



TPC Power Holding Plc

“As a holding company investing in power plants, BOI privileges helps us by exempting us from paying tax on dividends to shareholders so they can get a full return from their investments.”

Mr. Cherdasak Wattanavijitkul

Managing Director of TPC Power Holding Plc (TPCH)

Investing in Renewable Power for the Future

TPC Power Holding Plc (TPCH) is a public holding company which invests in alternative energy electrical power plants such as those utilizing biomass, solid waste, and refuse derived fuel (RDF). They currently have a 110 megawatt biomass power plant and a 10 megawatt municipal solid waste power plant under commercial operation. Additionally, TPCH is constructing an RDF power plant in Nonthaburi Province with an expected capacity of 9.5MW. That project is scheduled to commence commercial operation in 2021. They presently have investments in a total of 9 other biomass power plants, along with the plants already mentioned. Their newest power plant to begin generating electricity is TPCH Power 5 Co., Ltd, located in Bang Po Sub-district, Mueang Narathiwat District, Narathiwat Province.

Initially formed as a subsidiary limited company by Thai Polycons Plc in 2012, the company registered to transform into a public company in June of 2014. Today Thai Polycons Plc owns a total of 41 percent of the company's total shares. The electrical generation business of TPCH was the original brainchild of Charoen Chanpalangsri, the founder, who led the construction

business of Thai Polycons Plc at that time. During his business trips as a construction contractor to build a biomass power plant in Yala province, he came up with the idea of running the infrastructure-related business to minimize the risk from the economic uncertainties of the construction business. One of the major benefits of operating a biomass plant versus other renewable resources is that the plant can operate at full capacity over a 24 hour period, compared to 6 hours for solar or typical 8 hours for wind. Additionally, the Thai government actively supports such plants as they provide income for local communities, both for the purchases of biofuel and also the hiring of local staff.

In term of environment friendliness, a 10 megawatt biomass power plant emits 30,000 tons of carbon dioxide less than an equivalent coal powered plant.

Many of company's power plants are located in the south of Thailand for easy access to fuel, the key element for biomass electricity generation. A majority of Thailand's rubber trees are planted in the South, and they are different from other agricultural products such as sugar cane, coconuts or rice husk because they are

non-seasonal. In any given year, 25-year-old rubber trees from approximately 2% of the total plantation areas will be cut. This amount creates a sufficient supply for operating the power plants. For example, the plantation area of Nakhon Sri Thammarat is 1.4 million rai, so 2% equals 30,000 rai. One rai of rubber trees equates to 30 tons of fuel. Therefore, Nakhon Sri Thammarat can provide 900,000 tons of fuel. A 10 megawatt biomass power plant utilizes 100,000 tons of fuel per year, so a sufficient supply of fuel is assured. Moreover, the southern part of Thailand is also a hub of palm tree plantations which themselves are also good sources of fuel for power generation.



Vision for the Future

Mr. Cherdasak Wattanavijitkul, managing director of TPCH, shared his company's goal for the next three years. "The company plans to double its power generation capacity to reach 250 megawatts total capacity. The company will make use of existing supports from the Thai government aimed at increasing the capacity of municipal waste power plants from 400 to 900 megawatts, and the community power plants promotion plan of the Ministry of Energy. The company

expects that these government supports will help drive TPCH to our goal"

"According to our plan," he continued, "we aim to operate power plants all over Thailand – however the specific areas are still undefined. We first have to do a deep dive in each locale to see and understand the agricultural landscape of the target areas, to make sure that our business can really add value and generate income opportunities for the local people there."

In Cherdasak's view, the experience gained in establishing and operating 6 power plants helps in the communication between the company and the local community. Local people have to have trust that this power plant will create advantages for themselves and their families. It will not only enrich the community through the sale/purchase of wood/ fuel and providing employment, but by the supporting fund created in compliance with law to further develop the local environment.

"What worries local people the most is the health issue. Their concerns are not about explosion but more about pollution – both air and water- and how it will affect the community. Our company can properly address all points of concern as our previous experience tells us how to properly manage it."

Supporting Policies from the Government

Thailand is continuing to develop its integrated energy blueprint, consisting of a gas plan, oil plan, the Energy Efficiency Plan (EEP), the Alternative Energy Development Plan (AEDP) and the Power Development

Plan (PDP) along with the Smart Grid Plan (SGP). The “IRENA” report, published in November 2017 by the International Renewable Energy Agency in cooperation with the Thai Ministry of Energy, showed new plans for expansion and further development, including increasing the share of renewable energy from 12% in 2017 to an eventual target of 30% by 2037. To facilitate this goal, the government has established an attractive feed-in tariff and amended several laws and conditions to encourage private investments in renewable energy plants.

Attractive BOI Incentives

For companies considering forming new or expanding existing businesses in Thailand, the Thailand Board of Investment (BOI) offers a wide range of tax and non-tax incentives for projects that meet national development objectives. Tax-based incentives include an exemption or reduction of import duties on machinery and raw materials, as well as corporate income tax exemptions. Non-tax incentives include permission to bring in expatriates, own land and take or remit foreign currency abroad.

Additional information about specific activities relating to the advanced agricultural industry can be found by clicking [here](#) or contacting the BOI’s Investment Promotion Division 1.
