

Dear reporters

January 23, 2024 TESS Holdings Co., Ltd.

# We held a groundbreaking ceremony for the EFB pellet manufacturing plant in Indonesia

We, TESS Holdings Co., Ltd. (registered in Yodogawa-ku, Osaka, Japan and represented by Kazuki Yamamoto, Representative Director and President) are pleased to announce that PT PTEC RESEARCH AND DEVELOPMENT (registered in Riau Islands Province, Indonesia and represented by Tomoya Ishida, Representative Director and President, hereinafter referred to as "PTEC"), our consolidated subsidiary, held a ground-breaking ceremony on Monday, the 22th of January 2024, at the site (West Java, Indonesia) where the company plans to build a plant to produce EFB (\*1 – see note below) pellets, a biomass fuel derived from agricultural crop residues.



Groundbreaking ceremony (January 22, 2024)

Seventh from left: PTPN Group General manager Wahyu

Seventh from right: TESS Holdings Representative Director and President Yamamoto



Image of completed plant

#### ■Aiming to make effective use of EFB in Indonesia by building this plant

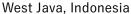
In 2018, our group established PTEC in Indonesia as a research and development base for processing agricultural crop residues into biomass pellets and has been accumulating various "knowhow" for converting the residues including EFB- typical unutilized material from palm oil industries, into a form of biomass pellets.

This plant will be constructed in West Java, Indonesia as a manufacturing base for EFB pellets, utilizing the know-how accumulated to date, and will have a site area of approximately 9,000 m<sup>2</sup>. Operations are scheduled to begin around May 2025, and annual production will be approximately 10,000 tons after the start of operations. The EFB pellets produced will be supplied to a tea plant operated by the PTPN Group, an Indonesian state-owned palm plantation company. By converting some of the fuel used in PTPN Group's tea plant to EFB pellets, we can contribute to the effective utilization of EFB discharged from PTPN Group's palm oil mills. In addition, this is the first case in Indonesia where EFB pellets are produced and locally produced for local consumption (\*2 – see note below). Since the plant will be based on BOT (\*3 – see note below) basis, the ownership of the plant will be transferred to the PTPN Group after a certain project period.

Indonesia is the world's largest producer of palm oil and the palm oil industry is a part of important economic foundation of Indonesia. On the other hand, a large amount of EFB is generated during palm oil process and the most of EFB is consequently left unutilized besides a part being used as fertilizer, whilst no other way for usage. Moreover, it is problematic that it causes soil contamination and generation of gaseous methane during decomposition (GWP of methane is approximately 25) (\*4 -see note below). Therefore, palm oil producing countries are seeking ways to effectively utilize EFB.

In December 2022, PTEC signed an agreement with PTPN Group for the "EFB Pellet Production Project" (\*5 – see note below) and we are currently conducting a feasibility study for constructing full scale pellet production plant with an approximate capacity of 200,000 tons per year in the area of North Sumatra, Indonesia. Activating accumulated knowledge and taking initiative at this plant to produce new alternative fuel, we will challenge to seek for more effective way of EFB utilization in the future.







EFB and EFB pellets (manufactured by PTEC)

#### ■Future Development

The target of our Group activities, the value of our existence in other words, is to contribute for the global energy decarbonization through the realization of Total Energy Savings & Solutions, and we are committed ESG and compliance at the core of our management, focusing on three business areas: namely "renewable energy as main power source," "energy efficiency maximization," and "intelligent energy infrastructure".

Our group will continue to contribute to the realization of a circular economy and global carbon neutrality through the production of biomass fuel using agricultural crop residue by PTEC, Indonesia.

## \* 1 EFB (Empty Fruit Bunch):

Palm empty fruit bunches are a by-product (residue) when extracting palm oil from oil palms.

- \* <sup>2</sup> Based on publicly available information on EFB pellet production in Indonesia. (As of January 23, 2024)
- \* 3 BOT (Build Operate and Transfer):

A method in which a private company builds, maintains, and operates a facility and transfers ownership to the public at the end of the contract period.

\* 4 GWP: Global Warming Potential:

A number that expresses the extent to which other greenhouse gases have the ability to cause global warming, based on CO<sub>2</sub>.

\* <sup>5</sup> Signed an agreement regarding the "EFB pellet manufacturing business" with Indonesian state-run palm plantation company PTPN (Press release, December 23, 2022)

https://ssl4.eir-parts.net/doc/5074/tdnet/2217716/00.pdf

### ■Contact information regarding this matter

Public Relations & Investor Relations Team, TESS Holdings Co., Ltd.

https://www.tess-hd.co.jp/english/contact/

\*\*Our group has adopted telework and staggered working hours.

For this reason, we may not be able to respond over the phone, so please contact us via our homepage. We apologize for any inconvenience this may cause and appreciate your understanding.