



Peran Program Mandatory Biodiesel Dalam Mendukung Percepatan Realisasi Program Energi terbarukan

ICE-BSD Tangerang , 17 November 2021

Jummy BM Sinaga

Indonesia Biofuels Producer Association



**ASOSIASI PRODUSEN
BIOFUEL INDONESIA**



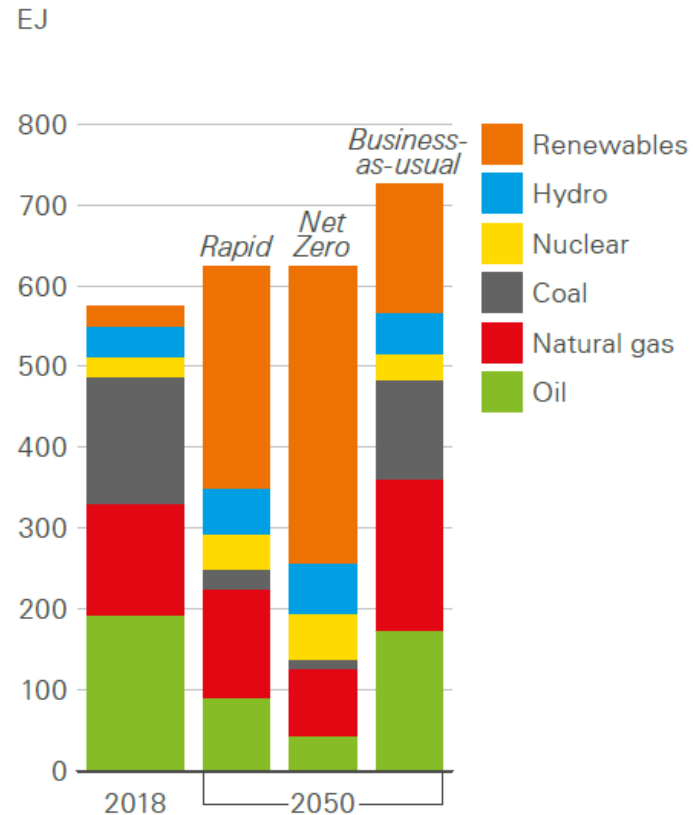
Outline:

- 1. Transisi Energi**
- 2. Konversi Minyak Sawit menjadi Food grade, Oleochemical, Green Energy**
- 3. Program Mandatory Biodiesel**
- 4. Peran Biodiesel dalam GHG Reduction**
- 5. Peran Biodiesel terhadap Ekonomi & Sosial**

1. Transisi Energi

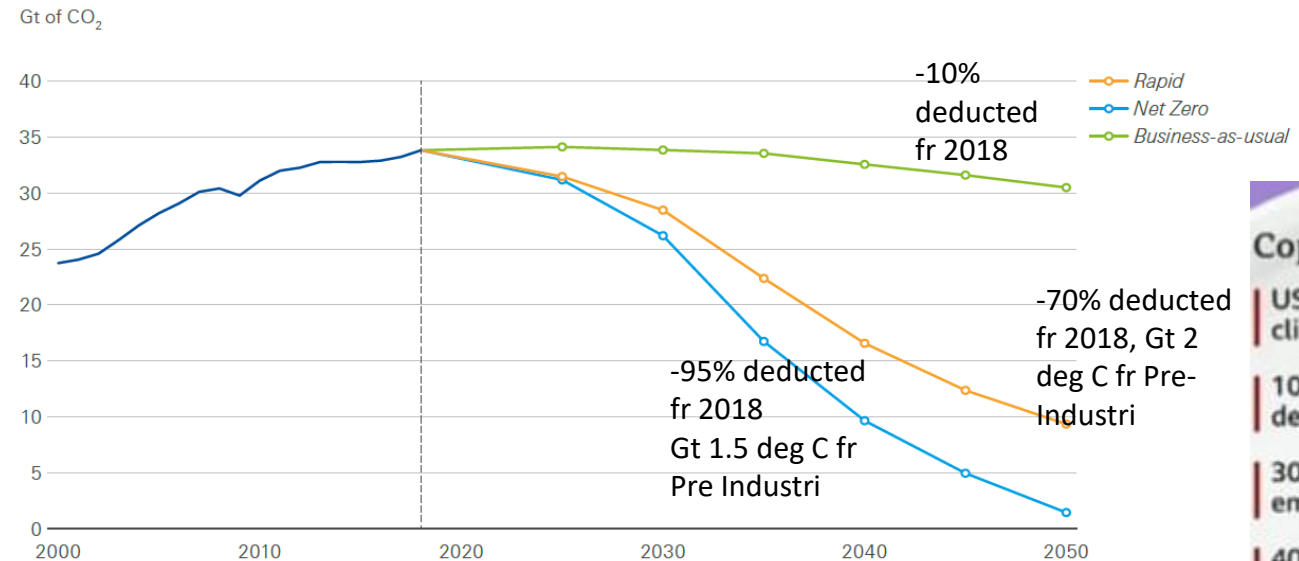


Primary energy consumption by source



Three scenarios to explore the energy transition to 2050

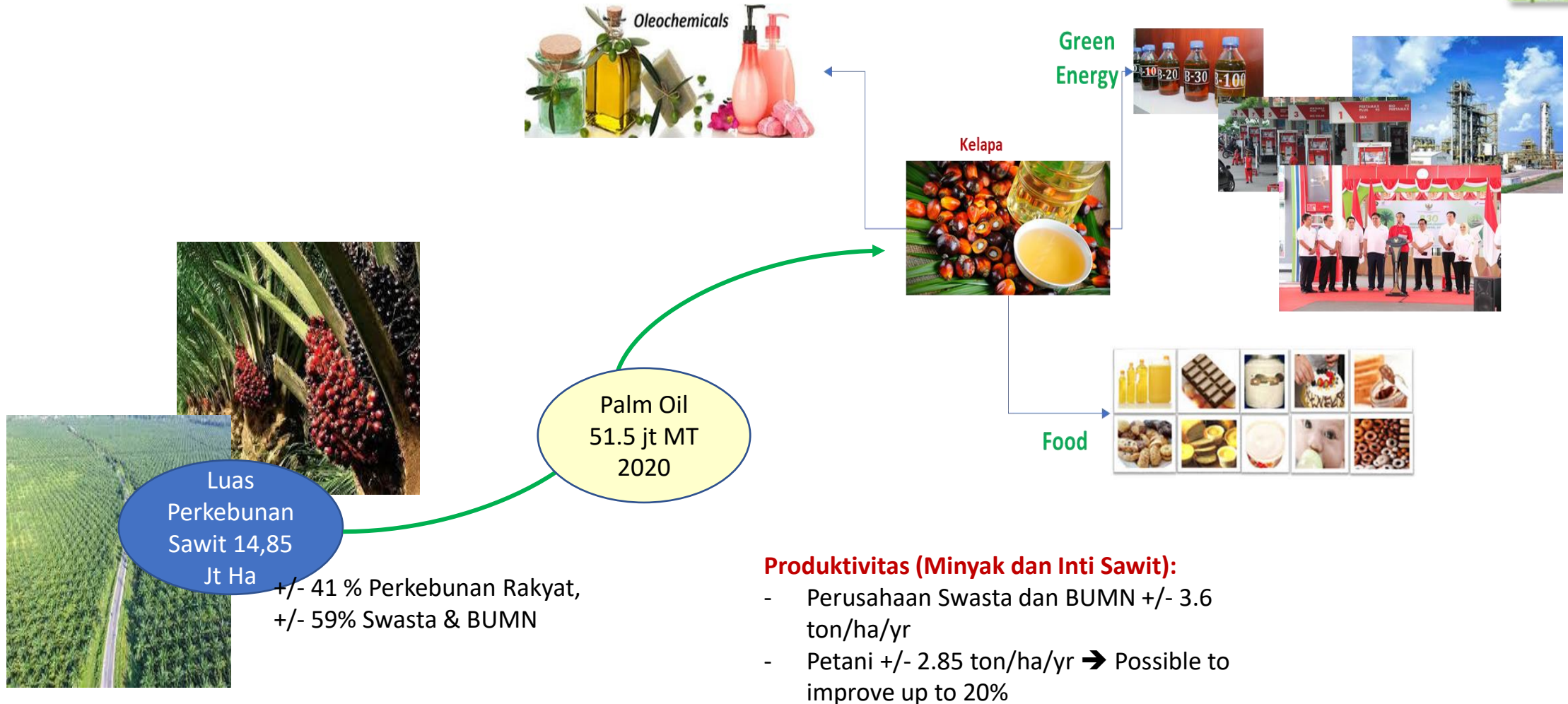
CO₂ emissions from energy use



Cop26: Agreements

- US-China pledge closer climate co-operation
- 100+ nations to end deforestation by 2030
- 30% cut to methane emissions by 2030
- 40+ nations agree to shift away from coal use
- Financial orgs agree to back 'clean' technology

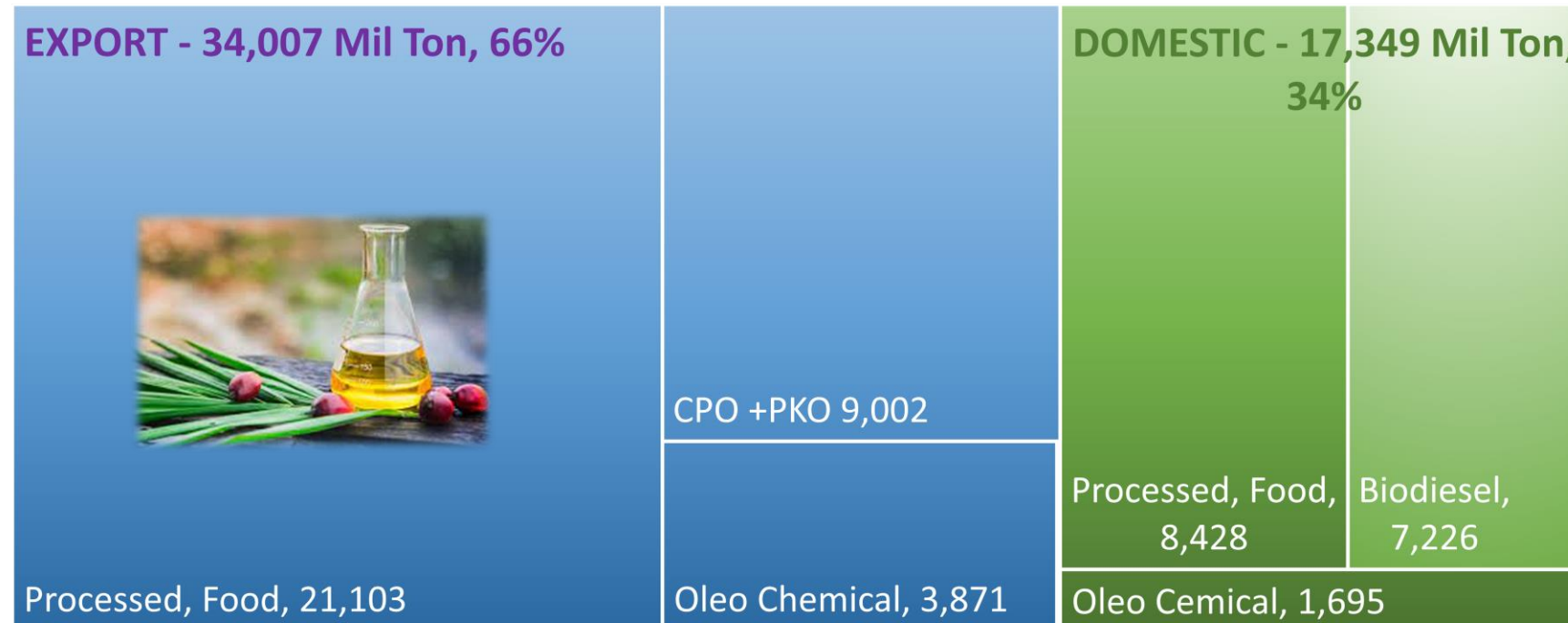
2. Konversi Minyak Sawit menjadi Food grade, Oleochemical, Green Energy



2020 Palm Oil Production & Distribution Map

2020 Palm Oil Production, 51,584 Mil Ton

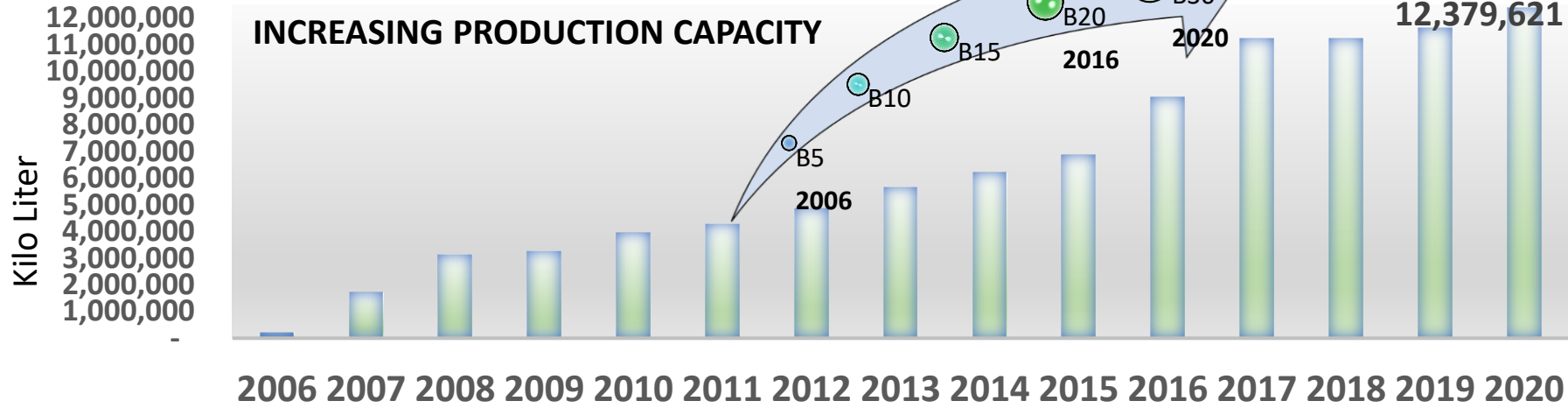
■ DOMESTIC - 17,349 Mil Ton, 34% ■ EXPORT - 34,007 Mil Ton, 66%



Biodiesel Production for domestic took 14% from the 2020 Palm Oil Production

2021 projection, Biodiesel domestic will use about 15.2% from 2021 Palm Oil Production.

3. Program Mandatory Biodiesel Indonesia



2022,
Kapasitas
Biodiesel +/-
15 Jt MT/Yr

**2020
B30**

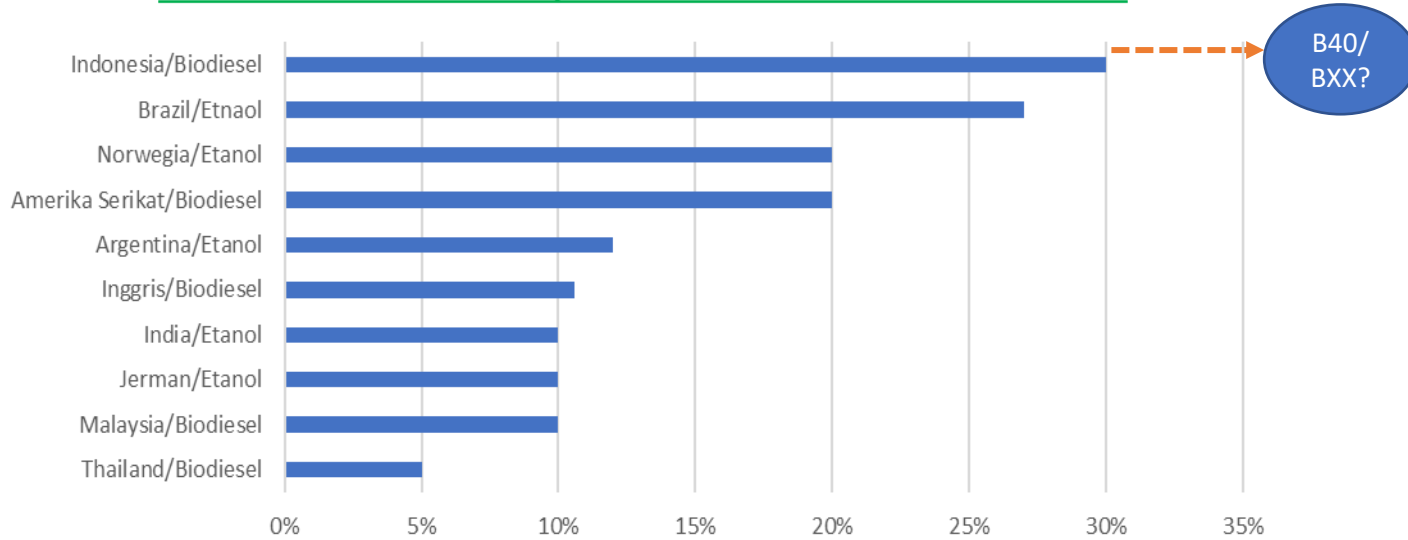
- Production **8,591,368 kl**
- Domestic **8,426,152 kl**

**2021
B30**

- Production **5,063,657 kl**
- Domestic **4,635,204 kl***

* July 2021

Indonesia leads in The Implementation of Biofuel in The World



BD has Participate in
Indonesia's Energy Mix
Target from to 23% in
2025, and 31% in 2050.

Source, APROBI, BDPKPS

4. Peran Biodiesel dalam GHG Reduction

Contribute

Indonesia,
Nationally Determined
Contributions UNFCCC

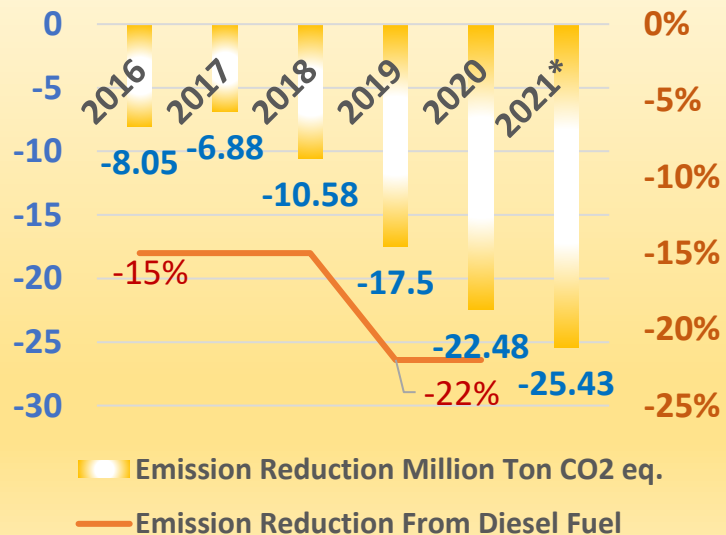
2020

26%

2030

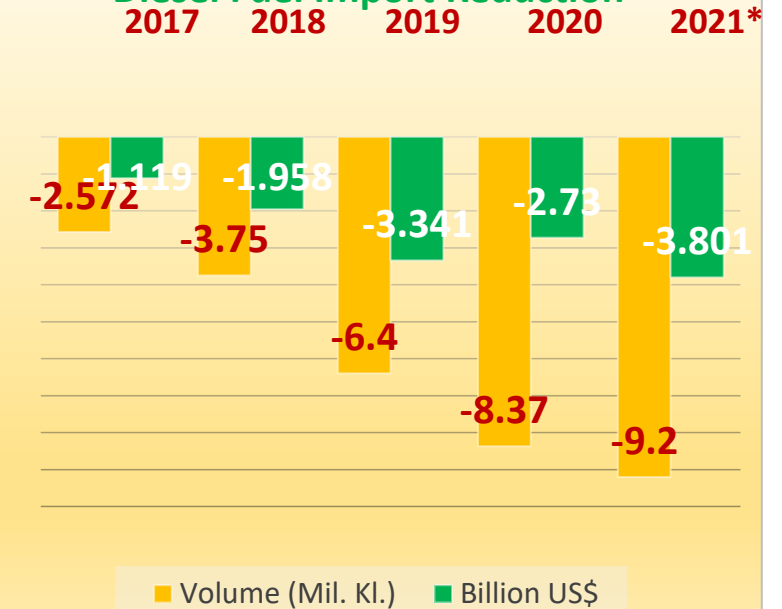
29%

Emission Reduction
& Reduction Percentage from
Diesel Fuel used



- Last year (2020) Biodiesel could contribute reducing 22.48 mil. ton CO₂ eq.
- In 2020, Biodiesel contributes about 7.8% to the GHG Emission reduction energy target as Indonesian NDC in 2030
- Significantly decreasing Diesel Fuel import

Diesel Fuel Import Reduction



Considering to Enviroment

Indonesia has implemented the moratorium on deforestation for any use since 10 (2011) years ago, and moratorium for new Palm plantation since 2018.

Also, it has been formed Peat Restoration Board in 2016

Palm Oil Sustainability Standard RSPO (Roundtable on Sustainable Palm Oil) standard. 51% from Indonesia Plantation, 2,1 million Ha Certified

ISPO (Indonesia Sustainable Palm Oil) standard. More than 800 Indonesia plantations, 4.5 million already certified. Soon we have the ISPO Down Stream and Indonesia Bioenergy Standard Indicator,

ISCC (International Sustainability & Carbon Certification), lot of Indonesian Companies certified.

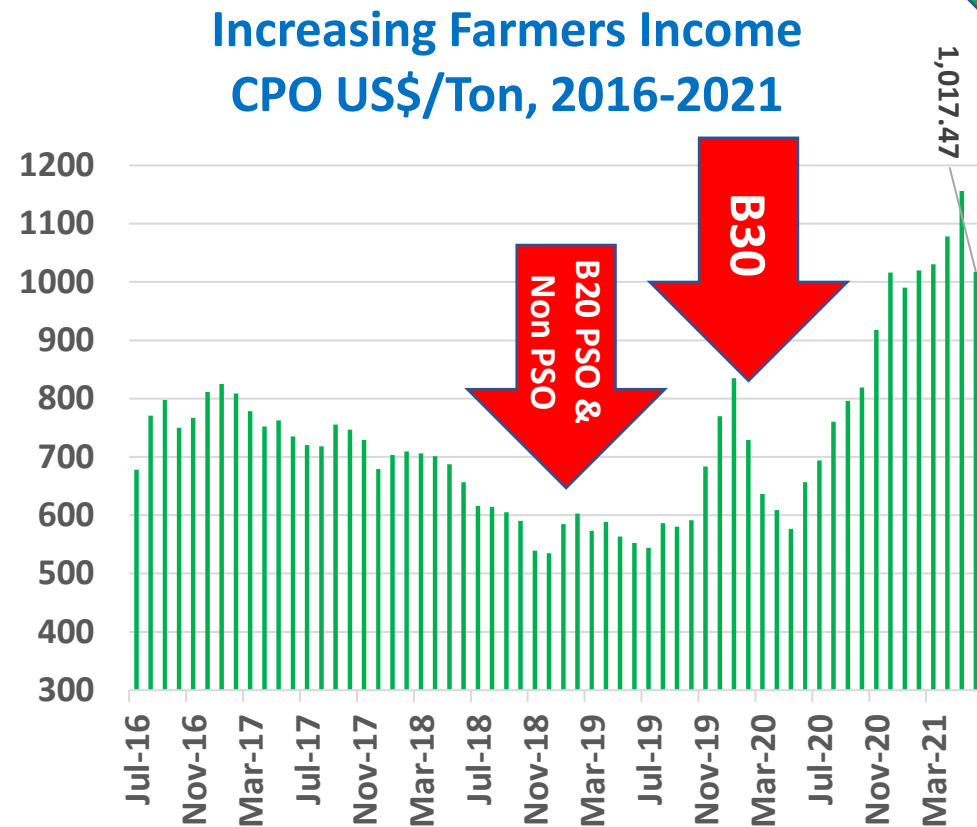
Continue to develop the Biofuel environment friendly processing technology



5. Peran Biodiesel terhadap Ekonomi & Social



Social & Economy Impact



- Shown, the effect of the B20 program for PSO and Non PSO on CPO prices in September 2018 with prices tending to increase until the end of 2019
- Early to mid-2020, there was a decline in CPO prices due to falling world oil prices and the Covid 19 pandemic
- In May 2020, CPO prices have started to improve until now .

UPSTREAM WORKERS
1.160.000



Source, APROBI, Index Mundi, Aug. 2021

Product Development

Biodiesel

- Projection in 2021, ~9.2 M kl and export 1 M kl.
- B40 test in progress for implementation in 2022, Projection 12.8 M kl.

Product Development

- Bio-hydrocarbon fuels, HVO
- Green Diesel, Green Gasoline,
- Bio Avtur,

Feedstock

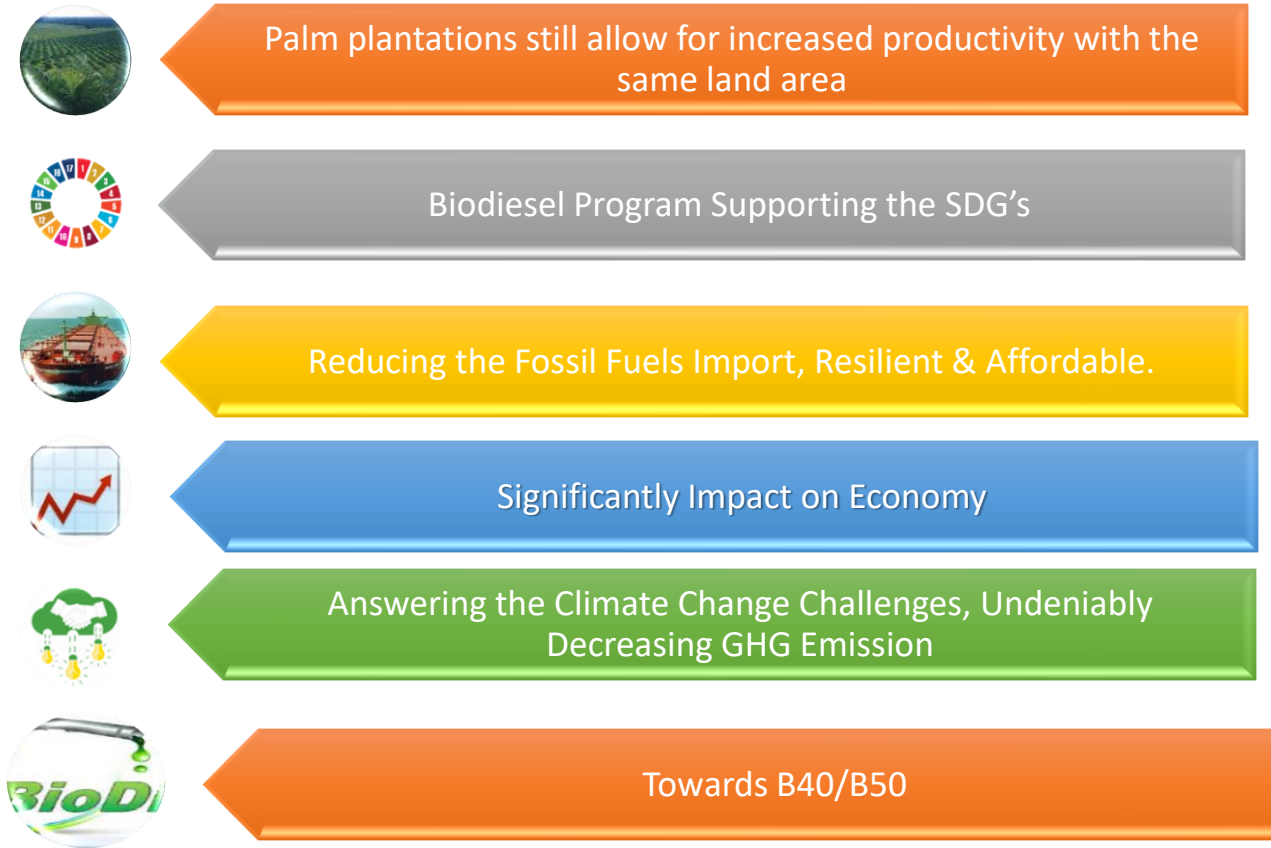
- Cellulose, hemicellulose, or lignin
- Micro algae
- Biomass, Crop residue

Technology

- Unique technologies and processes that transform a wide range of plant, waste, and cellulosic molecules into hydrocarbon molecules like those produced at conventional refineries

- The development of energy from oil palm continued, even heading to Bio-hydrocarbon products such as gasoline, diesel fuel also aviation fuel.
- Some research center to develop bioethanol from palm cellulose.
- Even research on micro algae and other types of raw materials continues to be explored and developed
- Of course, we also improving technology process

Conclusions





Thankyou

- **Asosiasi Produsen Biofuel Indonesia/APROBI**
- ***Indonesia Biofuels Producer Association/IBPA***
- 11th FL. Multi Vision Tower
- Kuningan Mulia 9b,
- Jakarta Selatan 12980
- T +6221 2938 0882
- F +6221 2938 0883
- Email, office@aprobi.or.id
- www.aprobi.or.id