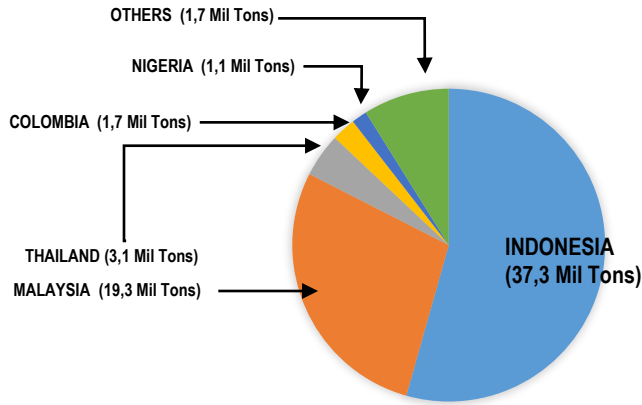




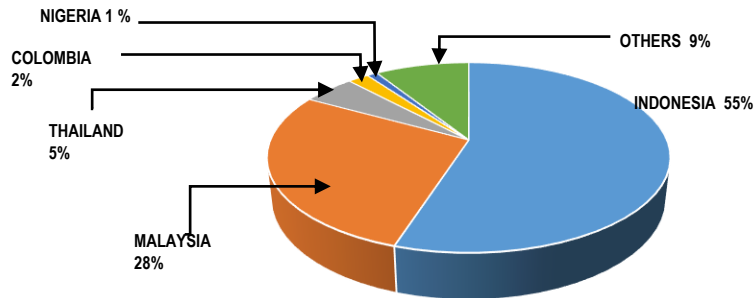
# **SUSTAINABLE PALM OIL AND TRACEABLE PALM KERNEL SHELL**

# INDONESIA PALM OIL INDUSTRY

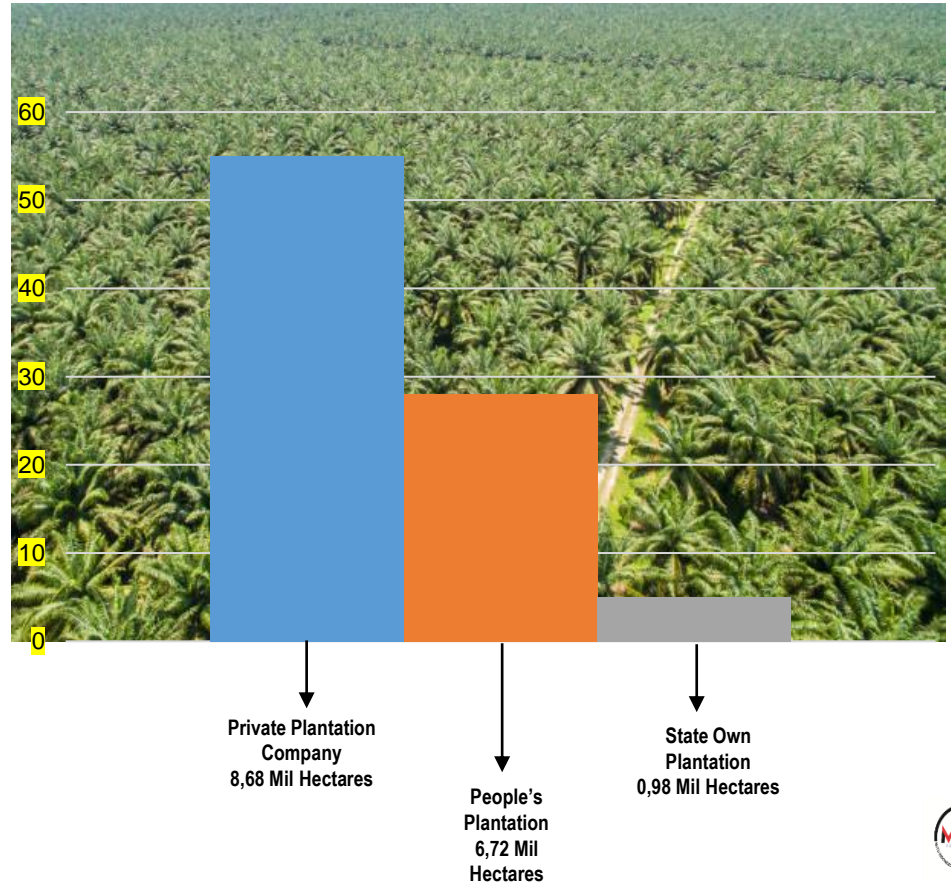
## THE WORLD'S NUMBER ONE PALM OIL PRODUCER



## GLOBAL PALM OIL MARKET SHARE



## RESULTS OF THE NATIONAL PALM OIL COVER RECONCILIATION (2019) INDONESIAN PALM OIL LAND AREA: 16,381,959 Ha (Minister of Agriculture Decree No: 833/2019)



# INDONESIA PALM OIL INDUSTRY



**Significantly  
 Contributing to  
 Employment**

**4.4 MILLION  
 DIRECT JOBS**

**12 MILLION  
 INDIRECT JOBS**



**Supporting to  
 Energy Resilience  
 (Renewable Fuel  
 Sources)**

**Mandatory Biodiesels  
 (B30) Program With  
 Production In 2020 of  
 8,591,368.23 KL**

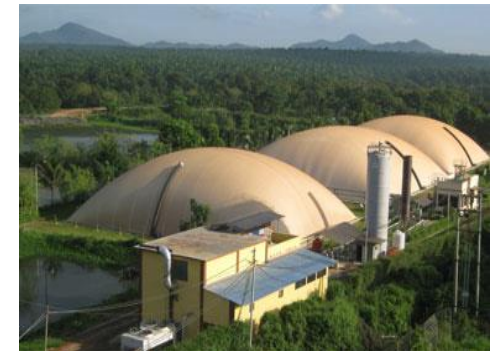


**Supporting Energy  
 Resistance  
 (Renewable  
 Electricity Sources)**

- **879 Palm oil mill**
- **CAPACITY 38,908 tons FFB/Hour**
- **500 tons FFB/Hour GENERATING 23.5 MWh**
- **The total production is 1,828.68 MWh.**



**PT. Nusantara V  
 Plantation**



**PLT BIOGAS Capacity 1.6 MG PT ANJ in  
 Belitung Island (PKS Capacity 90 tons FFB/hour)**



# **CERTIFICATION SYSTEM**

# CONTINUAL IMPROVEMENT OF ISPO

Presidential Regulation & Regulations of the Minister of Agriculture



PERPRES NO. 44/2020  
Indonesian Sustainable Palm Oil (ISPO) Certification System.

PERMENTAN  
NO. 19/2011  
Indonesian Sustainable Palm Oil (ISPO).



PERMENTAN  
NO. 11/2015  
Indonesian Sustainable Palm Oil (ISPO) Certification System.

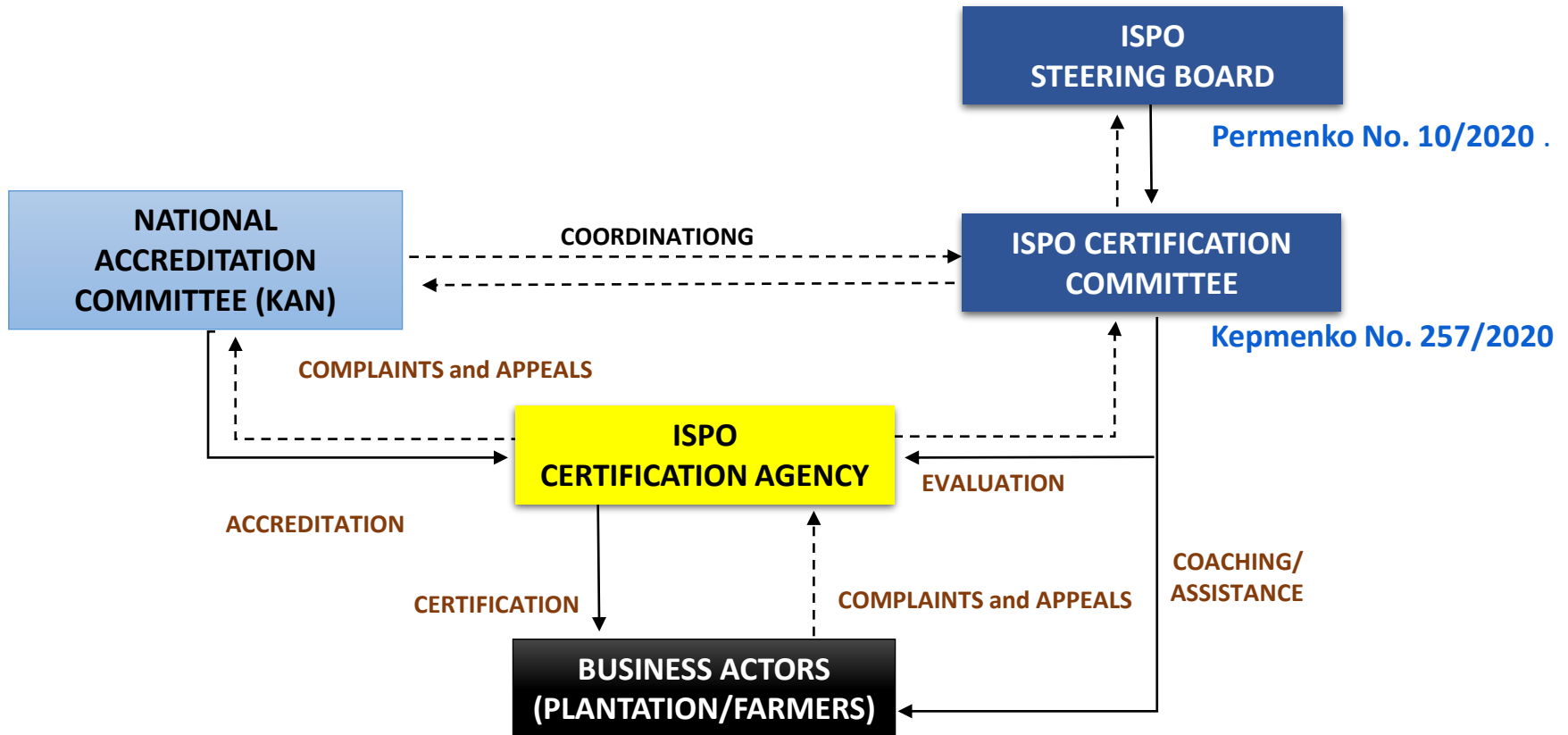


PERMENTAN  
NO. 38/2020  
Implementation of ISPO Certification System

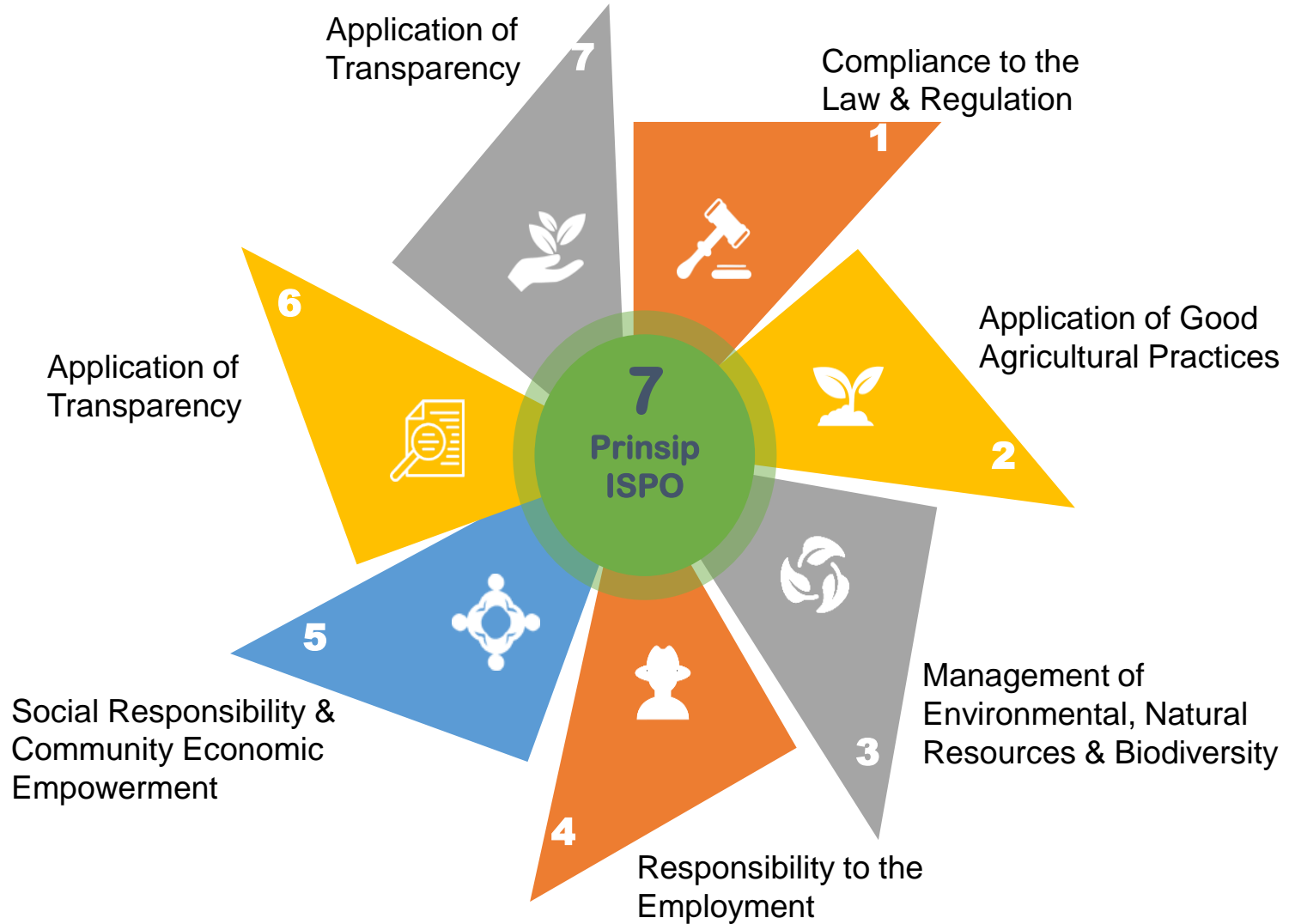


Principles, Criteria and Indicator of ISPO developed based on Laws and Regulations		
1 Scheme: Integrated Oil Palm Plantation & Crude Parl Oil (CPO) Mill	6 Schemes: 1) Integrated 2) Oil Palm Plantation 3) CPO Mill 4) Biofuel 5) Partnership Smallholder 6) Independent Smallholder	2 Schemes: 1) Plantation & CPO Mill* 2) Smallholder
Mandatory for Private Company	Mandatory for Private Company Voluntatry for Smallholder	Mandatory for Private Company and Smallholder
Third party audit by independent Certification Body accredited by National Accreditation Committee		
Final certification decision making entity is ISPO Commission		Final certification decision making entity is Certification Body 5

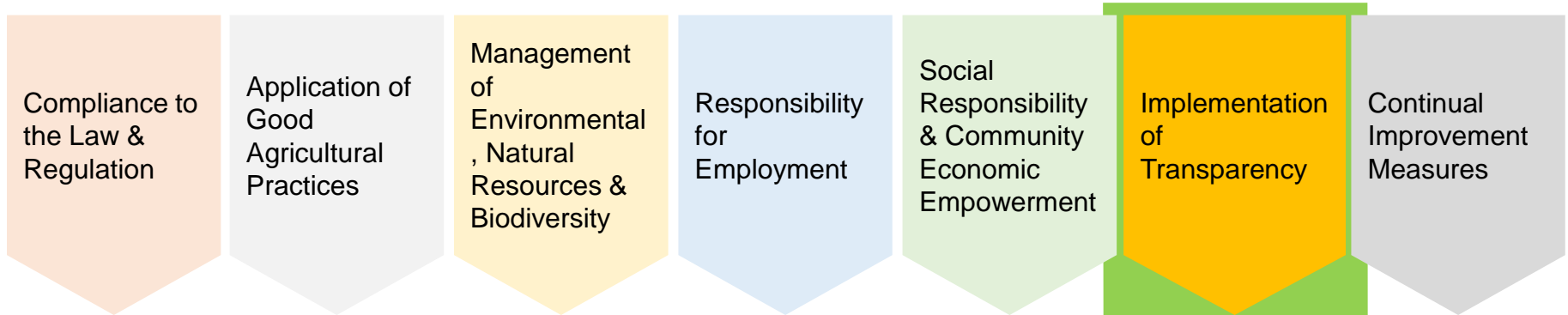
# INSTITUTIONAL ARRANGEMENT OF ISPO



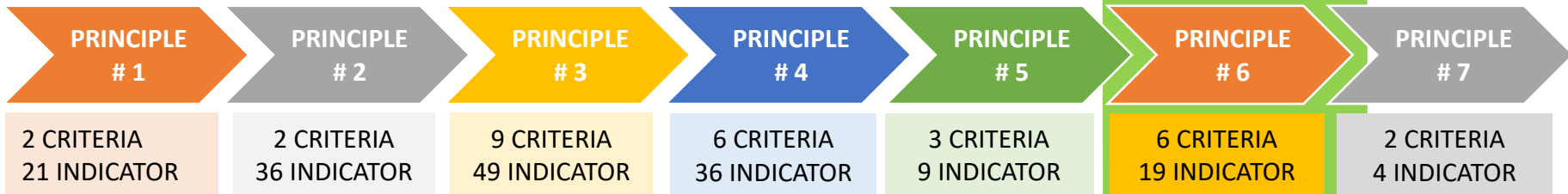
# PRINCIPLES OF ISPO



# PRINCIPLE, CRITERIA & INDICATOR OF ISPO



## PRIVATE COMPANY



## SMALLHOLDER







# **TRANSPARENCY & TRACEABILITY**

**for  
Palm Oil Kernel  
Shell Commodity  
Export**

# ISPO SUPPLY CHAIN CERTIFICATION



## PERMENTAN No. 38/2020

- Supply Chain System to regulate and guarantee the integrity and traceability of palm oil products in all stages,
- Initiated by the implementation of ISPO transparency principles at plantation and CPO mills.
- ISPO product traceability mechanism and its certification by independent third-party Certification Body have to be implemented in 2025.
- The mechanism will apply the Supply Chain Model of Mass Balance and Segregation.

## Director General Of Plantations Decree No. 348/KPTS/OT.050/12/2020

- Guidelines for Inclusion of the Logo for the Implementation of Indonesian Sustainable Palm Oil Certification.
- ISPO Certified CPO Mills is allowed to use ISPO Logo following this guidance.

## Regulation of the Minister of Industry (Draft)



- Supply Chain System to regulate and guarantee the traceability of palm oil derivative products within the category of food, cosmetics and other agrochemical, personal care, and surfactant products.
- The traceability aspect is implemented with QR Code-based information technology at each stage: receiving raw materials, processing, storing, transporting, to loading/unloading exports of downstream palm oil products.



## Regulation of the Minister of Energy & Mineral Resources (to be drafted)

- Supply Chain System to regulate and guarantee the traceability of palm oil derivative products of biofuel.

# PALM KERNEL SHELL TRACEABILITY

- Palm oil kernel shell is a waste product resulted after the processing of palm kernel in the CPO Mills.
- The Directorate General of Plantations is currently drafting the SNI Draft on the Indonesian Palm Shell Traceability System.
- The instruments to guarantee the traceability of palm kernel shell, for further discussion, could be:
  - 1) Information System providing the reliable and verifiable data of ISPO Certified CPO Mills that produce palm kernel shell as a traceable source for the export of this commodity.
  - 2) Inspection mechanism providing guarantee that specific quantity of palm kernel shell
  - 3) Specific supply chain certification schemes as integrated part of ISPO certification scheme that guarantee the traceability of palm kernel shell sourced from Certified CPO Mills.





# **Additional Explanations**

# GHG EMISSION REDUCTION POLICY IN PALM OIL COMMODITIES

- In ISPO Criterion 3.8, namely Green House Gas (GHG) Emission Mitigation, there are 5 assessment indicators, namely: (1) Having SOPs for GHG emission mitigation; (2) Having an inventory of GHG emission sources; (3) Having GHG calculation results; (3) Have GHG calculation results; (4) Have land history documents; (5) Have GHG mitigation documents.
- Environmental permit in criterion 3.1 contains activities that must be carried out by the company for environmental control of business activities. environmental management activities are carried out in accordance with the provisions of the environmental regulations of the Ministry of Environment and Forestry which include biodiversity. The implementation of environmental permits affects the carbon stock.
- In ISPO Criterion 3.9, namely Plantation Business Actors Protecting Natural Forests and Peat, there is 1 assessment indicator, namely: Documents are available showing that new plantation developments do not clear natural forests and peatlands in accordance with applicable laws and regulations.

# SOURCES OF GHG EMISSIONS AND POTENTIAL CLIMATE CHANGE MITIGATION ACTION IN OIL PALM PLANTATION

## Sources of GHG Emissions in Oil Palm Plantation including:

- Land conversion to oil palm plantations (mineral land)
- Land conversion to oil palm plantations (peat land)
- Fertilizer use
- Transportation to support plantation activities
- Solid waste management
- Forest/land fires.

- Mitigation actions from plantation integration and processing activities can be divided into 5 groups, namely from: (a) land management, (b) plantation cultivation, (c) transportation, (d) energy use, and (e) waste treatment.

## Self Monitoring Implementation of Climate Change Mitigation

1. Avoid clearing natural forest land for oil palm activities
2. Rehabilitation of abandoned/critical land
3. Application of land clearing without burning
4. Use of organic fertilizer
5. Peat restoration
6. Improvement of peat water system

# Initiatives/Efforts to Reduce GHG Emissions and Increase Carbon Sequestration in Palm Oil Commodities

1. Application and development of palm-livestock integration, by utilizing agricultural waste for animal feed and cow dung for bioenergy/biogas and compost.
2. Application and development of intercropping for palm-palawija during the immature plantation (TBM) period.
3. Development of organic fertilizers to increase carbon storage in soil
4. Control of Plant Pest Organisms (OPT) is carried out with an Integrated Pest Management (IPM) system.
5. Expansion of plantation area on abandoned/degraded land.
6. Rehabilitation, reclamation and revitalization of abandoned peatlands and peatland management for sustainable agriculture (water management)
7. Development of technology for land clearing without burning (PLTB).
8. Implementation of sustainable oil palm plantations through ISPO certification.
9. Oil palm plantations use cover crops (LCC), to increase moisture, especially on peatlands.
10. Optimization of land, namely by increasing productivity through rejuvenation of old plants and extensification carried out in areas with low C reserves.