経済産業省

Japan’s Biofuel Policy

Oct. 17, 2025

Ministry of Economy, Trade and Industry, Japan

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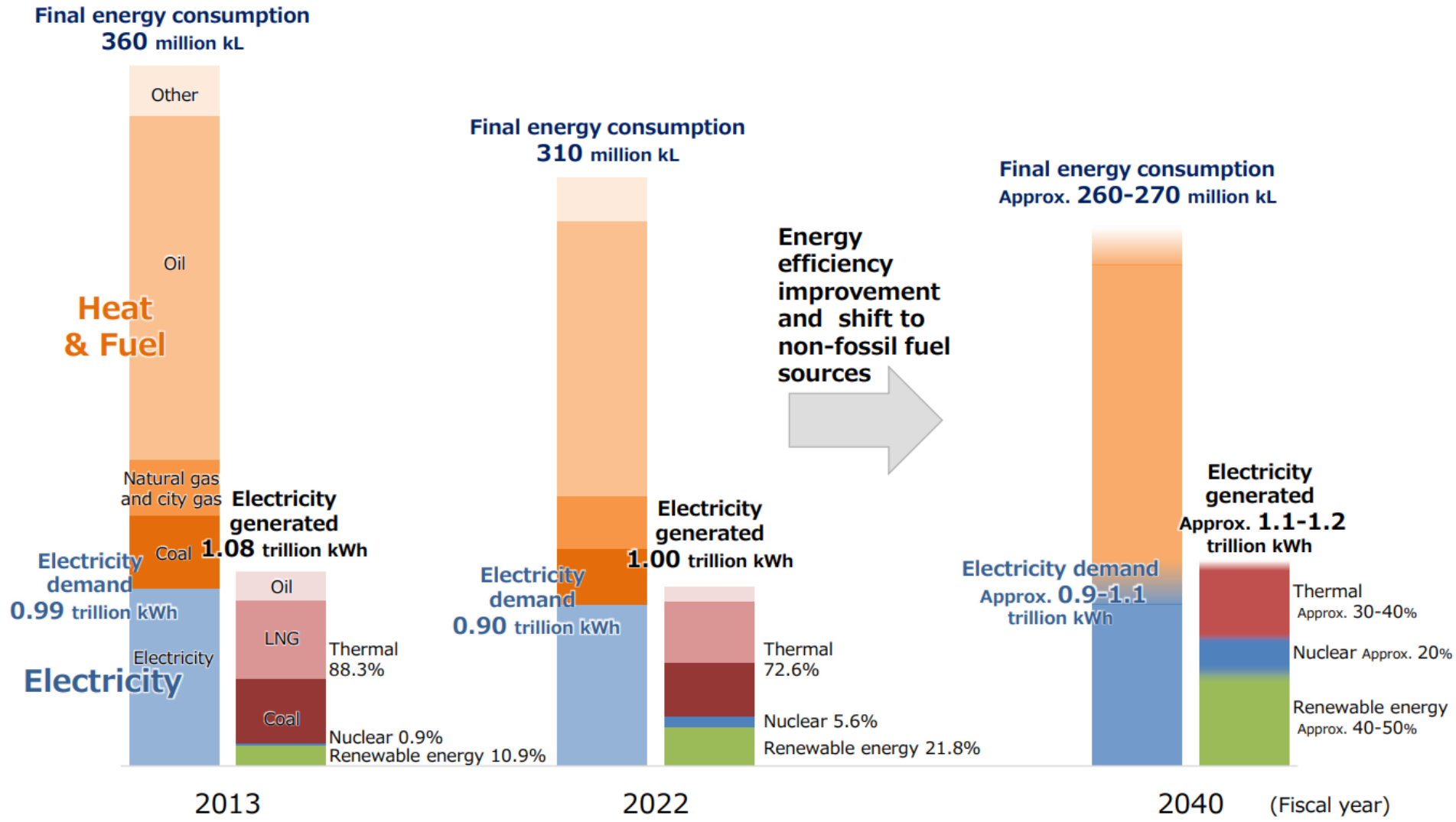
Outlook for Energy Supply and Demand (2040)

- Fuel continues to be essential in Japan's energy mix.



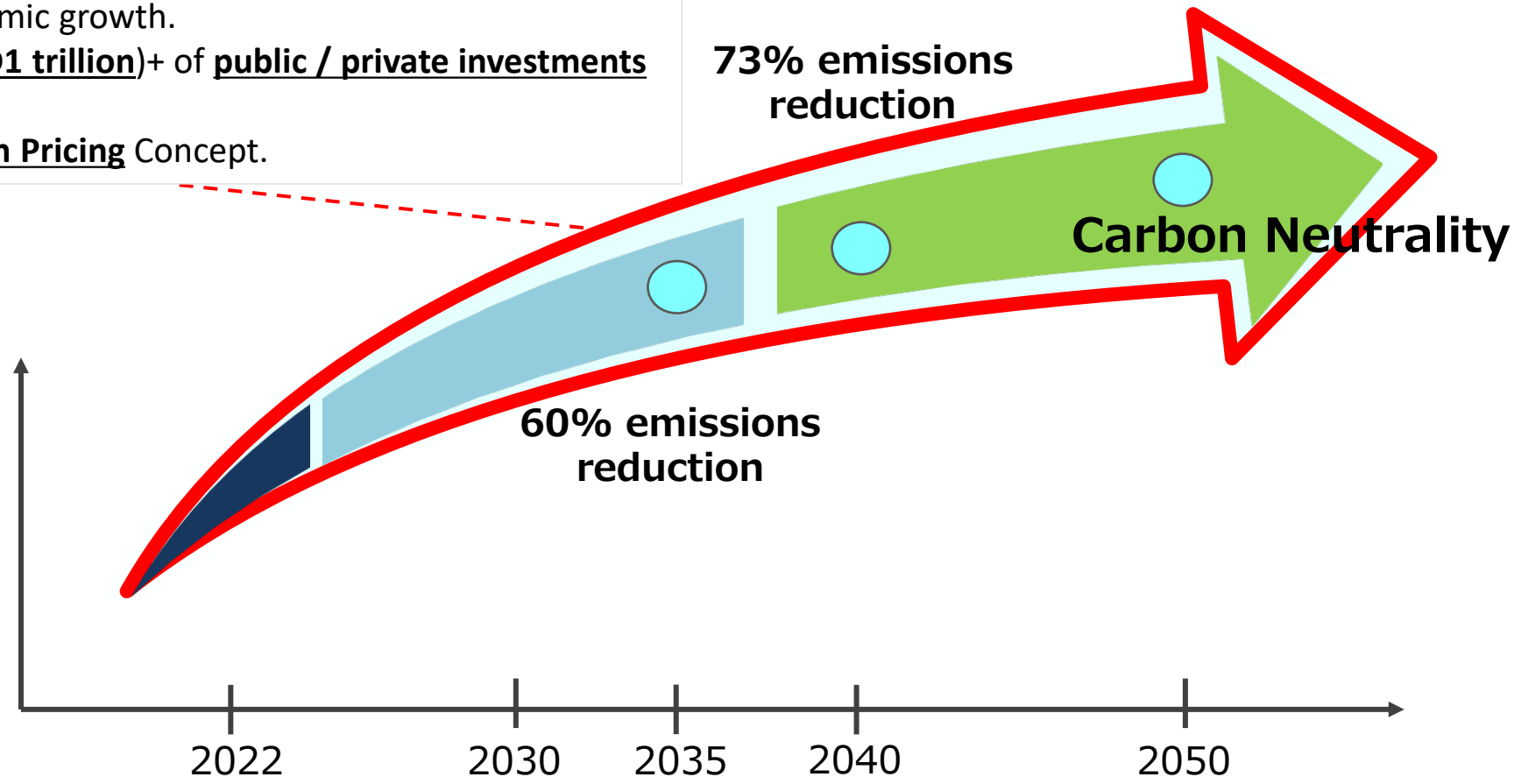
Agency of Natural Resources and Energy, Feb 2024

Japan's major energy-climate policy packages

GX delivers both **emission reduction**, **economic growth** and **energy security**.

'Basic Policy' for the Realization of GX, 2023

- **Create new demand & markets** in stable energy supply and decarbonization, leading to improved competitiveness of industries & economic growth.
- \150 trillion (≒**USD1 trillion**)+ of **public / private investments** over next decade
- **Pro Growth Carbon Pricing** Concept.



Transition to Carbon Neutrality

We need to promote further decarbonization through **practical energy transitions** that allow **various pathways** depending on the circumstances of each country.

What will likely expand in the near future?

- Expectations for **biofuels** for **aircraft** and **automobile**

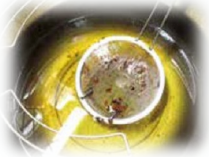
Sugarcane

Corn

Wasted Paper

Wasted Pulp

Oils and fats (Used cooking oil, etc.)



Oily plants (Palm etc.)

Wasted Plastic

Biomass

Bioethanol

Biodiesel

SAF
Sustainable aviation fuel

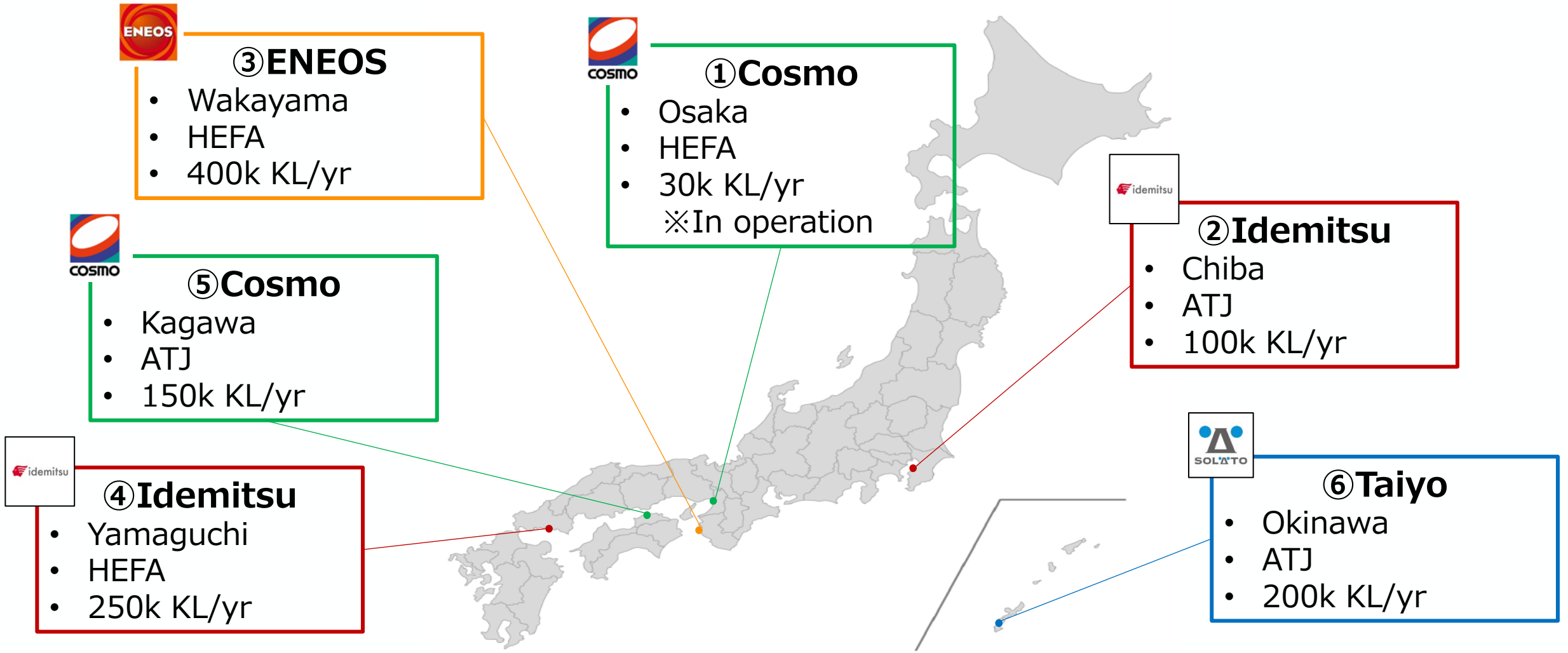
Automobile（Bioethanol）

Track（Biodiesel）

Aircraft（SAF）

SAF Projects in Japan

- First commercial SAF plant started operation in April 2025.
- Several projects in the pipeline.



Japan's SAF Policy: Combining "Carrot and Stick"

- Japan set a target of **10% SAF adoption by 2030**.
- **"Carrot (support)" and "Stick (regulations)"** to incentivize SAF deployment.

Support Measures

- **Capital investment support for installation of large-scale SAF production facilities (approx. 300 billion yen)**, using GX Economic Transition Bonds.
- **30 yen/L of SAF tax credit** for domestic production and sales through "Taxation for Promoting Domestic Production in Strategic Areas".
- Support for the establishment of a secure and stable feedstocks supply chain.
- Support for technological development, demonstration, and certification of non-food derived SAF.

Regulations/Legislations

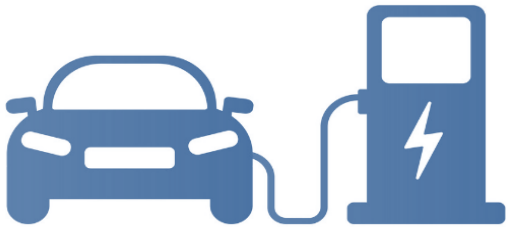
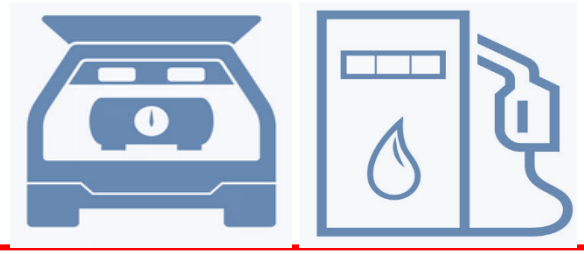
- In "the Act on Sophistication of Energy Supply Structure," a **5% carbon reduction (=10% SAF mix*50% CI reduction) supply target for jet fuels in 2030 will be established**. (Supply side)
- **Japanese airlines are required to set the target volume of SAF use in 2030** via "Decarbonization Promotion Plan," to be submitted under the Civil Aeronautics Act. (Demand side)
- "Visualize" Scope 3 efforts for passengers and cargo users (shippers) of aviation.

Future-Oriented Co-Creation Projects with the Global South by Japan

事業者	国	概要
Sojitz Corporation	Thailand	Aiming for the production of SAF in the collaboration with local refineries in Thailand to building a supply chain in Asia
Green Power Development Corporation of Japan	Indonesia	Establishing a traceability system of non-standard coconut as a SAF feedstock
Chodai Co., Ltd.	Philippines	Feasibility study of coconut oil extraction
Nippon Biofuel Co., Ltd.	Mozambique	Feasibility study of jatropha biofuel
Euglena Co., Ltd.	Bangladesh	Feasibility study of UCO recovery and oilseed cultivation for SAF feedstock on underutilized land or during fallow periods
Toray	Thailand	Feasibility study of supply chain establishment for biochemicals production from non-edible biomass
Four Pride Japan Co., Ltd.	Indonesia	Demonstration project for advanced pongamia nursery facility
Hanwa Co., Ltd.	Malaysia	Expanding the plantation project of pongamia

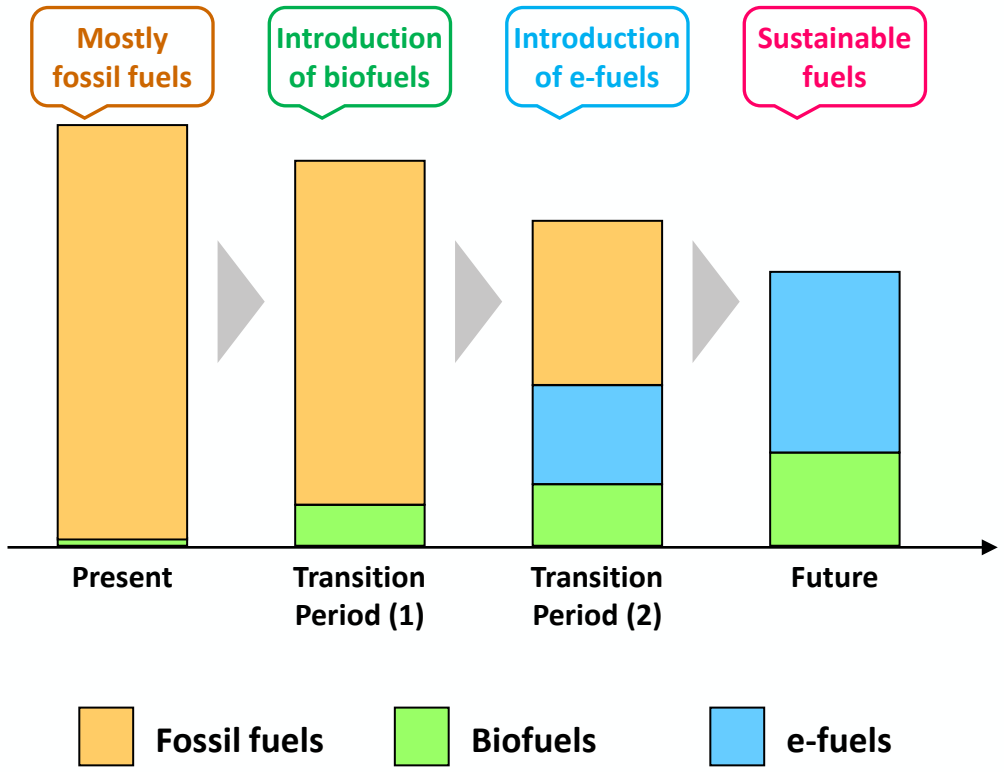
Road Transport Sector: A Range of Pathways

- To achieve carbon neutrality in the road sector, it is important to pursue **a range of pathways**.
- It is necessary to advance **the combination of high-performance various equipment and sustainable fuels such as biofuels and e-fuels** as well as electrification, depending on the circumstances of each country and region.

Energy sources		Powertrain		Infrastructure	
CO2 Free electricity (renewable energy, nuclear power, etc.)	×	BEV、PHEV	×	➢ Charging infra-structure ➢ V2X	
CO2 Free Hydrogen	×	FCV	×	Hydrogen stations	
Sustainable fuels (biofuels, e-fuel)	×	PHEV, HEV Flex-Vehicle	×	Gas Station	

Passenger Vehicle Policy: Expanding Bioethanol use

Transition to sustainable fuels

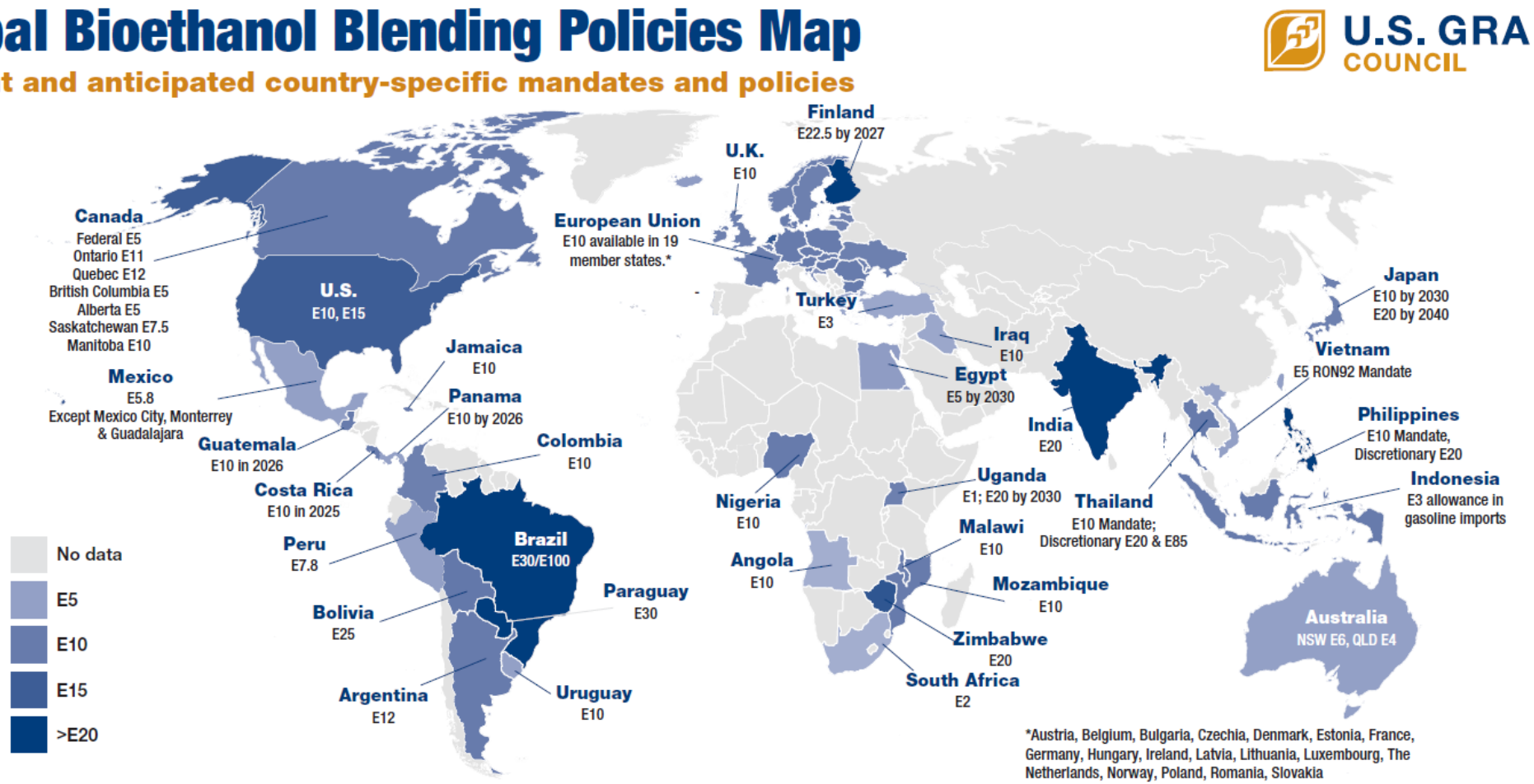


Expansion of Biofuel Adoption

- In the 7th Strategic Energy Plan (February 2025), Japan set a new target to expand biofuel use.
  - **Start 10% direct bioethanol blending (E10) by 2030**
  - **Start 20% direct bioethanol blending (E20) by 2040**
- To complement these targets, Japan will aim to start supplying **100% E20-compatible vehicles in new passenger car sales by the early 2030s.**

(c.f.) Expanding Bioethanol use in ASEAN Countries

ASEAN countries are also promoting bioethanol blending into gasoline.



Sources:.Lieberz, Sabine, and Antonia Rudolf. Biofuel Mandates in the EU by Member State – 2024. United States Department of Agriculture, Foreign Agricultural Service, 27 June 2024, Report No. E42024-0016. https://apps.fas.usda.gov/
ePure. Overview of biofuels policies and markets for road transport across the EU. June 2024
SGS Inspire. Ethanol Mandates and Average Content in Gasoline. Jan. 2025.

(Reference) U.S. Grains Council : USGC < https://grains.org/bioethanol/ >

(c.f.) Initiative for Sustainable Fuels and Mobility (ISFM)

- To **reduce emissions** and **encourage just and inclusive energy transitions** by expanding the use of **sustainable fuels** and **high-performance mobility equipment**, **Brazil and Japan** launched a new collaborative framework called the **Initiative for Sustainable Fuels and Mobility (ISFM)** at the summit meeting in May 2024.
- Through mutual collaboration and leadership, both countries will work together to **create momentum towards COP30** and **mainstream sustainable fuels**.

Key Concept of ISFM

Sustainable Fuels
(e.g. Biofuels, E-fuels)

✓ Increase supply and demand of sustainable fuels

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High-performance Mobility
(e.g. Hybrids, Flex-fuel engines, Next-generation aircraft)

✓ Improve energy efficiency

Key Events (2025)

March
Brazil-Japan Summit

August
CEM 16

September
G20 Energy Transition Ministerial Meeting

October
Ministerial Meeting on Sustainable Fuels in Osaka

October
AZEC Ministerial Meeting

November
COP30

Ministerial Meeting on Sustainable Fuels

- The meeting was held **for the first time on September 15th in Osaka**, Japan, **co-hosted by Japan and Brazil** based on the "Initiative for Sustainable Fuels and Mobility (ISFM)*“ .
- Participants from **34 countries and organizations** discussed **the importance of expanding the production and utilization of sustainable fuels** as well as **the necessity of international and public-private cooperations**. The Co-hosts issued **a Chairs' Summary** as an outcome, which will lead to **COP30**.
- As an opportunity to **experience the societal implementation of sustainable fuels** in Japan, the meeting **provided an excursion** including a ride on a e-fuel bus and a visit to the Gas Pavillion in collaboration with Osaka Kansai World Expo. The meeting also **held an exhibition** related to sustainable fuels.

Overview of the Meeting

- Date : Monday, September 15
- Venue : Hilton Osaka
- Hosts : Japan and Brazil
- Participants : 34 countries and organizations
- Timeline
  - > 10:00-10:05 : Opening Remarks
  - > 10:05-11:00 : Presentations from Organizations
    （IEA、IRENA、Biofuture Platform、Biofuture Council、JAMA）
  - > 11:00-11:55 : Remarks from Participants
  - > 11:55-12:00 : Closing Remarks
  - > 15:00-19:30 : Excursion

Major Outcomes

- **Discussed necessary efforts and cooperation towards the expansion of sustainable fuels**, based on an outlook presented by the IEA that **the production and use of sustainable fuels will expand by at least four times** by 2035 from 2024 levels
- **Shared the importance of sustainable fuels** such as biofuels, e-fuels and e-methane in a “multi-pathway” approach towards carbon neutrality and **recognized the necessity of international and public-private cooperation**
- Recognized the importance of **the decarbonization in road transport sector by combining sustainable fuels and high-performance mobility equipment** such as hybrid engines

*__Initiative for Sustainable Fuels and Mobility (ISFM)__ : An initiative launched at the Japan-Brazil Summit Meeting in May 2024, to lead global decarbonization efforts in road transport sector by combining sustainable fuels such as biofuels and e-fuels with high-performance mobility equipment including hybrid engines

Action towards COP30

- "**Belém 4X Pledge on Sustainable Fuels**" has been announced at Pre-COP on Oct. 14 by Brazil, the Chair of COP30.

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PRESS RELEASE N. 478

Launch of the Belém 4x Pledge on Sustainable Fuels

Published in Oct 14, 2025 04:10 PM | Updated in Oct 15, 2025 11:38 AM | Share:

The "Belém 4x Pledge on Sustainable Fuels" was launched yesterday during the pre-COP in Brasília. The initiative, to be endorsed at the Climate Summit, on 6 and 7 November, aims to provide high-level political support for the goal to expand sustainable fuels use globally by at least four times by 2035. The text is being negotiated by Brazil with partner countries, such as India, Italy and Japan, and will be published in the coming days.

The goal of increasing fourfold the use of sustainable fuels is based on the International Energy Agency's report "Delivering Sustainable Fuels - Pathways to 2035," published yesterday and available at https://www.iea.org/reports/delivering-sustainable-fuels.

The Belém 4x pledge aims to promote the scaling up in the global adoption of clean and sustainable energy sources, such as hydrogen and its derivatives, biogases, biofuels, and synthetic fuels, which can replace fossil fuels as part of the gradual effort to decarbonize energy systems and fight climate change.

https://www.gov.br/mre/en/contact-us/press-area/press-releases/launch-of-the-belem-4x-pledge-on-sustainable-fuels