment."

Solvest was thoroughly impressed with the support provided by Schneider Electric, before, during, and after the installation. With the support of Schneider Electric, Solvest's clients – Snowline Gold and the NNDDC – have demonstrated the benefit of renewable energy in the mining industry. As Scott Berdahl, CEO and Director of Snowline, stated, "The initiative puts [us] into another 'first mover' category as we look for ways to eliminate the negative and enhance the positive impacts of our exploration activities. We trust the data collected will be instrumental in allowing additional resource companies to effectively assess potential renewable energy solutions."

Na-Cho Nyäk Dun Development Corporation is working towards building a fleet of systems similar to this that can be deployed throughout the Traditional Territory.

"Remote mineral exploration camps face many challenges, including high fuel and transportation costs. This challenge presents an opportunity for highly economic solar-battery system deployments which also achieve significant and impactful emissions reductions. Solvest is proud of the opportunity to work with great partners in NNDDC and Snowline Gold to deliver this first-of-its-kind project, and we hope it becomes a blueprint for others to follow."

-Ben Power, CEO & Co-founder, Solvest

"Investments such as this are examples of how Indigenous businesses are leading the way in accelerating the green economy. We see this investment as just the first of many of its kind, and we are working towards building a fleet that can be deployed throughout the Traditional Territory."

-Jani Djokic, CEO, NNDDC



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