



A career in renewable energy: French Guiana, a land of opportunity

08 Nov 2023

As French Guiana's leading private electricity producer, the Voltalia Group is proud to have delivered major projects that have transformed the region's energy landscape. Want to learn more? Read on to find out what we've been up to!

French Guiana: an ideal place to start a career in the renewable energy sector

Lush natural environment worth preserving

Renowned for its outstanding environment, French Guiana is home to an abundance of **biodiversity**. Just one hectare contains the equivalent of the entire biodiversity of the European Union!

Against this backdrop, it's easy to envisage the **environmental impact** of each project and the challenges it poses to combating climate change. That's why every **power plant project** is the focus of our development teams' full attention.

Their job? To preserve nature by studying how the projects **affect flora and fauna**. They develop compensation measures and scientific studies to monitor biota, create protection and reproduction zones for local wildlife, etc.

A non-interconnected territory with major energy challenges

Due to their location (on islands or overseas) some French territories are not connected to the mainland electricity grid. These are known as **non-interconnected territories**, or ZNI ("Zones Non Interconnectées").

In French Guiana, one of these ZNIs, the cost of fossil fuels (gas, oil, and coal) is significantly higher than in mainland France. This is a real problem for this territory, which, with its 300,000 inhabitants and its space center, is the **largest consumer of electricity** of all the French overseas departments and territories.

Power outages and blackouts are among the top concerns of the population and local elected officials. This is why French Guiana has set a goal of **generating 100% of its electricity from renewable sources** by 2030. With this goal in mind, the region has embraced innovation.

The exception of French Guiana

France's 2015 Energy Transition for Green Growth law requires each ZNI to have its own multi-year energy plan (known as **PPE**, or "Programmation pluriannuelle de l'énergie").

With French overseas departments and regions aiming for energy self-sufficiency by 2030, **French Guiana's PPE is far more ambitious than that of mainland France**.

Voltalia in French Guiana: renewable energy at the heart of our work

A laboratory for renewable energy

Our presence in French Guiana translates into more than **30 MW of assets in operation**, thanks to a diverse portfolio of renewable power plants, including:

- solar and biomass power plants
- a hydroelectric plant
- storage plants

This broad portfolio responds to the **need to innovate** to address very local issues, particularly energy transition and preserving biodiversity.

Our aim? To ensure a continuous power supply and **overcome the intermittent nature of solar energy** by developing cost-effective, efficient solutions.

Overview of our work

Voltalia's **Biomass Center of Expertise** includes a research and development department specializing in the latest biomass technologies (hydrogen production, micro-power plants, etc.).

In 2020, Voltalia also launched **Mana Stockage**, a battery storage system with an installed capacity of 10 MW, producing 11.3 MW of cumulative energy each year!

“Opportunities are everywhere in this industry. Embarking on a career in renewable energy means being part of making history. What’s special about the French overseas departments is that they offer quick access to exceptional projects and high-level positions.”

Hubert Herbaux Asset Owner at Voltalia

Strong local presence

In addition to creating direct and indirect jobs, Voltalia has a strong relationship with the local community. Several initiatives reflect this **commitment**:

- **sponsorship**: organizing school trips and local events, such as participating in archaeological research, upgrading public spaces, etc
- **raising awareness and educating**, in particular by running courses on renewable energy and biomass in high schools and universities
- **working with local politicians** to promote renewable energy projects or emissions monitoring
- **a privileged relationship with EDF**

A focus on Voltalia’s sites in French Guiana

The Kourou biomass power plant

Kourou is the **first 100% biomass power plant in the French overseas territories**, processing 30,000 tons of sawmill waste annually. Its annual production amounts to 12,000 MWh of clean energy per year, **equivalent to the consumption of around 11,000 Guyanese inhabitants**.

Solar parks

Several **photovoltaic** parks have also been built in French Guiana. The best-known are Coco-Banane, Savane des Pères, and, more recently, Sable Blanc.

Coco-Banane in figures

- Operational since 2010
- First park of its kind and scale in French Guiana
- Installed capacity of 4.7 MW
- 6,200 MWh of annual energy
- **equivalent to the consumption of 5,500 Guyanese inhabitants**
- 5600 tons of CO₂ emissions avoided each year

Sable Blanc in figures

- Operational since April 2023
- 5 MW photovoltaic power plant
- Storage system with a capacity of 10.6 MWh
- 5,200 MWh fed into the grid
- Produces **50% of what the Mana municipality consumes**
- Lowest carbon power plant in French Guiana with 27.9 kg CO₂/MWh
- No conflict of use due to its location under a high-voltage line
- €570,000 raised through crowdfunding

“Joining a company in this field like Voltalia opens up long-term career prospects and growth opportunities, owing to constant innovation and technological development.”

Maxime Jal Head of the Biomass Center of Expertise at Voltalia

These innovative installations actively contribute to French Guiana’s energy transition. And the best part? They represent real career opportunities in the fast-growing renewable energy sector. Why not take a look at our current vacancies in the region?

[Explore career opportunities at Voltalia!](#)