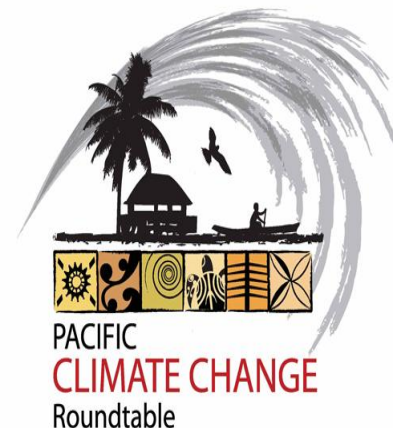




# Natural Disasters and Resilience of Renewable Energy Installations



*Presentations will look at lessons learnt on RE installations in Tonga [Ian], Vanuatu [Pam] and FSM [Maysak] on how they fared during these events.*



# Tonga – Cyclone Ian 2014





# Tonga – Cyclone Ian 2014





# FSM – Cyclone *Maysak* (2015)





# Vanuatu – Cyclone Pam (2015)





# UNELCO - Wind turbine Systems at Devil Point Efate



← Vergnet attends Islanded Grid Wind Power  
Conference, Anchorage, Alaska

US DOE Report Charts Path to 35% Wind  
Penetration by 2050 →

## Vergnet Wind Turbines Withstand Cyclone Pam In Vanuatu

Posted on 24 March 2015 by Vergnet

**Last Friday, the Vanuatu archipelago, which is made up of 80 islands and has a population of 270,000 people, was hit by Cyclone Pam, a category 5 storm with gusts exceeding 320 km/h.**

Although, little is known as yet about the full scope of destruction and resulting needs of the island nation, Vergnet found no damage to our thirteen wind turbines installed in the area. The GEV MP medium-power wind turbine that is used on Vanuatu was specifically designed by Vergnet to withstand hurricanes by lowering its blades to the ground.

We have been installing projects in extreme weather conditions since 1992 and now have over 900 wind turbines installed around the world. Vergnet wind turbines are specifically designed for distributed generation in markets such as Europe and the USA, as well as in isolated areas in Australia and Africa through to hurricane areas including Japan, the Caribbean and New Caledonia.



# Way Forward

- Adoption of guidelines and standards at the national level on systems design and installation for Grid and off Grid PV Systems.