

Company Name: Hakai Energy Solutions Inc

Project Name: Comox Valley Airport Solar Project

Project Value: \$275,000.00

The Comox Valley's International Airport now hosts a robust renewable energy system, built by Hakai Energy Solutions of Cumberland BC. Commissioned in September 2023, the airport now welcomes travellers through their main terminal, with a roof adorned by 266 solar panels. In addition to furthering their advancements in environmental stewardship, the solar photovoltaic energy system enables the airport to generate their own emission free electricity, while protecting themselves from escalating utility electricity rates.

Ample roof space, a significant amount of electrical load, a large electrical distribution system, and the fact that it is a long-term infrastructure asset made the Comox Valley Airport an ideal host for a solar PV array. Hakai Energy Solutions was pleased to be selected to deliver this design-build project for the Comox Valley Airport. Since 2011, Hakai Energy Solutions has been a leader in innovation and renewable energy project delivery, offering services from concept development, through construction and project turnover. As the largest solar energy contractor owned and operated in BC, Hakai Energy has delivered complex power systems for municipalities, business owners and communities across western Canada.

YQQ's powerful photovoltaic system consists of (266) 455-watt solar modules, mounted to the centre portion of the airport's metal roof. The solar modules are racked onto the metal standing seam roof, using specialized clamps, which avoid the requirement of roof penetrations, maintaining the integrity of the roof structure. Hakai Energy's electrical design included custom shrouding for weather protection and purposeful cable routing which eliminated intrusions. The PV system's total capacity is 121.03 kilowatts, which has been modelled to produce an estimated 130,687-kilowatt hours of electricity per year. Based on the airport's historical consumption data, the system's solar generation is anticipated to offset 13% of the airports' annual electrical consumption. This solar photovoltaic system will produce carbon-free electricity for the next 30-35 years.

AES Engineering provided electrical design services and project engineering. The Airport's PV system is interconnected to the electrical distribution at the facilities main 3-Phase panel board. In order to achieve the inter-connection authorization with the utility, a net-metering agreement was established with BC Hydro. Hakai's commissioning services included one on one training with the client to ensure that product awareness, safety, and maintenance requirements are understood. Hakai's in-house IT & network team provided a custom developed solution for real-time and historical production tracking. A renewable energy system becomes tangible and engaging when the public are able to view and interact with energy yield metrics. The Comox Valley Airport has been progressive in their ongoing efforts to reduce their carbon emissions, and promote environmental

sustainability, presenting strong displays of regional scale climate action. This renewable energy project was a collaborative team effort, which demonstrated Hakai Energy's overall expertise in the delivery of complex innovative energy projects in Western Canada.