



Press release
21 November

2019

Lifou island, New Caledonia: 100% Renewable Energy by 2020

On November 18th, Carole Le Gall, CEO of ENGIE France Networks, inaugurated an energy storage unit on Lifou island, in the presence of Christopher GYGES, the New Caledonian government minister for the energy sector.

Since 2017, EEC (ENGIE Solutions) has embarked upon a three-stage renewable energy development program, which aims to achieve the goal of 100% renewable energy by 2020.

ENGIE EPS, Alizés Energie and Socometra ENGIE are also partners in this project, which shows the ENGIE Group's ability to offer integrated, cutting-edge solutions for the zero-carbon energy transition. EEC also relies on local companies on the island, such as Caledonie Toiture and KMK Constructions.

The project consists in using solar and wind power to generate electricity, which will eventually replace the diesel generators at the thermal power plant.

Since renewable energy resources are by nature intermittent and dependent on sufficient wind and sunshine to provide stable, green energy to consumers, this means that large-scale, centralized energy storage solutions are necessary.

Through the installation of this storage unit, driven by an innovative energy management system, EEC has now moved into the second phase of the "Lifou 100% Renewable Energy by 2020" project.

The storage unit, which was connected to the high voltage distribution network in early September 2019, provides 5.4 MVA of power and has a capacity of 5.06 MWh. It can supply Lifou with 100% green energy (with the battery in service and electricity generators turned off) for several hours a day and store the excess energy provided by the solar and wind power plants to return it to the grid when needed, thus reducing diesel consumption.

This second phase also includes a new program to increase renewable energy production facilities, which comprises the installation of 2 new wind turbines (the same model as the first turbine) and a 2,000 kWp solar power plant, which is currently under construction.

The total investment in the first two phases of the project, carried by EEC and Alizés Energie, amounts to over 900 million French Pacific Francs. The second phase of the program will generate savings for the tariff system from the first year of operation onwards.

Over the course of the project lifecycle, tariff system savings will total nearly 1 billion.

At the end of 2020, all the solar parks will have been installed and 100% renewable energy (90% wind + solar power and 10% biofuel - coconut oil) will be injected into the network, saving 3 million litres of diesel and 8,000 tons of CO₂ emissions. This achievement, the first of its kind worldwide, will make Lifou a global model for green energy.

Looking back to the first phase

The first phase of the project consisted in increasing solar power production facilities. Alizés Energie built 6 solar farms throughout Lifou island representing a total of 960 kWp (kilowatt-peak) of power, which boosted the previously existing installations (2 solar farms and 1 retractable wind turbine). All these facilities have been in service since March 2018, resulting in an increase in the annual proportion of energy produced from renewables in Lifou, which rose to 22% in 2018.

About ENGIE Solutions*

ENGIE Solutions is an umbrella brand bringing together ENGIE Ineo, ENGIE Axima, ENGIE Cofely and ENGIE Réseaux. ENGIE Solutions employs 50,000 people in France, all with varied skills, who can act together alongside towns, local authorities, industrial firms and service companies, providing them with the solutions they need to take up the challenge of the energy transition. Improving performance in factories, comfort in buildings and making regions more attractive are central to ENGIE Solutions' value proposition, with a zero-carbon goal.

*The ENGIE Solutions brand will be completely effective as of 1 January 2020

About EEC ENGIE

EEC ENGIE is a subsidiary of the ENGIE Group that has been operating in New Caledonia since 1929 and manages electricity distribution in the municipalities of Nouméa, Mont-Dore, Dumbéa (partially), Bourail, Kaala-Gomen, Koumac, Canala and Lifou. EEC meets the growing needs for efficiency and innovative solutions in the energy field for local authorities, industrial firms and the tertiary sector. EEC has 260 employees, supplies electricity to more than 65,000 customers in New Caledonia and is certified ISO 45001-2018 (Occupational Health and Safety Management), ISO 50001-2018 (Energy Management) and ISO 14001-2015 / Environmental Management.

About ENGIE EPS

The Lifou storage system was designed and supplied by ENGIE EPS, an ENGIE group company specializing in the development of energy storage solutions and microgrids that enable intermittent renewable sources to be transformed into a stable power source. The system implemented on Lifou can be operated using a "grid-forming" method, which allows the island's diesel generators to be switched off when energy demand is fully covered by solar or wind production, without any risk to the stability of the network. This operating method therefore enables a reduction in diesel imports and maximizes the contribution of renewable energy.

ENGIE HQ Press contact:

Le Public Système PR

Myriam Baghdadi

mbaghdadi@lepublicsysteme.fr

06 79 40 17 13