

### **CENERGI REFUEL SDN BHD ("CREF")**

**INFO PACK – NOVEMBER 2024** 

# **Cenergi Refuel (CReF)**

### About

Cenergi ReFuel Sdn Bhd ("CReF") was incorporated on **16 November 2017** in Malaysia with registration number 201701041888 (1256061-U)

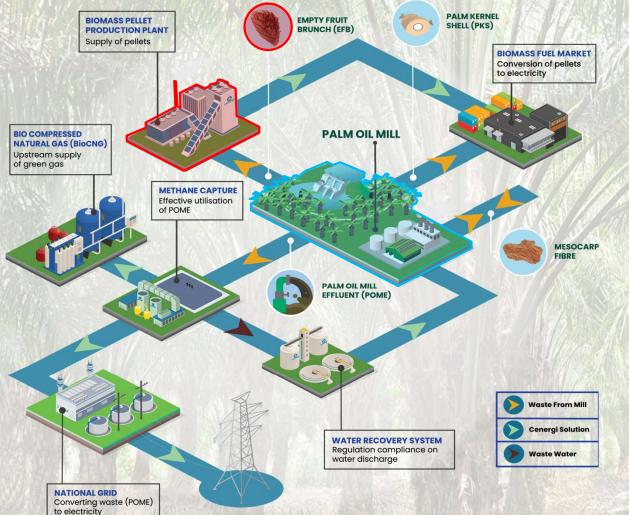
CREF is a wholly-owned subsidiary of Cenergi SEA Berhad ("CSEA"), a premier sustainable energy solutions company specializing in reducing carbon footprint through investment in Renewable Energy and Energy Efficiency projects.

Our businesses:

- Develop, build/refurbish, own and operate biomass pellet plant
- Manufacture and sell biomass pellets to local and international markets



### **Cenergi Business Overview**



**EFB Business** 

- Empty Fruit Bunch ("EFB") Pellets and Briquettes as sustainable biomass fuel provides an additional solution to Malaysia's RE potential, whilst unlocking the value of an underutilised by-product of the palm oil mill.
- With **rising global demand** for sustainable biomass fuel, Cenergi has invested into EFB Pellet and Briquette business.
- EFB Pellets and Briquettes can be **co-fired** with primary fuel in **coal combustion systems** with the potential of displacing up to **5-15% of coal**.

## **CReF Business Overview**

#### **EFB Pellet/Briquette Processing**

Empty Fruit Bunch (EFB)

(makes up 23% of POM's waste)

### EFB Pellets & Briquettes

Treated EFB

Shredded EFB

(for processing)

Pre-treatment (proprietary) (to reduce Na and K content)

#### **Sustainability Impact**



Contributes to Malaysia's low carbon ambitions

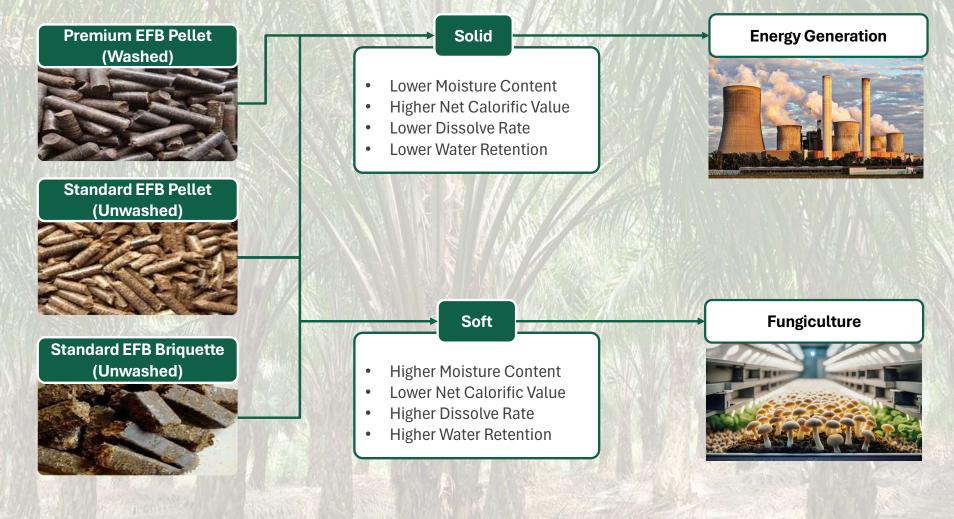
Utilizing renewable fuel Reduces CO<sub>2</sub> emissions from coal-fired power plants



Mitigates release of methane from under-utilized EFB

Effective utilization of an indigenous resource

# **CReF Products & Applications**

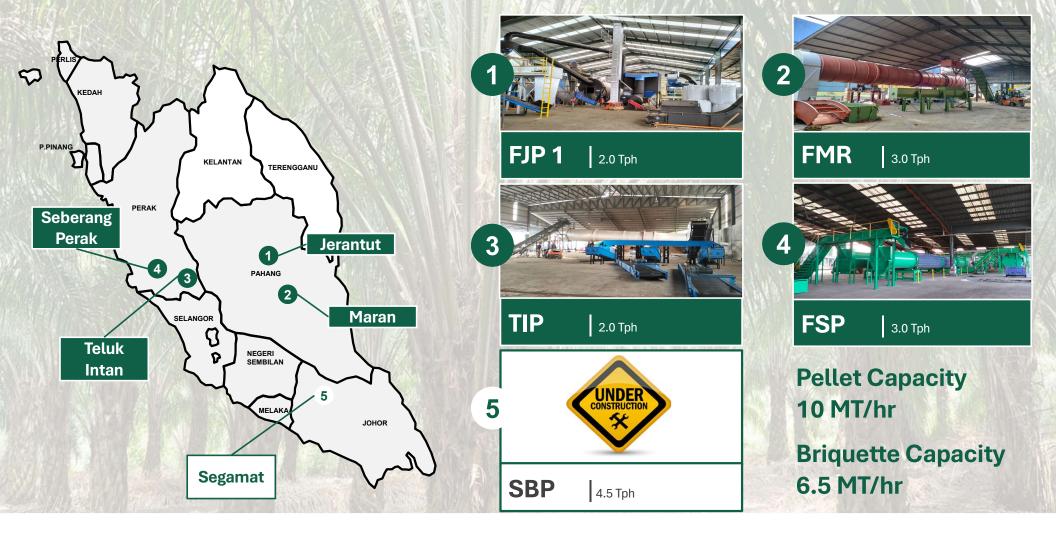


## **CReF Product Specifications**



Product	Premium Pellet	Standard Pellet	Standard Briquette
Chemical Concentration (ppm) Sodium Potassium	< 2,000 ppm	≥ 2,000 ppm	≥ 2,000 ppm
Net Calorific Value (kcal/kg)	3,900 – 4,100	3,900 – 4,100	3,900 – 4,300
Dissolve in water	Solid: More than 3 minutes	Solid: More than 3 minutes Soft: Less than 3 minutes	Solid: More than 2 weeks Soft: Less than 3 minutes
Moisture Content (% wt)	< 10	< 10	< 10
Ash Content (% wt)	≤3	>3	>3
Size	Diameter: 6-8 mm Length: ≤ 32 mm	Diameter: 6-8 mm Length: ≤ 32 mm	30 mm x 30 mm / 18 mm x 18 mm Length: can be customized
Market Application	Fuel	Fuel and Fungiculture	Fuel and Fungiculture
Market	Oversea, Local	Oversea, Local	Oversea, Local

## **CReF Plant Locations**





Thank you



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