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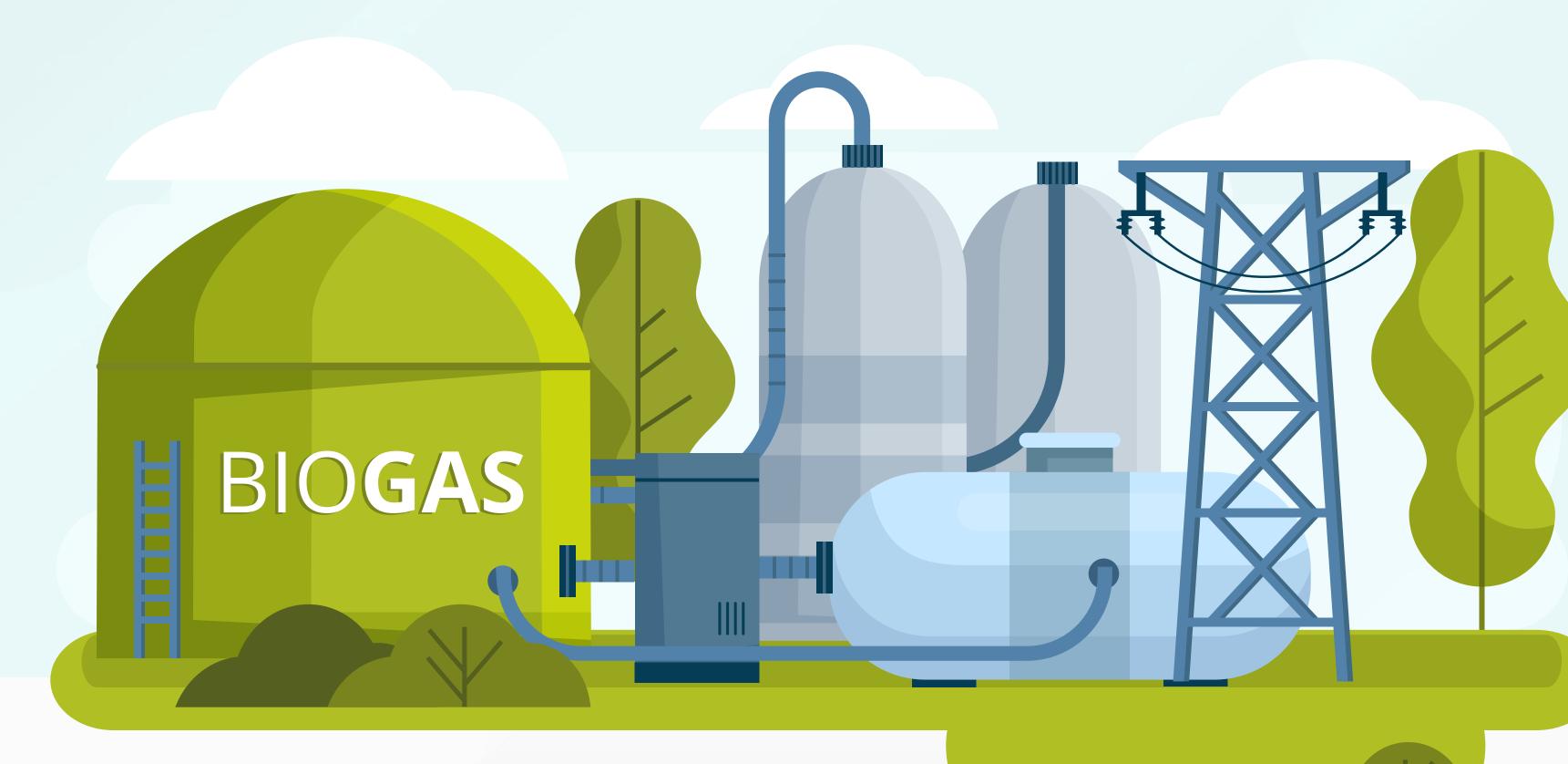
PROGRAM PEMINDAHAN TEKNOLOGI SAWIT MPOB

A BIOGAS TRAPPING FACILITY FOR HANDLING PALM OIL MILL EFFLUENT (POME)

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THE TECHNOLOGY: MANAGING POME THROUGH BIOGAS TRAPPING FACILITY SPECIFICATION OF BIOGAS PRODUCED:

- Biogas quality: 55–65% CH₄, 35–40% CO₂,
 217–1418 ppm H₂S
- Biogas yield: 27 30 m³ biogas/ m³ POME
- COD & BOD reduction rate = 90-95%
- High loading factor = 6-8 kg COD/ m³day
- Short HRT = 7-9 days, life span > 30 years



ADVANTAGES/BENEFITS



Waste to wealth /
Trash to cash



Green and renewable fuel for sustainable future

ECONOMIC ANALYSIS

For a 60 t/hr palm oil mill, the CAPEX for biogas plant only is ~RM8 million while the OPEX is ~RM105,000/yr (including electricity, labour cost, etc.). A payback period of 2-4 years can be achieved with FiT revenue of RM7.9 million/yr (selling price = RM0.45 per kWh).

