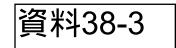
78th Meeting of the CIMAC EEC WG





Asia and Japan Marine and Power Plant

CIMAC NMA Japan Internal Combustion Engine Federation (JICEF) 12nd June 2024



- Bill for the Act on Promotion of Supply and Utilization of Low-Carbon Hydrogen and its Derivatives for Smooth Transition to a Decarbonized, Growth-Oriented Economic Structure in Japan (Hydrogen Society Promotion Bill)
- 2. Bill for the Act on Carbon Dioxide Storage Businesses in Japan (CCS Business Act)
- 3. ClassNK updates alternative fuel guidance

1. Background and purpose of the Bills

To achieve carbon neutrality by 2050, it is essential for Japan to further advance thorough energy conservation and promote the utilization of decarbonized power sources, including renewable energy and nuclear energy, and to implement green transformation ("GX") in the hard-to-abate industries.

Aiming to promote GX in the hard-to-abate industries, including iron and steel, chemicals, mobility and power generation sectors, the Bills stipulate provisions that are to be carried out in these industries:

- (1) promotion of the supply and utilization of low-carbon hydrogen and its derivatives, and
- (2) development of the business environment for carbon dioxide capture and storage (the "CCS"), a technology that is used to store carbon dioxide underground. For this purpose, the Bills stipulate necessary measures in accordance with the "Strategy for Promoting Transition to a Decarbonized, Growth-Oriented Economic Structure" on which the Cabinet Approval was made in July 2023.

Enactment of Bill : May 17th / Promulgation : May 24 Enforcement : Within 6 months after the Promulgation of the Bill

2. Outline of the Bills

(1) "Hydrogen Society Promotion Bill" Aiming to enable the Government of Japan to take the lead in promoting the supply and utilization of low-carbon hydrogen and its derivatives early, the Hydrogen Society Promotion Bill is to stipulate special measures involving the following: formulating basic policies, setting up a scheme for approving business plans, providing support measures for businesses that have received approval for their business plan ("support focusing on the price gap," "support for the development of hubs," etc.), and granting special regulatory exemptions. In addition, aiming to expand the supply of low-carbon hydrogen and its derivatives, the Hydrogen Society Promotion Bill is to include measures for stipulating criteria that businesses which supply low-carbon hydrogen and its derivatives are required to have well regards in their operations.

To expedite the supply and utilization of low-carbon hydrogen and similar substances, measures such as assistance focusing on price differences will be implemented towards businesses that have received plan certification.

Definitions

"Low-carbon hydrogen etc." refers to hydrogen and similar substances that: Emit an amount of CO2 below a certain value during their production. Contribute to our country's reduction according to international decisions related to the calculation of CO2 emissions.

"Hydrogen etc." includes hydrogen and its compounds (anticipated to be ammonia, synthetic methane, synthetic fuel).



Support Focused on Price Differences

The standards for plan certification include:

- The joint plan must be co-signed by both the supplier and user businesses. It is expected that the supply of low-carbon hydrogen etc. will begin within a certain period and continue for a certain period.
- It is expected that the user businesses will make new facility investments or business innovations for the use of low-carbon hydrogen etc.
- In addition to simple price comparisons, the following evaluation items will be
- set up for comprehensive evaluation when selecting projects for support:

Policy importance: Energy policy (S+3E), GX policy

(Decarbonization and economic growth)

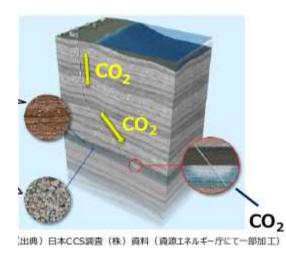
Prospect of project completion: High degree of certainty in the business plan, reasonableness of the plan.

Source: https://www.meti.go.jp/english/press/2024/0213_003.html https://sp.m.jiji.com/english/show/33055

CCS Business Act

1. Outline of the Bills

(1) "CCS Business Act" Aiming to develop a business environment in which private companies are able to launch CCS businesses in Japan by 2030, the bill is to stipulate provisions involving the following: establishing a licensing system for storage business and trial-drilling, establishing a storage right system and a trial-drilling right system, and developing business regulations and safety regulations pertaining to storage businesses and pipeline carbon dioxide transportation businesses.





CCS Business Act

- 2. Establishment of a permit system for exploration and storage businesses and development of business regulations and safety regulations related to storage business.
 - (1) Establishment of a permit system for exploration and storage business.
 - (2) Regulation for storage business operators.
- 3. Development of business regulations and safety regulations related to the pipeline transport business of CO2.
 - (1) Establishment of a notification system for pipeline transport business.
 - (2) Regulation for pipeline transport business operators.

Enactment of Bill : May 17th Promulgation : May 24 Enforcement : Within 6 months after the Promulgation of the Bill

Source: https://www.meti.go.jp/english/press/2024/0213_003.html https://sp.m.jiji.com/english/show/33055

ClassNK updates alternative fuel guidance

1.1 Purpose of the Guidelines

These guidelines have been independently established by society with reference to SOLAS, the IGC code and the IGF code. Taking into account the nature of each gas or other low flashpoint fuels (hereinafter referred to as "Alternative fuels") to minimize risks to ships , crew , and the environment associated with the use of alternative fuels, and setting standards for equipment, control , and monitoring devices for ships using alternative fuels.

1.2 Structure of Guidelines

(added new requirements related to hydrogen-fueled ships)

- 1.2.1 Part A contains safety requirements for ships using methanol / ethanol
- 1.2.2 Part B contains safety requirements for ships using LPG
- 1.2.3 Part C contains safety requirements for ships using ammonia
- 1.2.4 Part D contains safety requirements for ships using hydrogen

Published : May 2024

Source: https://www.motorship.com/alternative-fuels-and-lubricants/classnk-updates-alternative-fuel-guidance/1494052.article https://www.classnk.or.jp/account/en/Rules_Guidance/ssl/guidelines.aspx

" Prior registration with NK is required for access"

Thank you for your attention

