

Ciel Terre Japan, KK

The French company Ciel & Terre, which is involved in floating solar power generation, established Ciel Terre Japan, KK in Tokyo in 2013. The company provided the floating structure for the first floating solar power plant in Japan, which was inaugurated in the same year. Through expanding its business in Japan and Asia, the company aims at the spread of floating solar power generation.

France-based Ciel & Terre, which designs floating solar power plants and sells the floating structures, established Ciel Terre Japan, KK in Tokyo.

The company designed and supplied the floating system to be installed on water and provided technical assistance in the project to construct the first floating solar power plant in Japan, which utilizes a reservoir in Okegawa City, Saitama Prefecture. The floating solar power plant in Okegawa, which connected to the grid in July 2013, is divided into two islands, and covers 40% of the water with 4,536 solar panels in total. The plant has a generation capacity of 1.18 MWp (equivalent to the annual consumption of approximately 400 general households).

Since its establishment in 2006, Ciel & Terre has managed the installation of over 55 solar power plants around the world, and is aggressively expanding its presence overseas by operating through representative offices or agents in countries such as the United States, India and Thailand.



Solar power generation by the Hydrelío technology

The strength of Ciel Terre Japan is the Hydrelío patented technology, that makes possible the generation of power on the water by setting solar panels on the floating units. Floating units can be assembled by connecting them with pins, which is easy and enables quick construction. In fact, the installation was completed in only three weeks in the Okegawa City project. In addition, the impact on the environment is limited because all parts are made with recyclable materials.

The installation of a solar power plant on water can also be expected to prevent water evaporation because the sunlight will not directly shine on the water. In addition, even on hot days when power generation usually decreases because the temperature of panels and cables gets too high, an installation on water helps to maintain high generation capability by cooling the electrical parts.

With regard to the company's technology, Ms. Eva Pauly, International Business Manager of Ciel Terre Japan, explained as follows: "The Hydrelío technology has many strengths. In terms of irrigation facilities, it is possible to generate power while maintaining the original functions, and those facilities will not compete with agriculture and other matters."



Floating solar power plant in Okegawa City

Reason for choosing Japan

The Hydrelio technology enables solar power generation by using the surface of existing reservoirs, ponds, water channels, lakes and the like. While land available for mega solar projects in Japan is limited, there are several reservoirs and artificial lakes dotting around the country. Thus, Ciel & Terre established its Japanese subsidiary this time in anticipation of the exploration of new business opportunities and the deployment of this technology.

In addition, one of the reasons why the company decided to enter the Japanese market is the existence of an FIT (feed-in tariff) scheme for renewable energy. Under the scheme, the purchase of electricity generated with renewable energy is guaranteed at fixed prices for an extended period of time. Thus, renewable energy operators' risk of entering the business is sharply reduced. Although the purchase price is declining each year, the company is not necessarily taking the fact negatively because it has successfully reduced generation costs over the past few years. Ms. Pauly commented as follows: "Four years ago, we were producing electricity by spending five times as much as now in cost. However, we have made a lot of progress to date, and in the next few years, we will be able to provide electricity at general prices."

Future business development

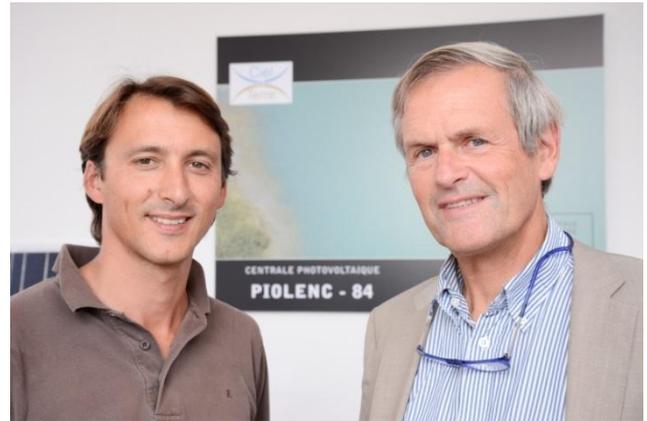
It has been about one year since the power plant started operating in Okegawa. Although some typhoons and earthquakes have occurred since then, no damage has been recorded on the floating power plant. The success of the project in Okegawa has been a major topic in various quarters, and has attracted interest from all over Japan. In June 2014, Ciel Terre Japan started a project using its technology in Kawagoe City, Saitama Prefecture. Furthermore, it also provided technical assistance and a floating structure to a project in Ono City, Hyogo Prefecture and a project in Yasugi City, Shimane Prefecture, which are scheduled to be connected in September 2014. In addition, in order to manufacture parts also in Japan that are currently manufactured in France, the company has been preparing for the commencement of production by the end of 2014. The company strives to discover partner companies in Japan and establish a cooperating system to promote the development and operations of projects all over the country.

Using the success in Japan as a stepping stone, the company intends to operate projects in Asia in the future. It plans to meet demand in Asia by placing Japan as its hub for the entire region.

JETRO's support

To support the company in setting up their Japanese base, JETRO's Invest Japan Business Support Center (IBSC) provided a range of services such as free temporary office space and consultation with experts in the fields of company registration, tax and labor matters. JETRO also provided information about the market for solar systems in Japan.

Ms. Pauly commented on JETRO's services as follows: "Even now, I often read the materials provided by JETRO over again. Without JETRO's support, we could not have concentrated on our work at the beginning of the establishment of our Japanese subsidiary."



Mr. Bernard Prouvost, General Manager, Ciel & Terre Group (Right)

Mr. Alexis Gaveau, Managing Director and Technical Director, Ciel & Terre International (Left)

(September, 2014)

Corporate history

June 2006	Ciel & Terre Group established
April 2013	Ciel & Terre International established
June 2013	Ciel Terre Japan established
July 2013	Designs world's first floating solar power plant of over 1 MWp and provides floating structure in Okegawa, Saitama
June 2014	Designs floating solar power plant of 700 kWp and provides floating structure in Kawagoe, Saitama

Ciel Terre Japan, KK

Establishment:	2013
Business:	Technology development and installation of solar power generation, etc.
Parent company:	Ciel & Terre International
Address:	Arca Central 14F, 1-2-1 Kinshi, Sumida-ku, Tokyo
URL :	http://www.cielterre.jp/