

March 6, 2020  
SINANEN CO., LTD.

**Entering the power generation business through micro wind turbines that are able to efficiently generate power even with a gentle breeze.**

**Established Sinagy Revo Co., Ltd. in February 2020.**

SINANEN CO., LTD, (Headquarters: Minato-ku, Tokyo; President & CEO: Toshimi Saeki; hereinafter referred to as “SINANEN”), which provides energy solutions for corporations, is entering the micro wind power generation business in collaboration with Global Energy Corp. (Headquarters: Hamamatsu, Shizuoka Prefecture; Representative Director: Masahiko Suzuki; hereinafter referred to as “Global Energy”), which has a renewable energy business that has developed a very quiet micro wind turbine that can efficiently generate power even with a gentle breeze.

Also, in February 2020, we established Sinagy Revo Co., Ltd. (Headquarters: Minato-ku, Tokyo; President & CEO: Yuji Shindo; hereinafter referred to as “Sinagy Revo”) to develop, manufacture, design, sell and maintain products equipped with micro wind turbines.

While there have been great expectations with regards to conventional small and micro wind power generation in Japan as the focus of renewable energy, along with solar power generation, there have been many issues, such as noise problems and repeated accidents caused by such things as the weight, material and shape of the blades. Especially in the micro wind turbine market, there has been a high need for installation locations where private power generation is required, but it took a long time to research and develop to solve this problem. Against this background, after trial and error, Global Energy, which has been continuously focused on the research and development of wind turbines since its establishment, has succeeded in developing a micro wind turbine that rotates with a gentle breeze with an average wind speed of about 1m/second, and can generate electricity at an average wind speed of about 2m/second.

As a global trend, amid rising expectations for environmentally friendly renewable energy that is conscious of sustainable development away from conventional fossil fuel-derived energy, SINANEN is newly putting effort into the renewable energy business. We entered this collaboration with a focus on the potential for new wind turbine power generation markets in Japan and overseas using the micro wind turbine developed by Global Energy.



Upper part of completely independent power supply equipment equipped with a micro wind turbine (image)

The biggest feature of the micro wind turbine developed by Global Energy is the ultra-lightweight blades that also have rigidity, and the special shape that can generate electricity efficiently. As a result, it has become possible to reduce the weight of the wind turbine itself, which was difficult to develop, to achieve highly efficient power generation, and to ensure safety at the same time. Sinagy Revo, which was newly established by SINANEN, will develop and sell completely independent pole-type power supply equipment and rooftop wind power generation equipment as a product lineup equipped with this innovative micro wind turbine.

The completely independent pole-type power supply equipment is equipped with a security camera, LED lighting, communication devices such as WiFi and a small storage battery, and can be expected to be used as a power supply infrastructure in the event of a disaster, which has been attracting attention recently. Specifically, by installing it in about 75,000 evacuation sites nationwide, people who are evacuated will not only secure night lighting in the event of a

power outage, but by providing a communication network and power supply that are indispensable for confirming safety in the event of a disaster, it contributes to the safety and security of evacuees. In addition, by using the security camera and communication network, since you can check the status of evacuation shelters with a smartphone or PC, it can be used to improve the efficiency of the disaster prevention system of local governments.

In addition, as a stand-alone power source or emergency power source equipment that uses renewable energy, we believe that it can greatly contribute to the SDG and BCP measures of each company.

As an energy solutions company, in addition to expanding sales of the existing energy business, SINANEN will continue to take on various challenges in the renewable energy business and provide energy to corporate customers.

#### ◆ Sinagy Revo Co., Ltd. Company Outline

Establishment : February 2020  
President & CEO : Yuji Shindo  
Capital : 150 million yen (including capital reserves)  
Shareholders : SINANEN CO., LTD. 100%  
Address : Mita, Minato-ku, Tokyo, Japan  
Main Business : Develop, Manufacture, Design, Sell and maintain micro wind turbine products

#### ◆ Features of Micros Wind Turbines

##### (1) Highly Efficient Power Generation

You can expect a high facility utilization factor of 30% or more.

Compared to the blades of other companies, since the patented blade shape of the micro wind turbine can efficiently convert the wind received into energy, it rotates at an average wind speed of 1m/second and can start power generation with a gentle breeze (average wind speed of 2m/second). In addition, because it is a vertical type, it receives wind from 360 degrees and generates electricity regardless of the wind direction.

##### (2) Low Noise

Generally, the noise in a quiet library is about 40db, but the wind noise at the maximum rotation of the new micro wind turbine is about 30db, which is very quiet. On the ground a few meters from the installation location, it is almost inaudible to the human ear, so it can be installed in urban areas that could not be considered before.

##### (3) Safety

With the newly developed control system, it is possible to control the blades to maintain a constant rotation speed without stopping the rotation even in strong winds, and it is possible to generate electricity even in strong winds. In addition, the generator won't be overloaded, and safety has been dramatically improved.

##### (4) Special Lightweight Material

We have succeeded in reducing the weight of the entire blade by using a special material. By reducing the weight of the blades, it is possible to generate electricity at low wind speeds and reduce secondary disasters in the event of bad weather such as typhoons.

#### ■ About SINANEN CO., LTD. <http://www.sinanen.com/>

SINANEN CO., LTD. is an energy service company for corporate clients within the SINANEN HOLDINGS Group. We are developing a wide range of businesses such as petroleum product sales, renewable energy investment, electricity sales and solar power maintenance.

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