

Canada: Indigenous First Nation communities start to self-generate power passing from green fuel

SOURCE: PRESS RELEASE, 26 APRIL 2022



The ORC unit is a system based on a closed-loop thermodynamic cycle for the generation of electric and thermal power, especially suitable for distributed generation (photo: Turboden)

The Meadow Lake Tribal Council (MLTC), representing nine Indigenous First Nations in Saskatchewan, Canada, is a successful case of carbon-neutral power project, where the community decided to invest in green power with an 8 MW power generation system that uses sawmill residual woody biomass as fuel.

The power plant, provided by Turboden and based on the ORC technology, replacing the old diesel engine production, is now in operation.

It produces 6,600 kW (net) of carbon neutral baseload electricity to power approximately 5,000 homes.

It also decreases greenhouse gas emissions by more than one million tonnes over 25 years (equivalent to CO₂ emission of more than 50,000 vehicles per year), as well as significantly reduce smoke and other harmful particulate matter, improving the local air quality conditions.

In addition to the generated electricity, the system design provides process heat to the NorSask sawmill buildings as well as new high efficiency lumber dry kiln, to reduce natural gas consumption and to improve the economics of Canada's largest 100% Indigenous-owned sawmill facility.

The project is part of Turboden's mission to accelerate the transition to a world powered by low-carbon technologies.