



SHIFTING THE LIMITS

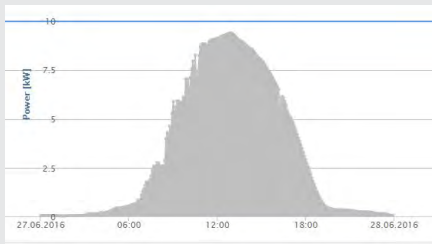


KUGLUKTUK, NUNAVUT, CANADA

/ Literally 24 Hours of Sun production in Canada's Arctic.



Kugluktuk is the westernmost community in Nunavut, located north of the Arctic Circle on the mouth of the Coppermine River. The population of 1,400 is primarily Inuit. The goal of this 10 kW rooftop PV system was to reduce and displace expensive diesel power generation. Installer Green Sun Rising selected a Fronius Symo 10.0-3 208/240 inverter and Fronius monitoring for this project. All material was loaded up onto a DC3 plane and flown in from Yellowknife to Kugluktuk. Green Sun Rising developed special racking so the modules could be mounted to the curved metal roof of the hamlet's recreation centre. The project was successfully installed in one week, leaving time for boating and animal watching.



What makes this PV system a unique case study for Fronius' 24 Hours of Sun vision is that Kugluktuk receives constant daylight from May 27 to July 17 and is the warmest region in Nunavut thanks to a special micro-climate. "Only in the far North and in the summer can

a solar system generation power for 24 hours, around the clock," said Klaus Dohring, President of Green Sun Rising. Even during our typical nighttime hours, the system generated up to 30 W! Midnight generation is limited because of the decreased irradiance and sun's position - it shines from the North, on the back side of the modules.



INSTALLATION DATA	
Size of installation	10 kW
Purpose, system type	Rooftop PV system, diesel offset
Inverters	1 x Fronius Symo 10.0-3 208/240
Monitoring	Fronius Datamanager
Commisioned	June 2016
Developer	Green Sun Rising Inc.