



PT DHARMA SATYA
NUSANTARA, TBK
DSNG

Sustainable Palm Oil Dialogue
Brussels, May 2024

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DSNG GROUP



DSNG TODAY ABOUT DSNG



PT Dharma Satya
Nusantara Tbk (DSNG)
was established on
September 29, 1980.

1983



The Company operated its first **timber factory** in Samarinda, East Kalimantan, which produced sawn timber for export to Japan

1991



The Company's wood production base moved from Kalimantan to Java. Established wood processing factory in **Temanggung** and wood processing plants in **Lumajang and Banyumas**

1996



The Company expanded into the **palm oil** business in Muara Wahau Village in East Kalimantan.

1998



Pioneered using **sengon wood (Albizia)** as raw material which is harvested from community Agroforestry farms

2013



On June 14, 2013, the Company became a **public listed** company in Indonesia Stock Exchange with ticker code DSNG

2018



The Company acquired two palm oil plantation company in East Kalimantan with total planted area 17K ha & 2 mills

2020



On 23 April 2020, DSNG signed a loan facility of USD 30 million for 10 years from Stichting **Andgreen Fund** ("&Green"). The Company commits to comply to IFC PS, RSPO, and implement the NDPE and LPP

2023



On 26 January 2023, DSNG signed a Sustainability linked loan facility of USD 15 million and Grant of USD 500K for technical assistance from **Asian Development Bank (ADB)**

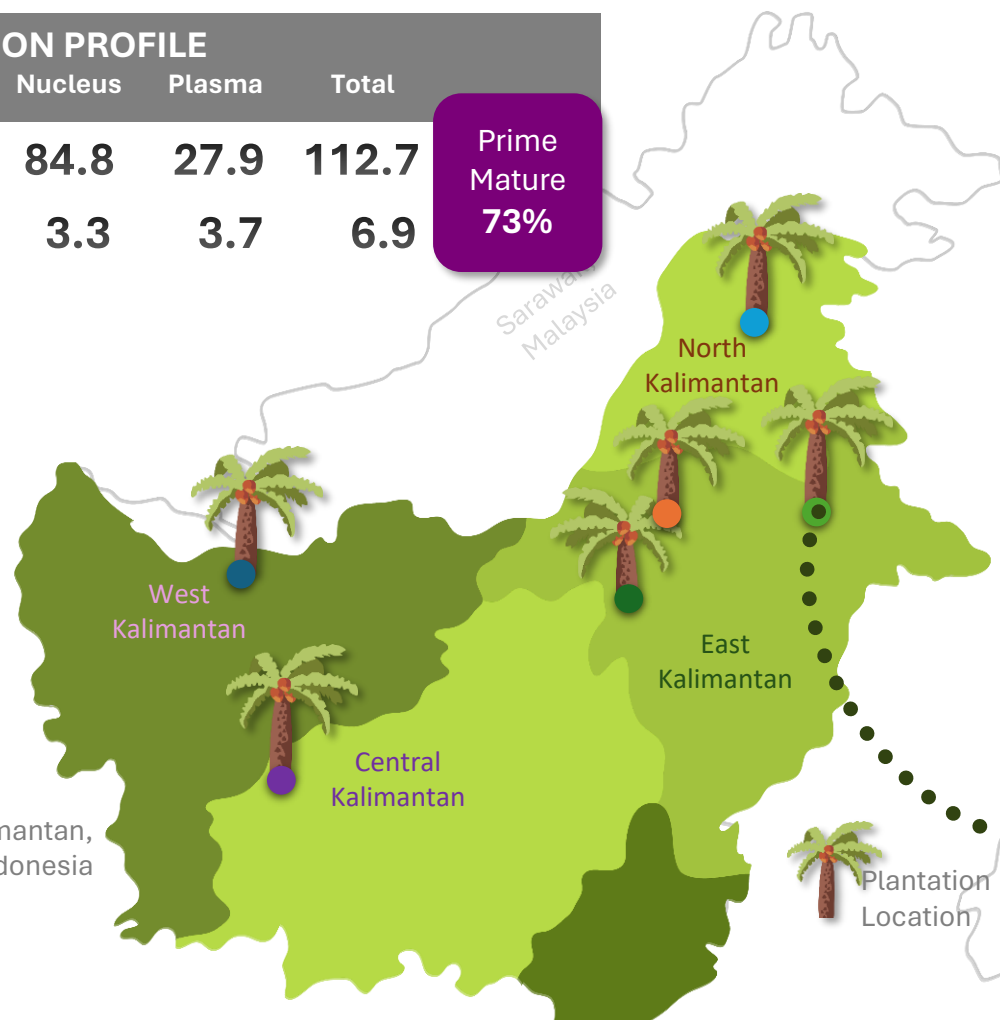
ABOUT DSNG PALM OIL SEGMENT

As of December 2023, Total planted area of the company, including nucleus and plasma, reached 112.7 thousand hectares, with mature area of 105.7 thousand hectares

PLANTATION PROFILE (*000 ha)

	Nucleus	Plasma	Total
Planted	84.8	27.9	112.7
Immature Plantation	3.3	3.7	6.9

Prime Mature
73%



PRODUCTION FACILITY

675^{ton/hour}
FFB

12 CPO Mills

400^{ton/day}
PK

1 PKO Mill

1,2^{MW}
Listrik

280^{m³/hour}
Bio-Methane Gas

1 Bio-CNG Mill

+ 1,7MW, 570 m³/jam

126K^{ton}
Storage Tank

In construction

±60.000 ha in
One Contiguous Area

Our most developed cluster
(±56%) in East Kalimantan is
nearly the size of Singapore



CERTIFICATION



RSPO

100% RSPO Certified Target

NUCLEUS

RSPO Certified 54.468 Ha

Not yet certified 30.098 Ha

RACP approved in Dec 2023
& scheduled for 100%
Certification Audit in 2024

PLASMA

RSPO Certified 2.762 Ha

Not yet certified 22.255 Ha

Target : 2025

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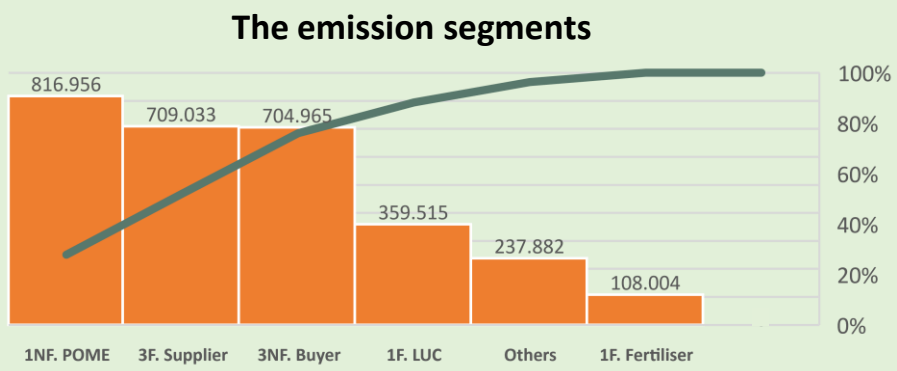
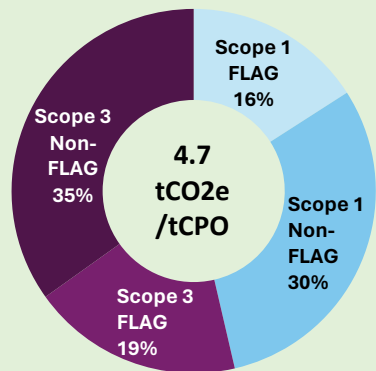
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OUR CAP JOURNEY GHG BASELINE & CLIMATE RISK AUDIT

2019 GHG Baseline Audit 2,936,354 tCO2e



“Climate Change is driven by greenhouse gas (GHG) emissions that act like a blanket wrapping around the Earth, trapping the sun's heat, raising temperatures and altering long-term weather patterns.”

2021 Climate Risk Audit

Physical Risk

Risk		WATER SCARCITY	RIVER FLOODS	EXTREME HEAT	LAND SLIDES	CYCLONE
Year	Baseline	1	3	2	3	1
RCP 4.5	2030	1	3	3	3	1
	2050	1	3	3	3	1
RCP 8.5	2030	1	3	3	3	1
	2050	1	3	3	3	1

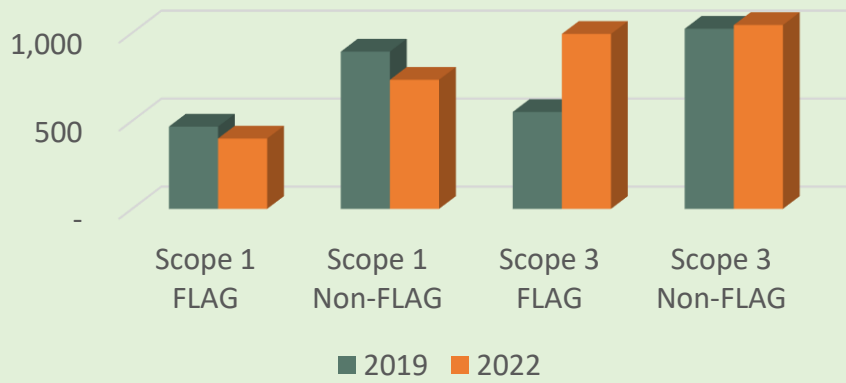
0 = No risk | 1 = Low risk | 2 = Medium risk | 3 = High risk

Transitional Risk

Risk		POLICY & LAW			MARKET		TECH.	REPUTATION
Year		Land use restrictions	Carbon tax	Biofuel	Consumer concern	Green loan	Renewable energy	Shareholder & NGO
2030		-0.11	-0.11	0.15	-0.15	0.15	0.22	-0.15
2050		-0.19	-0.36	0.20	-0.22	0.22	0.51	-0.22

High Opportunity | Medium Opportunity | Low Opportunity | Neutral | Low Risk | Medium Risk | High Risk

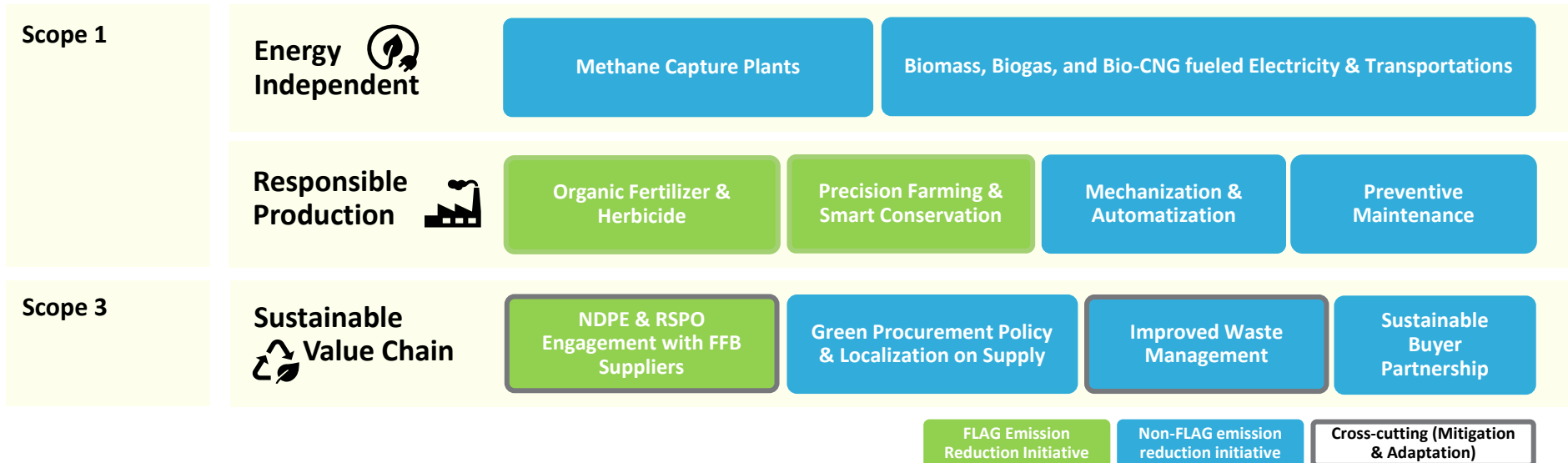
2022 GHG 2nd Audit 3,172,358 tCO2e



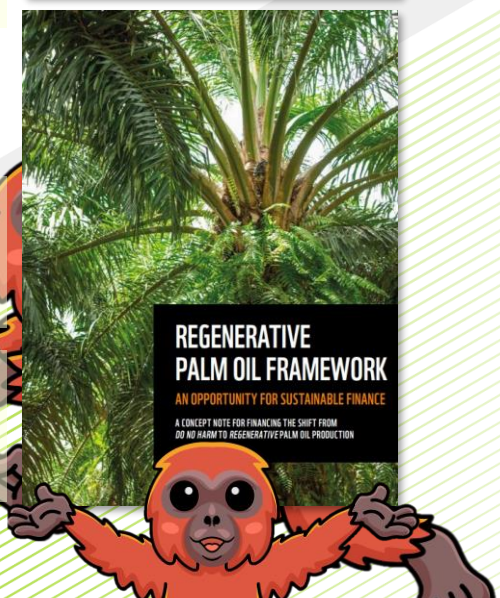
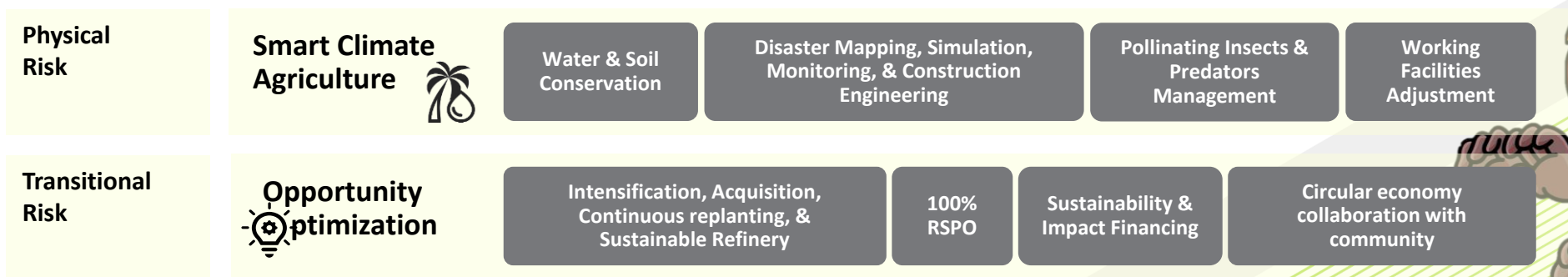
We've done several interventions and leads to the **decrease in Scope 1 emission**.
But the overall & intensity (5 tCO2e/tCPO) increment was mainly due to the **increase in external FFB purchase**.

FLAG: Forest, Land and Agriculture (Land use change & land management)
*Exclude biogenic sequestration | Scope: Palm Oil only

Emission Reduction



Climate Adaptation



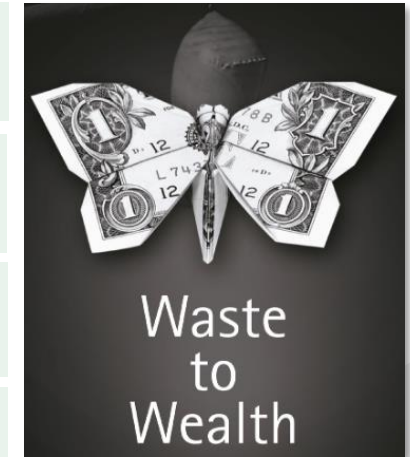
Emission Reduction

Scope 1&2	Energy Security	Energy Efficiency	Certified Renewable Energy	PLTS Renewable Energy	Electrical Forklift
	Sustainable Value Chain	Sustainable Forest Management through FM Certification			NDPE
Scope 3	Responsible Production	Increase Wood Efficiency	Reduce glue loss	Reduce Coating Loss	
	Waste Management	Waste Reduction, Sorting, Reuse, and Recycle			

FLAG Emission Reduction Initiative

Non-FLAG emission reduction initiative

Cross-cutting (Mitigation & Adaptation)



Climate Adaptation

Physical Risk	Water Management	Water Conservation			
Transitional Risk	Opportunity Optimization	Sustainable & Impact Investing	Digital Technology	Fire Sensor	
	Sustainable Value Chain	Sustainable Construction Product			



02 OUR CAP JOURNEY 2030 TARGET ROADMAP



CLIMATE ACTION PLAN

WE AIM TO ACHIEVE **44%** EMISSION REDUCTION & CLIMATE RESILIENT OPERATIONS **2030**

CAUSE
We emitted 4.7 tCO₂e GHG/tCPO

PROBLEM
Climate Change (in weather patterns)

IMPACT
Flood & Drought to business

THE PRIORITIES
Waste
Insect
Fertilizer
Carbon
Energy
Water

ZERO WASTE

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The graphic features a vibrant green background with illustrations of a lush forest on the left, wind turbines in the center, and a stylized landscape on the right. A small 'ZERO WASTE' icon is visible in the bottom left corner of the illustration area.

The 44% reduction of Total Emissions **EXCLUDES** any sequestration in setting

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RSPO INNOVATION AWARD & BEYOND SEVERAL ON-GOING PROJECTS - ENERGY

Energy Balance Roadmap

“I would like our business, starting from our palm operations to be **fully energy independent by 2028**”
Andrianto Oetomo, 2022 Sustainability Report



Since 2020, we **reduced the use of 6.12 million liters of diesel** equivalent to a reduction of **18,198 tCO₂e** in GHG emissions

In 2024, we began mapping the overall energy **supply and demand** to ensure the optimum scenario on relying almost exclusively on **in situ renewable energy** and wherever commercially and technically viable, to be able to **generate revenue from the sales our own energy sources.**

Community Bio-CNG Trucks

“Today, 100% or more than 1,000 trucks transporting that CPO or FFB **belong to communities** in and around our operations.”



We successfully found a technology that was able **convert diesel engine trucks to use 100% Bio-CNG-fueled** at a reasonable cost, and replicate it for the community owned trucks”



Potential emission reduction
26 ton CO₂eq / truck

In November 2023, we were honored to be the first to be awarded RSPO's Innovation Award

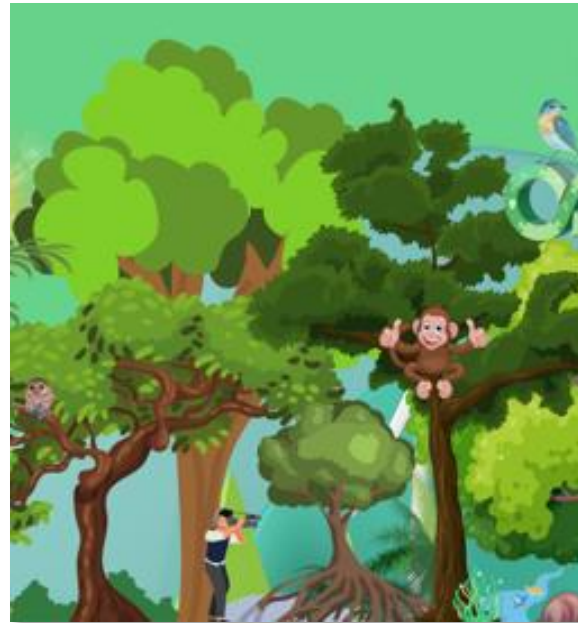
RSPO INNOVATION AWARD & BEYOND SEVERAL ON-GOING PROJECTS - REGENERATION

Regenerative Agriculture

3rd March 2023, was the first time we begun our replanting program for the group.



We consider replanting very seriously. Our 2nd chance to do things right. We start with data mining to determine the best areas to be replanted or reverted to tree islands and redesign our estates for mechanization. **Riparian buffers & Biodiversity corridors are paramount in this spatial planning.**



We are building in Tree/Biodiversity Islands in our Estates
50 ha for every 50k ha
On top of existing HCVs & Conservation

Natural Pollinator & Predator Study

We look at the risks posed to **beneficial insects**, which are important to the palm fruit creation process, but they are also vulnerable to climate change.

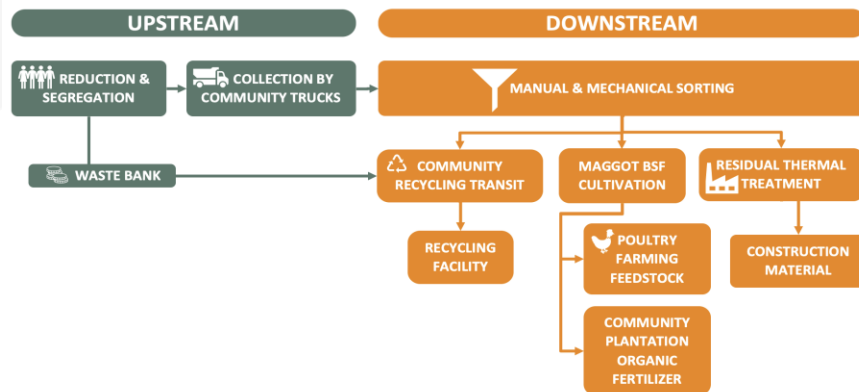


In collaboration with a palm oil research institution, we have commissioned a study to obtain **baseline data** of insect pollinator, predator, and pest during wet and dry season (in different areas). This will be the basis to **plan our adaptation strategy.**

RSPO INNOVATION AWARD & BEYOND SEVERAL ON-GOING PROJECTS - WASTE

Zero Landfill Domestic Waste

In 2024, we began planning an integrated municipal waste management facility that is **economically circular, community replicable, with the objective of zero waste.**



Along with promoting 3R behavior, we have started a pilot plan to process **4 ton of waste per day** within our employee housing clusters at the PT SWA subsidiary in Muara Wahau. The waste will be processed into several streams of products: **recycled materials, proteins, organic fertilizers, and construction materials.**



Waste is a perennial problem for humanity. In Jakarta, the equivalent of a 60 storey building of waste is generated every 3 years.

Our Waste Reduction Project at HQ

In 2021, we began a waste management plan at our HQ to raise awareness and reduce our office waste in a structured and quantifiable way.



In collaboration with Climate-Tech startup, we have **reduced office waste disposed of in landfills by 49.3%** from a total of 7,553 kg of waste generated during 2023.

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04 CHALLENGES WITH MEASURING our AMBITIONS THE CHALLENGES



Sequestration factors are not clear.

There is no universally accepted standard guideline for measuring biogenic sequestration per annum. It is potentially linked to over or under-estimation of removals and carbon offsets market.



NO DATA

Emission factors are generic and not specific.

For instance, there is no difference in the emission factors for Scope 3 FLAG external FFB purchases from NDPE-compliant farmers and non-committed ones. The same goes for the processing of our products by our buyers.



THANK YOU



www.dsn.co.id

Our planet doesn't need us to save it, It has gone through 5 mass extinction events.

We need saving from ourselves.

