



Sustainability action · Project Renewable Energy and Energy Efficiency

## Prony and Kafaete wind farms, New Caledonia

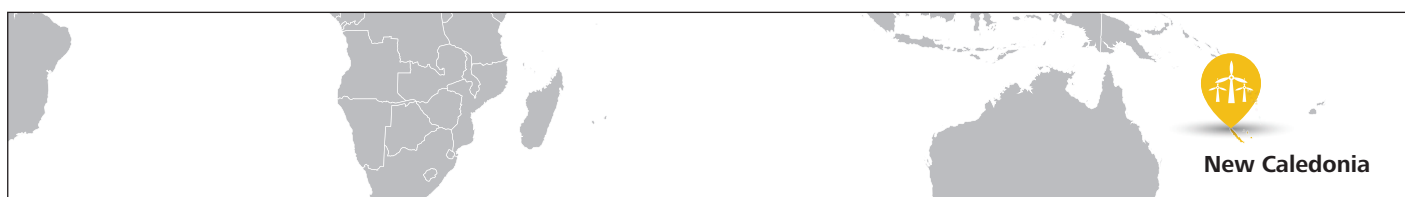
*Blessed by abundant wind resources, the French Overseas Territory of New Caledonia is now able to reduce its dependency on fossil fuels. The two wind farms of Prony and Kafaete are using modern technology to green-up the national grid and provide positive socio economic improvements for local communities.*

### Project

The project consists of two bundles of wind parks, Prony and Kafaete. The Prony wind farm comprises the following facilities: Prony II (4.62 MW commissioned in December 2003), Prony III (5.5 MW, commissioned in December 2006), Mont Mau (4.12 MW, commissioned in December 2007) and Touongo (4.95 MW, commissioned in January 2009) for a total of 74 turbines and a nominal power capacity of 14.24 MW. The Kafaete wind-farm comprises the Kafaete I facility (6.5 MW commissioned in March

2005) and Kafaete II facility (5.05 MW, commissioned in November 2005) for a total of 36 turbines and total nominal power capacity of 11.55 MW. The total annual expected electricity generation by both plants is 40'000 MWh. Both wind parks use GEV MP and GEV 26/220 turbines manufactured in France by Vergnet SA.

New Caledonia is located in a hurricane hot spot. The wind turbines used in the project are specifically designed for this type of climate: the whole wind farm can be tilted down within a few hours in the event of an extreme weather alert. This smart engineering approach makes the project a perfect match for the location and ensures that the nation's green power supply can sustain an extreme climatic event, such as a hurricane. To strengthen civil society and indigenous Kanak rights, the project developer supports local and regional initiatives addressing employment, youth and community activities.



## Location

The Prony site is located in the South province near the village of Mont Dore. The Kafeate site is located in the North province in the village of Koné. New Caledonia is surrounded by the world's second largest lagoon. The island is considered one of the world's most critically endangered and botanically most important hotspots. The UN recognises small-island developing states as being particularly vulnerable to climate change. Already severely affected by climate variability and extreme tropical weather events, they remain extremely vulnerable to future changes in the regional climate and to rising sea levels.

## Project achievements

### Socio-economic impact

- **The project provides over 40'000 MWh of clean electricity** to the residents of New Caledonia and replaces over 24'000 tCO<sub>2</sub> per year.
- **New Caledonia relies almost exclusively on imports to meet its energy demand.** The development of this wind farm allows the country to reduce its energy dependency and its energy bill by approximately EUR 5 million per year.
- **The project strives for the creation of local job opportunities:** more than 30 temporary and 28 permanent jobs have been provided by project developer Aerowatt and its subsidiaries to local Kanak people.
- **The project is a perfect example of technology transfer.** The employees receive training by the French wind turbine manufacturer Vergnet on maintenance, safety and operational issues. The project brought technology stimulation in the wider region thanks to the innovative and first-of-its kind large application of the typhoon safe turbine technology. By relying on their well trained staff, Aerowatt now uses its New Caledonian base for operation and maintenance of all its projects in the Pacific region.

- **The project owner embraced a local business initiative to strengthen small businesses and the local economy.** Through the pre-definition of work packages, several wind farm construction works could be carried out by small local enterprises.
- **Locals and school groups frequently visit the wind-farms as a touristic spot.** Open days for the public are regularly organised by the project owner to raise public awareness for climate and environmental issues.
- **Two Community Coordination Centers were partly funded, one in Mont-Dore and one in Yaté.** They offer employment and training opportunities in coordination with tribes and communities.
- **The project owner supports the regional community relations group,** which offers educational training for young people. It also organises sport and cultural events, and it supports initiatives and local infrastructure improvements.

### Environmental impact

- No new roads were constructed during project implementation in the hills. The project is based on existing road infrastructure from former mining sites to minimise soil erosion and other environmental impacts.
- The project leads to reductions in the release of air pollutants, including 600 tonnes of sulphur dioxide (SO<sub>2</sub>) per year, 700 tonnes of nitrogen oxides (NO<sub>x</sub>) per year, as well as other particulates that are typically associated to the burning of fossil fuels.

## Checklist Project 300344

### Commercial Operation Date

Between December 2003 and January 2009, depending on facility

### Total capacity

Prony (14.24 MW) and Kafeate (11.55 MW), each facility not larger than 6.5 MW

### Estimated Annual Electricity Generation

42'000 MWh

### Quality Assurance and Verification

Annual audit provided by PWC

Annual electricity verified by Epic Sustainability Services Pvt Ltd

### Transparency

RECs listed in GoldPower Register (<http://goldpower.net/goldpowerregister>)

Underpinning carbon credits retired in the Gold Standard Markit registry

### Marketing material

High-resolution pictures available

### Reportability

Meets GHG Protocol Scope 2 Guidance criteria

GoldPower credentials projects certified by



GoldPower credentials reportable under



[thesouthpolegroup.com/renewable\\_energy](http://thesouthpolegroup.com/renewable_energy)

Natalia Gorina  
Sales Director Carbon & Renewables

Phone +41 43 501 35 50  
[sales@thesouthpolegroup.com](mailto:sales@thesouthpolegroup.com)