



INDONESIA

has



10.5 M

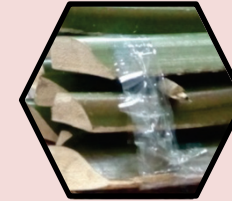
Ha
OIL PALM PLANTATION

producing



10.4 tons

/Ha/Year
PALM FROND



100 M

tons/year
PALM FROND

Palm fronds
not fully
UTILIZED

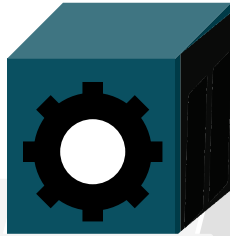
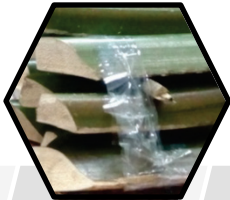
OIL PALM FRONDS TO BIO CRUDE OIL

PALM FROND

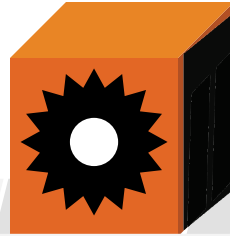
FLAKES

POWDER

BIO CRUDE OIL



CRUSHER



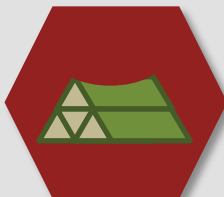
GRINDER



FAST PYROLYSIS REACTOR



**ENERGY
POTENTIAL**



100 M

tons/year

PALM
FROND



50 M

tons/year

BIO
CRUDE OIL



23 M

tons/year

HYDRO
CARBON FUEL

34%

of Indonesia
national fuel
consumption