



Work on a hydropower project backed by the Power Construction Corp. of China in a remote part of Indonesia is finally moving forward. (Photo by Erwida Maulia)

China pushes ahead with Indonesia's largest hydro-plant project

Nikkei staff writer

TANJUNG SELOR, Indonesia -- A local affiliate of Power Construction Corp. of China, or PowerChina, has started construction on its long-delayed 9-gigawatt hydroelectric plant in the Indonesian portion of Borneo island, with plans to also develop green industries in the area.

Kayan Hydro Energy (KHE) is building road access to sites for the Kayan Cascade project along the Kayan River in Borneo's North Kalimantan Province. Currently, there is no way to access the sites by road so the company says it has to transport heavy equipment via river boat.

Several small warehouses along the planned roads will house explosives used to blast through rocky terrain and to construct a diversion channel for river flows. Company executives say they are awaiting final approval from Indonesia's National Police before explosives can be brought in and used.

"After we're done blasting the diversion channel, which will

[start] early next year, then we'll begin construction of the body of the dam," said KHE director for operations Khaerony in comments to reporters on Sunday at the proposed site of the first dam -- a two-and-a-half-hour boat ride from Tanjung Selor, the capital of North Kalimantan.

The Kayan Cascade project will eventually comprise five dams with a combined power generation capacity of 9 gigawatts, which would make it Southeast Asia's largest hydroelectric station. The project is expected to cost \$17 billion and scheduled to be fully up and running by 2035.

The first dam, Kayan 1 with a capacity of 900 megawatts, is expected to start generating electricity by 2026. The last one scheduled for completion is Kayan 5, with the largest capacity of the five dams at 3.3 gigawatts.

Andrew Suryali, president director of KHE, said the final design for the facility was created by PowerChina Huadong, with SinoHydro taking care of engineering,

procurement and construction. Both are part of state-owned PowerChina, which is also involved in the ongoing construction of Indonesia's first high-speed railway connecting the nation's capital Jakarta with Bandung, capital of West Java Province.

According to Beijing's Belt and Road Initiative infrastructure and investment project website, PowerChina began studying the hydropower potential of the Kayan River in 2008. Suryali said KHE obtained a principal permit for the project in 2011.

But the work has been hit with delays including the region's difficult terrain, poor basic infrastructure and bureaucratic hurdles. Suryali said it took 10 years to obtain dozens of permits after North Kalimantan split from East Kalimantan to become a new province in 2012. These include permits for forest land use, environmental impact analysis and construction of the dams.

The project is finally picking up pace now as coronavirus restrictions have eased and after Indonesia's pledge last

year to become a net-zero carbon society by 2060. It also will help Indonesia transition from an exporter of raw materials to industrialized-nation status.

Hence, the government has high hopes for North Kalimantan. Large rivers running through the province could produce up to 23 gigawatts of electricity, local officials say, which would provide clean energy for a country otherwise heavily reliant on coal power. East Kalimantan, meanwhile, is where Indonesia will build its new capital, Nusantara, at an estimated cost of 466 trillion rupiah (\$31 billion).

President Joko Widodo in late December led a groundbreaking ceremony for Kalimantan Industrial Park Indonesia, a green industrial complex in a coastal area two hours away by car from Tanjung Selor. KIPI is a private consortium led by Indonesian coal miner Adaro Energy, which is constructing a \$728 million aluminum smelter in the complex.

The industrial park will initially spread over 16,000 hectares with the potential to expand to 30,000 hectares -- nearly half the size of Jakarta.

A boat travels along the river at the point where Kayan 1 is to be built. (Photo by Erwida Maulia).

For the near term, KHE is only planning to supply electricity for another green industrial park next to KIPI that will be developed by its affiliate, Indonesia Strategis Industri (ISI). President Director Suryali said tenants that are "ready" to move in include producers of aluminum, ammonia, hydrogen, batteries and even electric vehicles. They are all joint ventures between Chinese and

Indonesian companies including Green Ammonia Indonesia, Alum Ina Indonesia and Nickel Industri Indonesia. The companies are expected to start operations by the time Kayan 1 begins funneling electricity to the complex.

ISI has acquired 2,500 hectares of land in the industrial park, with a goal to expand it to about 4,700 hectares. Suryali said work is already underway at the site.

Another company, Kayan Hydropower Nusantara -- a joint venture between a North Kalimantan-based business and Malaysian utility Sarawak Energy -- will build a 1.37-gigawatt hydro facility to supply electricity to KIPI. A 10-gigawatt solar plant is also planned for the site.

A North Kalimantan provincial official told Nikkei Asia that construction is also ongoing for a petrochemical facility and a port with a one-kilometer jetty within KIPI.



The project has been beset by delays involving the region's difficult terrain, poor basic infrastructure and bureaucratic hurdles, according to Andrew Suryali, right, president director of Kayan Hydro Energy. (Photo by Erwida Maulia)