

GGL SUSTAINABLE BIOMASS DIALOGUE

FROM COMPLIANCE TO IMPACT: THE
FUTURE OF BIOMASS CERTIFICATION

19th February 2025
2:30pm - 5:20pm (GMT+8)
Sheraton Petaling Jaya Hotel



Topic Title

Biomass Certifications & Market Trends

Presented by

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Organized by



Four main activities serving a broad range of markets



Commodity
Inspections



Industrial
Inspections



Collateral
Services



CERTIFICATIONS



2BSvs - Biomass Biofuel
Sustainability voluntary scheme



GGL - Green Gold Label



ENplus - Whole chain
certification for wood pellets



ISCC - Certified Biomass and
Bioenergy



REDcert - Biomass for Energy



SBP - Sustainable Biomass
Program



FSC® - Forest Stewardship
Council®



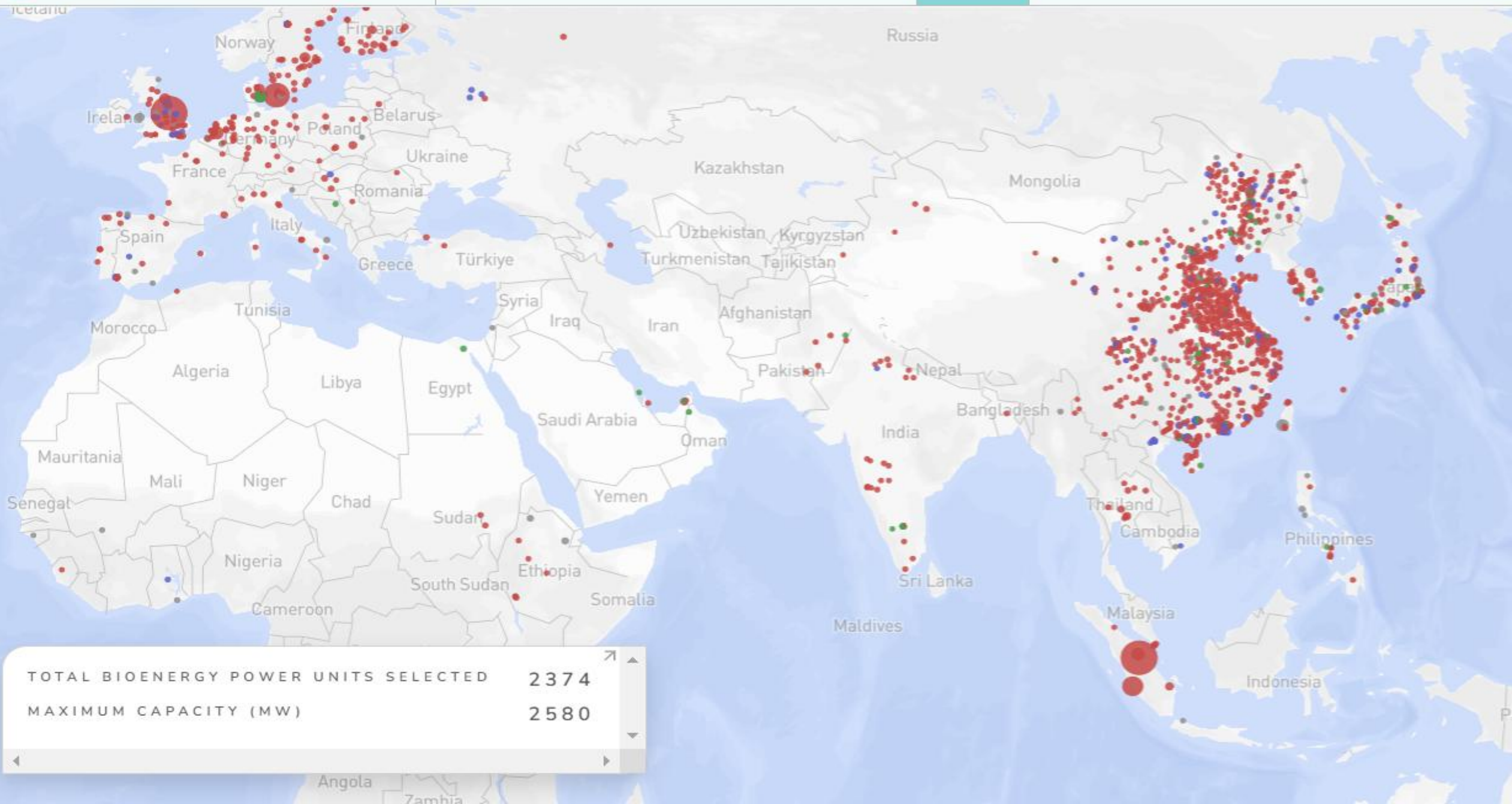
EUTR - EU Timber Regulation



PEFC - Program for the
Endorsement of Forest
Certification



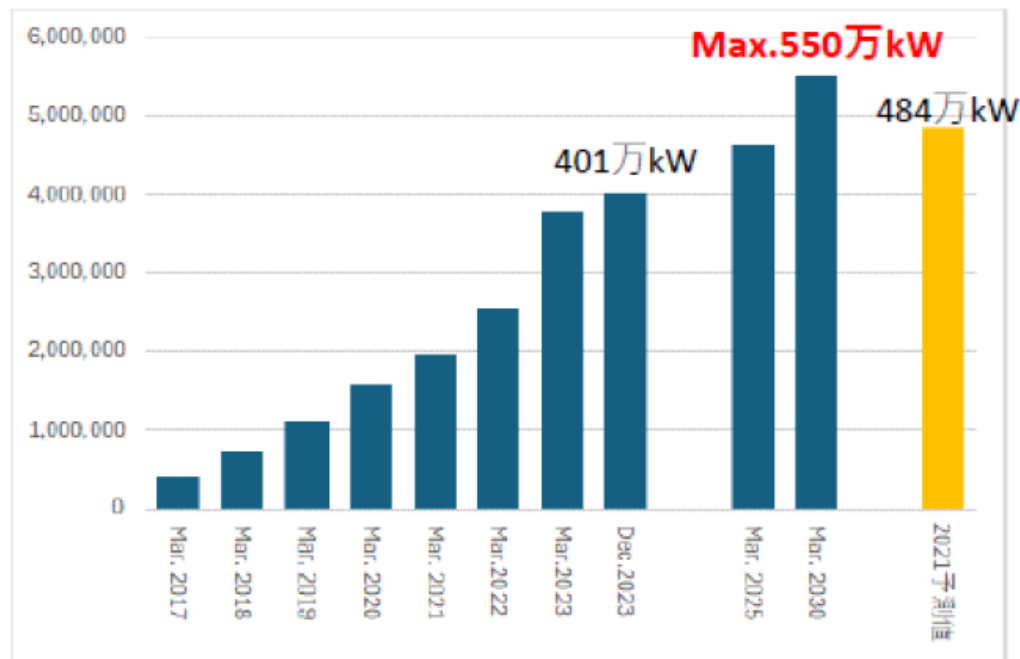
TLV - Timber Legality
Verification



TOTAL BIOENERGY POWER UNITS SELECTED 2374

MAXIMUM CAPACITY (MW) 2580

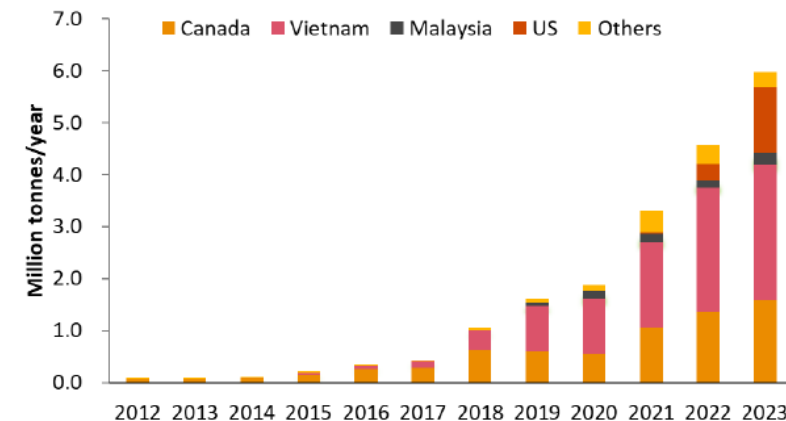
Growth of fuel imports in Japan



BPA anticipates further growth under the FiT/FiP towards 2030.

Wood pellets and PKS are the two main imported biomass fuels.

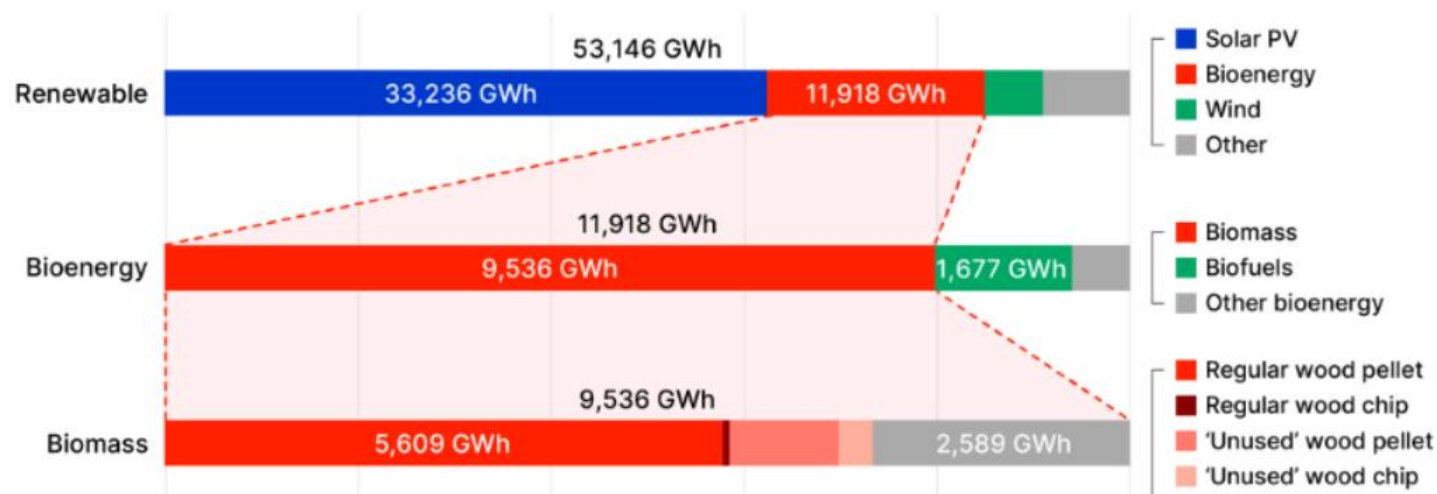
Wood pellet imports



PKS imports



Growth of fuel imports in South Korea



Sources: MOTIE, 2025; KEA, 2024; compiled by author.

Forest biomass accounted for 73% of all solid biomass electricity in 2023

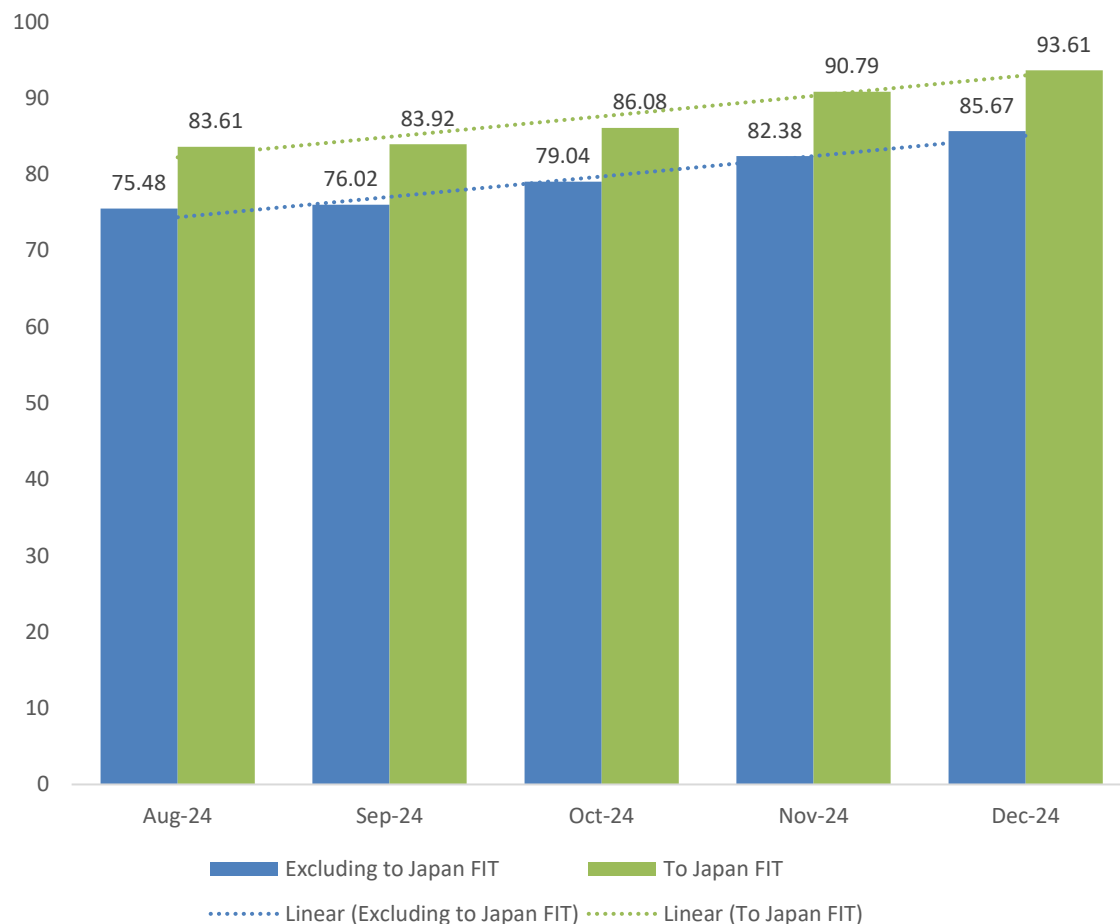
- REC reduction announced on 18 December to gradually phase out credits for biomass-fired generation.
- **Short-term impact:** Increased imports as utilities maximize output before credit reductions.
- **Long-term impact:** Declining demand due to lower REC incentives.
- Potential shift to alternative feedstocks like wood chips.

Demand-Supply Fundamentals

Malaysia's biomass exports in November 2024				t
	Quantity	± on month (%)	± on year (%)	
PKS				
Japan	106,526	-32.7	-0.6	
Thailand	2,231	-79.8	-70.5	
Total	148,438	-12.4	29.4	
Wood pellets				
South Korea	38,556	39.8	78.7	
Japan	91,674	342.4	222.6	
Total	159,421	43.1	214.3	
Source: GTT				

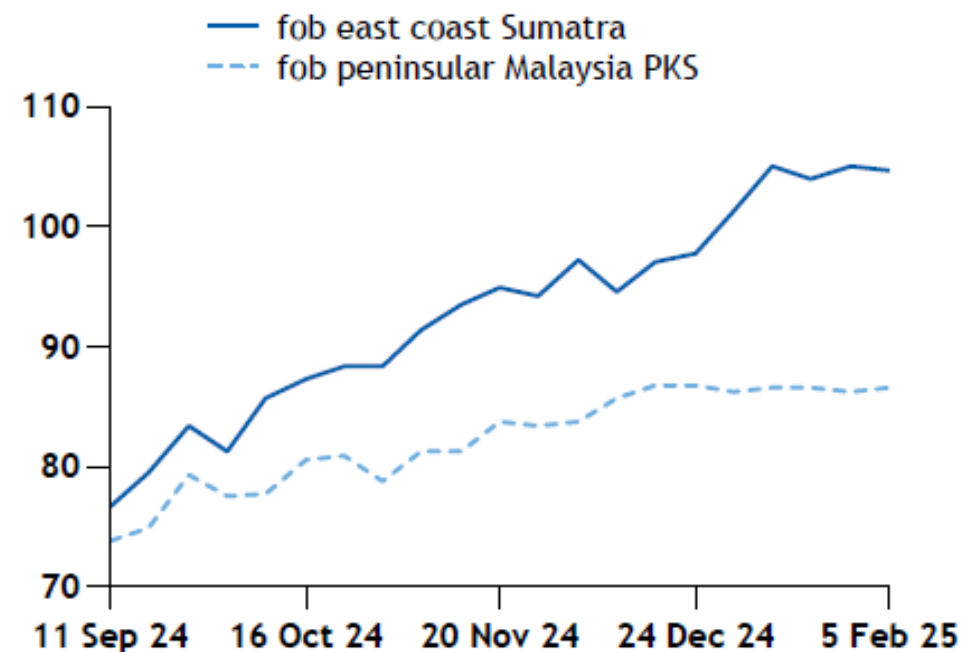
- Increased demand as Japan & South Korea ramp up installed power generation capacity.
- Japan was Malaysia's largest buyer, accounting for 58% of the country's wood pellet exports in November.
- Shipments to South Korea accounted for 24pc of Malaysia's total wood pellet exports in November.
- Malaysia occasionally exports a small amount of wood pellets to the UK, with 63,000t in October last year, and 29,000t in November.

Demand-Supply Fundamentals

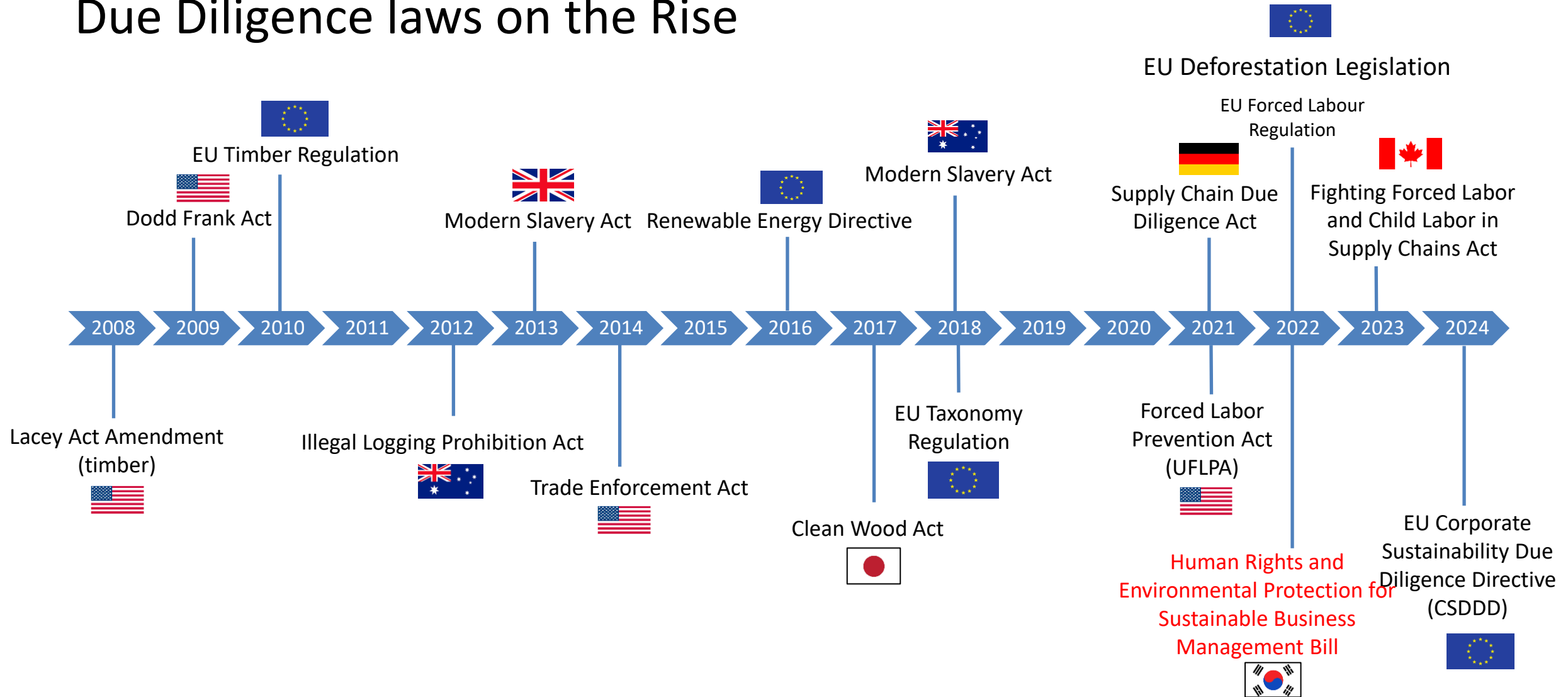


PKS spot prices

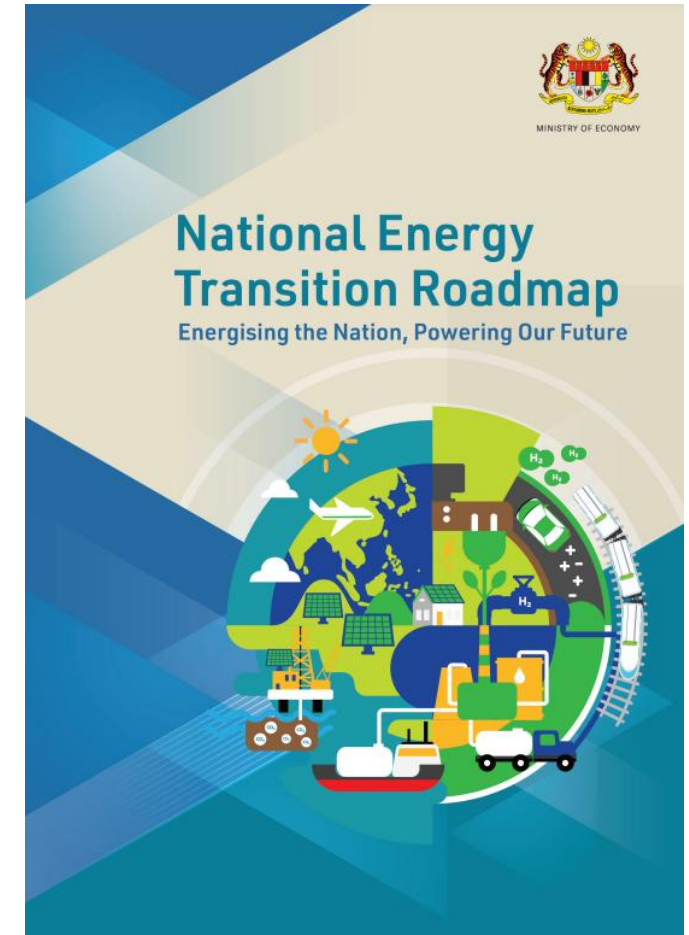
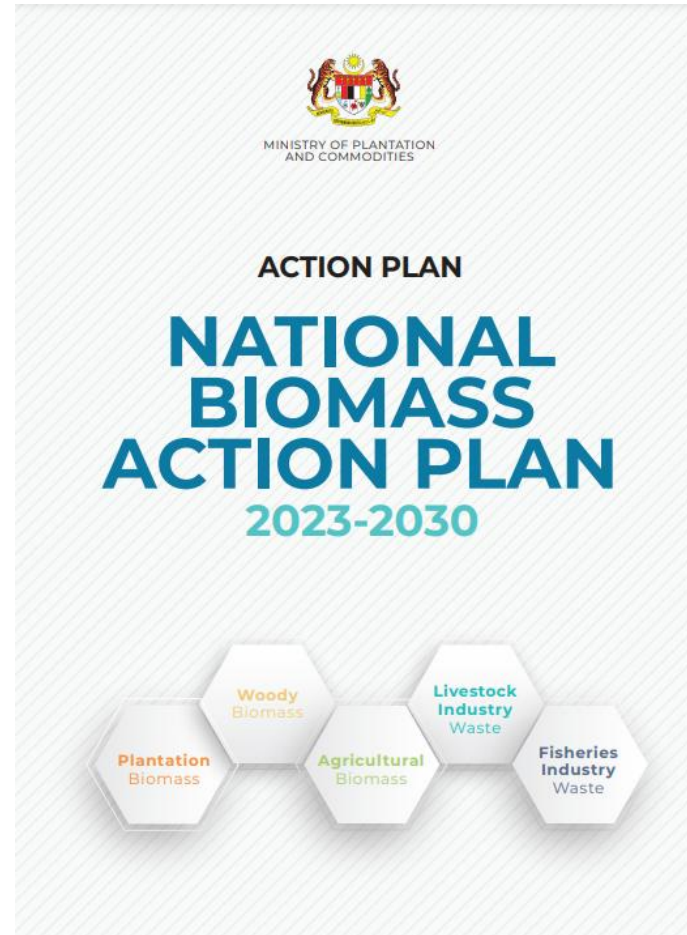
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Due Diligence laws on the Rise

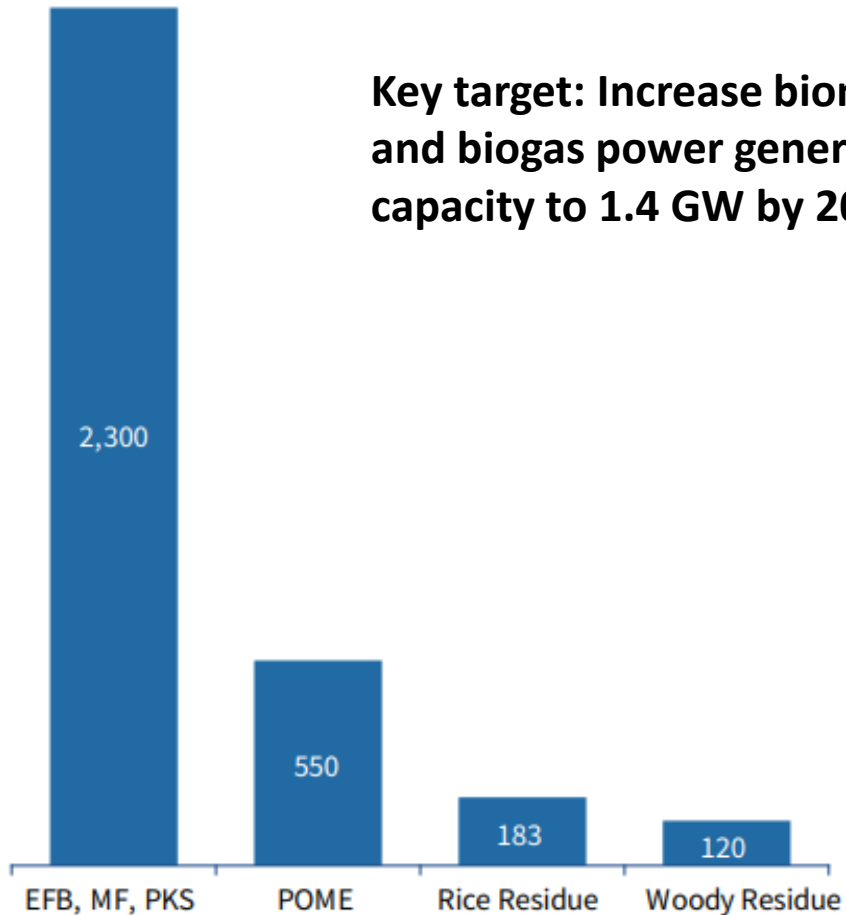


Malaysian Policies on Biomass and Bioenergy



Malaysian Policies on Biomass and Bioenergy – NETR 2023

Bioenergy Generation Potential in Malaysia (MW)



Key target: Increase biomass and biogas power generation capacity to 1.4 GW by 2050

- NETR aims to capitalise Malaysia's strong bioenergy potential, with focus on two key segments, namely agriculture-related bioenergy and non-agriculture waste
- Palm oil-related residue consists of the majority of potential bioenergy generation potential in Malaysia.
- NETR will focus on addressing challenges relating to palm oil biomass in agriculture-related bioenergy.

Flagship catalyst projects and initiatives

Biomass Co-firing

Co-firing initiative at the existing 2100 MW Tanjung Bin Power Plant by burning biomass along with coal. Biomass sources include empty fruit bunch (EFB) pellets, wood chips, wood pellets, bamboo pellets, coconut husk and rice husk. A pilot phase of co-firing will commence in 2024 with the scale-up potential to a minimum of 15% biomass co-firing capacity by 2027.

Applicability of the Certification Schemes

- **Woody Biomass**

Wood Chips, Wood Pellets, Residues from Landscaping



The mark of
responsible forestry



- **Non-woody biomass (Agricultural Residues and Biogenic waste and residues)**

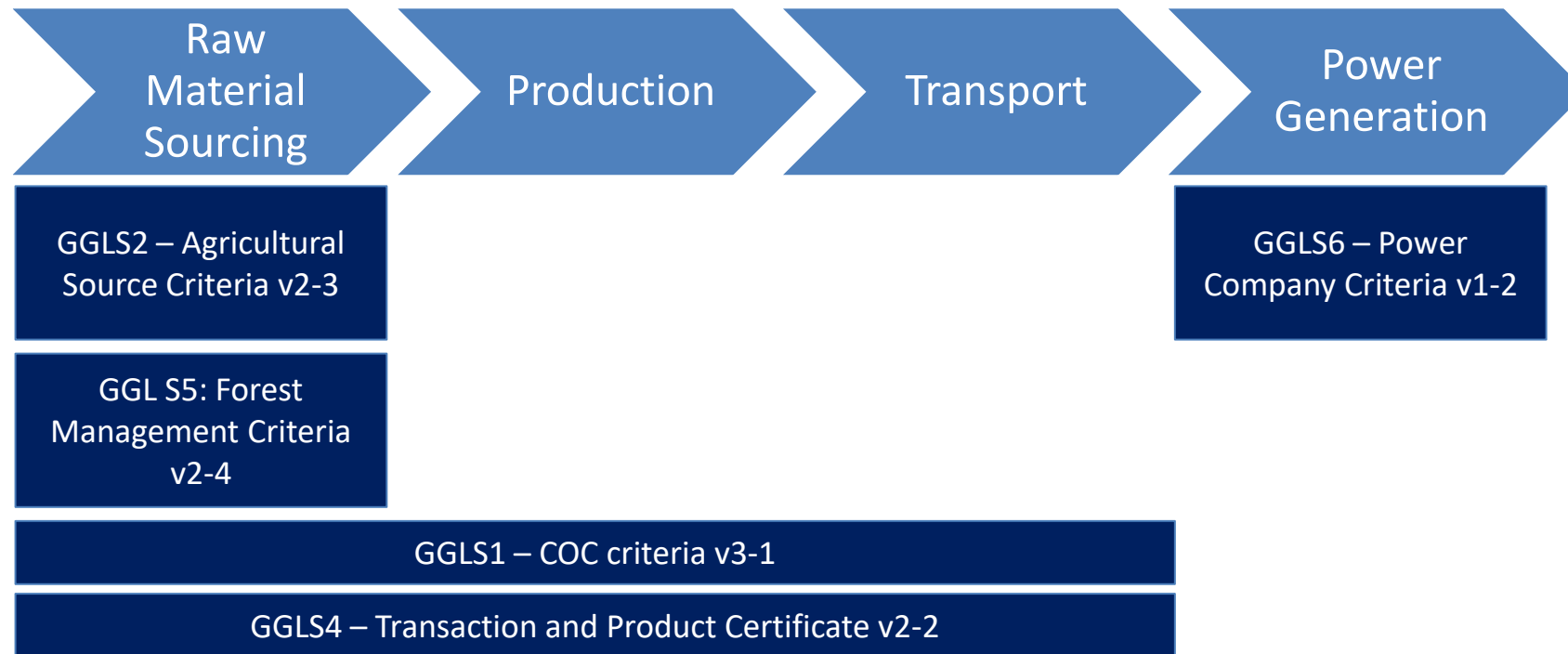
Palm kernel shells (PKS), Palm tree trunks and Empty fruit bunches (EFB)



The following sources are newly eligible fuels for Japanese FIT/ FIP per 1-1-2023:

Coconut shell, Cashew nut shell, Walnut shell, Almond shell, Pistachio shell, Sunflower seed shell, Corn straw pellet, Bengkuang seeds, Sugar cane stem & leaves, Peanut shell; and Cashew nut shell liquid (CNSL).

GGL Standards



- GGL chain of custody, GHG, and Transaction standards are mandatory for all GGL-certified companies
- GGL covers the requirements related to Supplying the Japanese market through GGL 1d. These requirements can be exempted if the CPO mills possess certifications of RSPO and MSPO V2.
- The requirements developed for the Japanese market are additional requirements adding to GGL's existing normative framework.
- GGL is compliant with SDE+ requirements and is in the process of adapting RED II requirements

Certification schemes approved under the Japan FiT scheme

	Agricultural biomass	Woody Biomass
Sustainability	(Palm oil)RSPO (PKS and OPT)MSPO, ARC RSB, ISCC, GGL	FSC, PEFC
GHGs calculation	RSB, ISCC, GGL	SBP, GGL

- Forest Agency concluded that both SBP and GGL are equivalent to “Goho” guideline requirements.
- All woody biomass schemes will be able to be utilized as “evidence” under revised “Clean Wood Act”, which requires all importers to conduct legality check.

Certification schemes approved by Korea

	Agricultural biomass	Woody Biomass
Sustainability	GGL, SBP	FSC, PEFC

Key Takeaways

- Expect fluctuations in the short term but stronger demand ahead.
- Japan and South Korea's renewable energy policies drive long-term biomass demand.
- Energy transition & power generation will drive market momentum.
- Supply-side adjustments will be critical in balancing structural shortages.
- European demand for Asian PKS is rising
- Compliance with sustainability frameworks is critical for market access.



Thank You.



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