

**Delivering Quality, Performance, Reliability, Security and Savings****Reliable Renewables: Wind Solutions**

DEVIL'S POINT WIND FARM

Efate Island, Republic of Vanuatu

Customer: UNELCO**Wind Turbines:** 13 Vergnet GEV-MP C,
32m rotor diameter, 55m hub height**Total power:** 3575 kW**Commissioned:** July 2007, December 2008 and
October 2014**Operations and Maintenance:** UNELCO*Devil's Point Wind Farm, Vanuatu*@unelco vanuatu

Vergnet GEV MP Wind Turbines Deliver Energy and Cost Savings for Vanuatu

Devil's Point Wind Farm is an integral part of the continuous renewable energy development in the Republic of Vanuatu.

Efate Island has limited road infrastructures and lifting substructures, along with a weak grid which can only withstand a maximum 12 MW. For these reasons, UNELCO, a subsidiary of the Suez/EEC group, chose to partner with Vergnet, a renewable energy manufacture with over 25 years' experience in delivering projects with limited electricity infrastructure in isolated areas.

In 2015, the Vanuatu archipelago, which is made up of 80 islands, was hit by Cyclone Pam, a category 5 storm with gusts exceeding 320 km/h. The GEV MP C medium-power wind turbines at Devil's Point were not damaged by this cyclone as they were specifically acutely designed by Vergnet to withstand hurricanes by lowering its blades to the ground.

Wind Energy Approach – Investing in Wind Energy

The first Vergnet GEV MP C was installed in July 2007 to gauge the wind potential of the site and to analyse the performance and results of the wind turbine, and its influence on diesel electric groups, which are the main electricity source on the island of Efate.

The results from the first wind turbine were very promising, prompting UNELCO to contract for ten new GEV MP C in 2008 and an additional two in 2014. Currently, the Devil's Point wind farm consists of 13 wind turbines, producing 3.6 MW of total power. The wind farm reaches approximately 43% wind penetration rate (70% instantaneous) on the Efate Island's grid.

Vergnet carried out thorough training of on site staff to ensure UNELCO could be self-reliant with regards to operations and maintenance of the wind farm.

Making a Difference at Devil's Point

"The Republic of Vanuatu has been undergoing renewable energy development and Vergnet are proud of the success of the wind farm at Devil's Point. With difficult conditions to consider, Vergnet adapted and designed the medium power wind turbines to suit the challenging climatic conditions on the island of Efate, which have proved their efficiency to withstand strong storms and hurricanes, as demonstrated with Cyclone Pam. The 13 wind turbines are producing a total power of 3.6 MW, contributing to the main electrical source on the island of Efate."

Reliable Renewables

Vergnet is a global renewable solutions company with a successful track record in providing high performance, reliable and affordable clean energy solutions for companies around the world.

Advanced renewable solutions, encompassing wind, solar PV and hybrid technology, make Vergnet a recognised partner of choice throughout the world.

The company leverages a 25 year heritage in delivering power quality, performance and availability of supply in remote, isolated environments with extreme climatic conditions and limited electricity infrastructure.



Wind turbine with cyclonic proof equipment on Efate Island

With a strong focus on design, manufacturing and engineering innovation, Vergnet provides adaptable renewable solutions that are highly customised to both the local environment and the specific needs of the project.

Vergnet's uniquely designed technology is adaptable for grid-connected as well as off-grid operations and has been developed specifically for extreme weather conditions providing reliable, efficient and scalable energy solutions. Vergnet operates in over 40 countries and has 166 employees in 10 offices.

Developing adaptable and affordable solutions that cut energy costs is at the heart of everything we do.