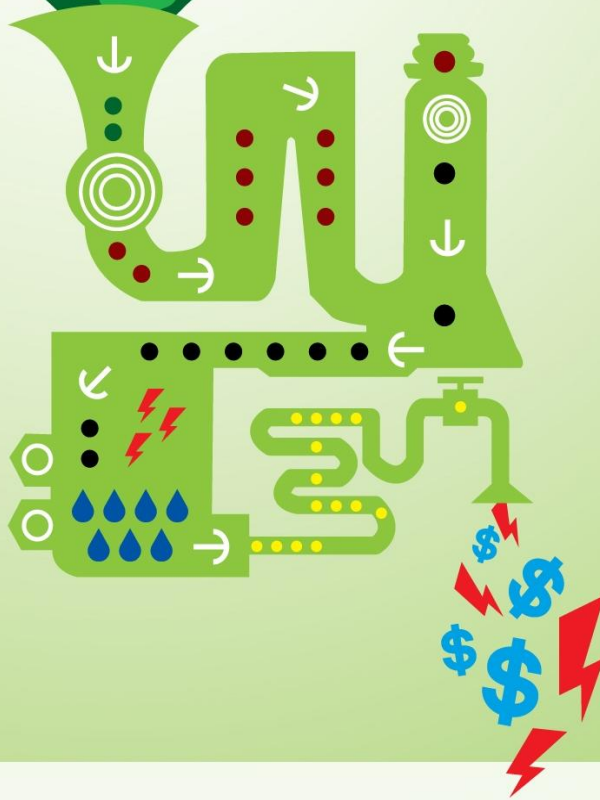


Zero Waste Solutions...

“Green Mill”



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Clean • Green • Renewable

SUSTAINABLE “GREEN MILL”

Crude Palm Oil (CPO) Mills use Fresh Fruit Bunches (FFB) to generate Crude Palm Oil (CPO) for sale. Dynamic economic growth and increasing affluence in developing countries, interrelated global factors associated with increasing price for oil and gas and the resulting focus on alternative bio-fuels is fueling significant growth to the price of CPO.

As the palm oil industry focuses on meeting increasing demand, existing facilities, some which are older, are faced with increased challenges related to environmental compliance issues, including stricter regulations and enhanced enforcement. **A solution to effective management of waste water, air emissions and solid biomass wastes such as Empty Fruit Bunches (EFB) is essential.**

The “GREEN MILL” is an integration of various state of the art proven technologies to provide palm oil millers a zero waste solution with the highest return of investment in the shortest period.

The “GREEN MILL” programme utilizes **ALL WASTES** from the CPO Mill to generate value, including thermal and electric power for the plant usage (offsetting the use of fossil fuels such as diesel) with surplus energy optionally exported to the grid and converts solid biomass into valuable commercial products ... **A TRUE WASTE-TO-MONEY and WASTE-TO-ENERGY SOLUTION.**

The “GREEN MILL” converts all the wastes into commercial products providing the mill with tangible additional income.

Empty Fruit Bunch (EFB)...



The **Fibre Plant** will shred, dry and separate the EFB into Dry Long Fibres (DLF) and Dry Short Fibres (DSF). The DLFs are baled and exported to be used as raw materials for products such as mattresses, erosion control mats and other geo-materials. The DSFs are processed into biomass pellets using a **Pellet Plant**.

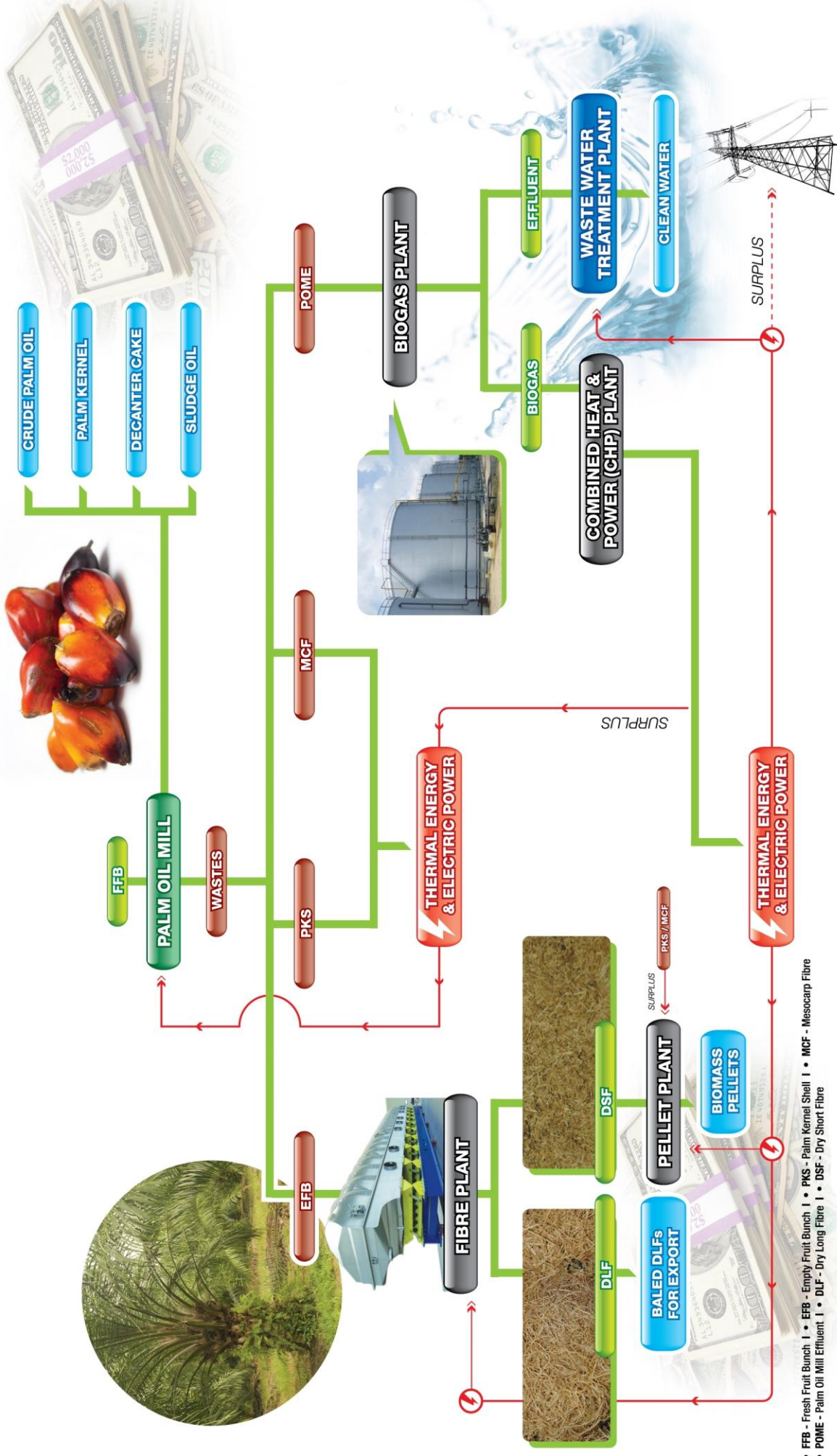
Palm Oil Mill Effluent (POME)...



POME, typically processed in anaerobic and aerobic ponds (resulting in high releases of Greenhouse Gases) will be processed in a controlled anaerobic digestion process that will convert the pollutants in the waste water into a methane rich biogas; which will be used for **providing thermal and electric power to the Fibre and Pellet Plants**. Surplus biogas energy can be optionally exported to the grid.

BENEFITS OF “GREEN MILL”

- Total Solution to environmental challenges (POME discharges)
- Attractive uses of waste biomass, eliminates burdens of disposal
- Guaranteed sources of additional revenues through off-take of dry long fibres (DLF) and biomass pellets
- Production of thermal and electric power (for Fibre & Pellet Plants, Main Boiler Fuel, Grid Power)
- Carbon Credits for Biogas Capture



• FFB - Fresh Fruit Bunch | • EFB - Empty Fruit Bunch | • PKS - Palm Kernel Shell | • MCF - Mesocarp Fibre
 • POME - Palm Oil Mill Effluent | • DLF - Dry Long Fibre | • DSF - Dry Short Fibre

Zero Waste Solutions... "Green Mill" Zero Waste Solutions... "Green Mill"



WASTE-TO-MONEY WASTE-TO-ENERGY



DLF Bales



Provides a **cost-effective addition** to the Natural Fibres market, augmenting the uses of such materials as coconut fibres. These markets are experiencing significant growth.



Biomass Pellets



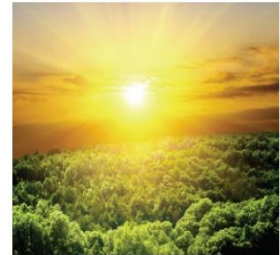
Diminishing supplies of fossil fuels and their irreversible increase in costs, the global focus to stem climate change are fueling the worldwide demand for biomass pellets. Pellets made from waste biomass from CPO mills provides the best solution; including **solutions to rural electrification challenges**.

Clean Water



Strict waste water discharge standards and enhanced enforcement, along with increased emphasis on the need to **preserve pristine ecosystems** are a driving force. Our POME biogas capture and tertiary treatment solutions will provide for optimum reuse of waste water, extraction of valuable resources from waste water.

Thermal Energy and Electric Power



Our programme ensures maximum utilization of waste resources to provide completely **energy-efficient, self-sustaining solutions** at the same time, surplus energy is made available for beneficial uses.



About Us

TOWARDS SUSTAINABLE ENERGY SECURITY



Future NRG is a renewable, alternative, waste-to-energy total solution provider. Future NRG secures project opportunities, manages the permitting processes, carries out the Engineering, Procurement and Construction (EPC) activities including the commissioning, operations and maintenance of the plants.

The technologies that Future NRG integrates include biomass gasification, biomass to energy thermal plants using boilers and steam turbines, biogas generators using anaerobic digesters and thermal plasma gasification.

Future NRG focuses on four (4) main categories of feedstock, namely:

- *Biomass Wastes and Palm Oil Mill Wastes*
- *Municipal Solid Wastes (MSW)*
- *Industrial and Hazardous Wastes*
- *Medical Wastes*

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Future NRG activities are currently focused mainly in Asia where the problem of compounding waste and the need for renewable, alternative energy to substitute fossil fuel and reduce carbon emissions are acute and urgent.

The management and technical team of Future NRG along with its technology partners have over 20 years of experience and is well positioned to work with Governments, communities, municipalities and corporations to implement renewable and alternative energy solutions that are cost effective and sustainable.

Future NRG is a wholly owned subsidiary of FITTERS Diversified Berhad, a company listed on the Malaysian Stock Exchange and has been in business since the 1970s. FITTERS is recognized as Malaysia's leading fully integrated fire protection and prevention specialist. FITTERS has over the years moderately diversify into selected new ventures and identified green energy as one of the way forward for the company. This is mirrored in its tagline ***"Diversified Growth Through Innovation & Technology"***.

Business Partner :