**Industry to Reach Net Zero – A Commitment or a Mission?** 





SCALING UP THE SUSTAINABLE PALM OIL VALUE CHAIN THROUGH COLLECTIVE ACTION







## About the Speaker: Puah Chiew Wei, Ph.D.

- Dr. Puah Chiew Wei is the Director of Strategy and Policy, Council of Palm Oil Producing Countries (CPOPC). She graduated from University of Malaya, Malaysia with a Bachelor of Science (Major in Applied Chemistry and Minor in Statistics) and Ph.D. in Chemistry. She has more than 20 years of working experience in the Malaysian oil palm industry.
- Prior to be appointed as the Director of Strategy and Policy, Dr. Puah served as Minister at the Embassy of Malaysia and Mission of Malaysia to the European Union in Brussels, Belgium, concurrently as the Regional Manager (Europe) of the Malaysian Palm Oil Board (MPOB) from September 2017 to June 2022.
- Her other appointments included the Head of Sustainability and Climate Change Centre, MPOB (2013 to 2016) and Leader of Sustainability and Climate Change Group, MPOB (2009 2013). She was seconded to the Ministry of Plantation Industries and Commodities, Malaysia from November 2008 to March 2011, particularly for the implementation of the biodiesel programme in Malaysia.







nature climate change

#### **PERSPECTIVE**

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#### The meaning of net zero and how to get it right

Sam Fankhauser <sup>1,2</sup> <sup>2,2</sup>, Stephen M. Smith <sup>1</sup>, Myles Allen <sup>1</sup>, Kaya Axelsson<sup>1</sup>, Thomas Hale <sup>1</sup>, Cameron Hepburn <sup>1</sup>, J. Michael Kendall <sup>1</sup>, Radhika Khosla <sup>1</sup>, Javier Lezaun <sup>1</sup>, Eli Mitchell-Larson<sup>2</sup>, Michael Obersteiner <sup>1</sup>, Lavanya Rajamani<sup>7</sup>, Rosalind Rickaby <sup>1</sup>, Nathalie Seddon<sup>8</sup> and Thom Wetzer <sup>1</sup>,

The concept of net-zero carbon emissions has emerged from physical climate science. However, it is operationalized through social, political and economic systems. We identify seven attributes of net zero, which are important to make it a successful framework for climate action. The seven attributes highlight the urgency of emission reductions, which need to be front-loaded, and of coverage of all emission sources, including currently difficult ones. The attributes emphasize the need for social and environmental integrity. This means carbon dioxide removals should be used cautiously and the use of carbon offsets should be regulated effectively. Net zero must be aligned with broader sustainable development objectives, which implies an equitable net-zero transition, socio-ecological sustainability and the pursuit of broad economic opportunities.

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Bio-organic fertilisers

Avoidance and reduction of emission from palm oil mill effluent

Biogas capture for generation of renewable energy

Non-oil phase as a food source

Feedstock for the production of biofuels

many more...



## **Comparing Roles of Tropical Forest and Palm Oil Plantation**



13 CLIMATE ACTION





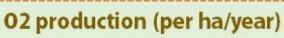
64.5 tons

**Palm Oil Plantation** 

CO2 absorption (per ha/year)













1.7 g/mega joule

0.9 g/mega joule

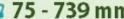
energy conversion efficiency (per ha/year)



Air Humidity (%)









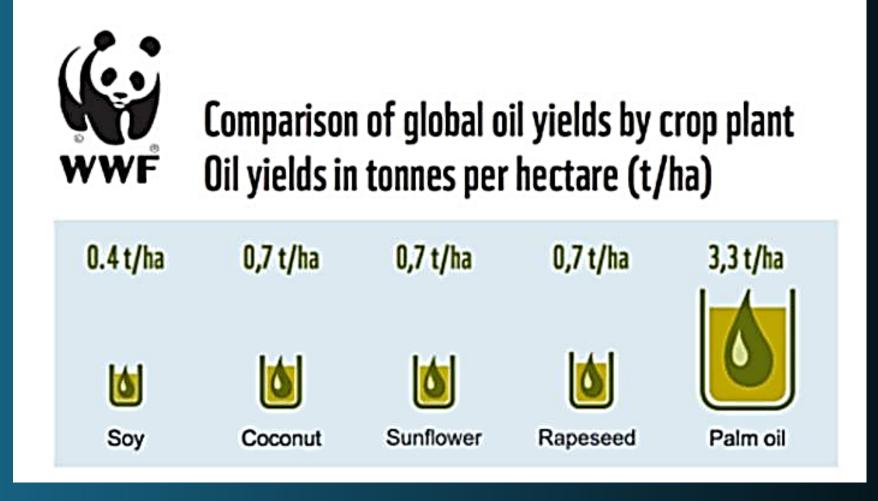








### Comparison of global oil yields by crop plant









## Forest cover in Indonesia and Malaysia

Country	Forest cover		Oil palm planted area	
	(million ha)	(%)	(million ha)	(%)
Indonesia	120 <sup>(1)</sup>	64	16.38 <sup>(3)</sup>	8.6
Malaysia	18.3 <sup>(2)</sup>	55	5.74 <sup>(4)</sup>	17.4

#### Source:

- 1. Ministry of Environment and Forestry, Republic of Indonesia (2020)
- 2. Ministry of Energy and Natural Resources, Malaysia (2018)
- 3. Ministry of Agriculture, Republic of Indonesia (2019)
- 4. Malaysian Palm Oil Board (2022)







# Palm Oil – The only vegetable oil with stringent certification requirements











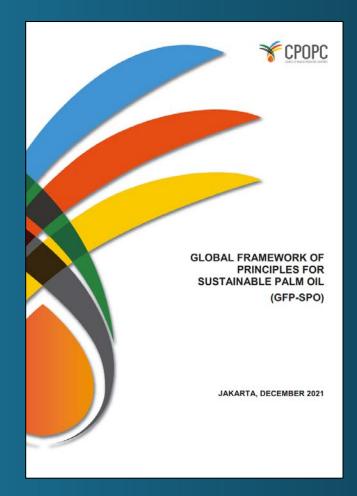


# Global Framework of Principles for Sustainable Palm Oil (GFP-SPO)

- CPOPC established the Global Framework of Principles for Sustainable Palm Oil (GFP-SPO) to harmonise the sustainable practices for production of palm oil to fulfil the global demand for a healthy and nutritious oil at an affordable price.
- The GFP-SPO is expected to act as a foundation to develop sustainability principles for other vegetable oils.
- The GFP-SPO is proof that we, as the primary global supplier of palm oil, are at the forefront of continuous improvement for a sustainable value chain of palm oil.







GFP-SPO is using the United Nations
Sustainable Development Goals (SDGs) as its
base to ensure that it is anchored in a common
and well-recognized framework.

## **Seven (7) Principles of GFP-SPO**

- Develop partnerships for sustainable development through transparency and collaboration and include other vegetable oils
- 2. Uphold peace, justice, and strong institutions through compliance with laws and regulations
- 3. Invest in innovation and technology to drive the adoption of efficient and best management practices
- 4. Minimize the net impact to the environment and ecosystems through the efficient use of natural resources
- 5. Benefit workers and local communities by improving their living conditions and respecting their rights
- 6. Inclusiveness for smallholders and low-income consumers
- 7. Commitment to continuous improvement







#### How do principles align across certification schemes?

	GFP-SPO Principles	Indonesian Sustainable Palm Oil (ISPO)	Malaysian Sustainable Palm Oil (MSPO)	Roundtable on Sustainable Palm Oil (RSPO)
1.	Develop partnerships for sustainable development through transparency and collaboration and include other vegetable oils	$\sqrt{}$	V	$\sqrt{}$
2.	Uphold peace, justice, and strong institutions through compliance with laws and regulations	$\sqrt{}$	$\sqrt{}$	$\checkmark$
3.	Invest in innovation and technology to drive the adoption of efficient and best management practices	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
4.	Minimize the net impact to the environment and ecosystems through the efficient use of natural resources	V	V	$\checkmark$
5.	Benefit workers and local communities by improving their living conditions and respecting their rights	V	V	
6.	Inclusiveness for smallholders and low-income consumers	V	V	
7.	Commitment to continuous improvement	√	√	<b>√</b>







### **Objectives of CPOPC**

Visible, Relevant, Effective

To promote, develop and strengthen cooperation in the oil palm cultivation and industry among the Member Countries, and

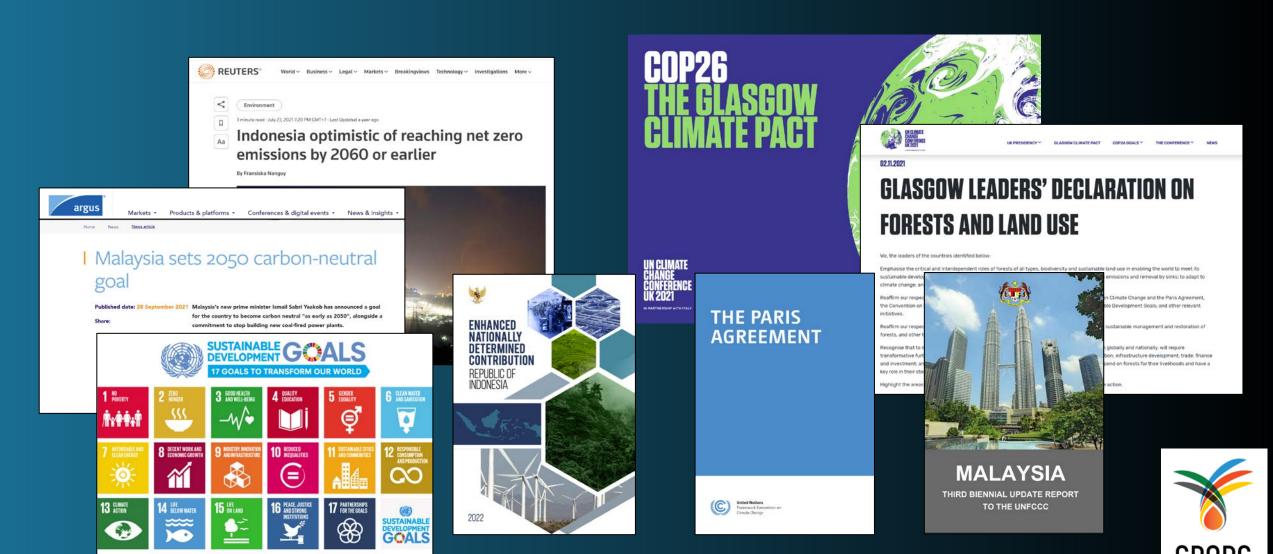
To ensure long term benefits of such palm oil endeavours to the economic development and well being of the people of the Member Countries.







#### **Commitments of Member Countries of CPOPC**







#### Conclusion

# Palm Oil Industry to Reach Net Zero – A Commitment and A Mission





# **CPOPC**

COUNCIL OF PALM OIL PRODUCING COUNTRIES

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