The Act Partially Amending the Port and Harbour Act (Act No. 87 of 2022)

Background and Necessity

- 1. Advancing the port and harbour decarbonization that is needed to transform the energy and industrial structures
- O In order to encourage the full-scale use of hydrogen and fuel ammonia, which is necessary to decarbonizing Japan's transportation and industrial sectors, Japan needs to establish supply chains and facilitate their use in ports and harbours, which are hubs of industry and maritime logistics. There are concerns that this might also impact the international competitiveness of Japanese industry, ports, and harbours.

A mechanism is needed to advance carbon-neutral port initiatives in cooperation with industrial facilities concentrated along the waterfront, with ports' and harbours' public- and private-sector stakeholders working as a unit.

2. Responding to pandemics and natural disasters

- In order to respond to new risks such as pandemics and increasingly severe natural disasters, it is
 essential to establish a system for reliably maintaining ports' and harbours' functions.
- 3. Addressing improvements to the efficiency and quality of port and harbour management by making use of the private sector

tons (10.7%)
Source: Prepared by the Port Authority from materials on the

website of the National Institute for Environmental Studies.

Examples of efforts prescribed

in port and harbour decarbonization plans

Development of the necessary

port and harbour facilities.

necessary to establish a supply chain for liquefied hydrogen

Environmentally low-impact ship

refueling services that support

decarbonization in the shipping

O In order to address the **dilapidation and declining attractiveness** of the green spaces and other areas in ports and harbours that serve as local centers for social interaction, a mechanism is needed to effectively promote the redevelopment and beautification of these areas by making maximum use of private-sector vitality.

Chemical Plants (including petroleum and coal products) 50 million tons (5.1%) rs, it is Other Facilities 460 million tons (43.8%) Power Plants, Refineries, etc. 420 million tonnes (40.4%) Steelworks 110 million tons (110 million tons)

Japan's CO2 Emissions

10.4 tonnes (FY2020)

Many of the **industrial facilities** that account for nearly **60%** of CO2 emissions are **situated**

in ports, harbours, and waterfront areas

Outline of This Act

1. Advancing decarbonization in ports and harbours

(1) Clarifying the position harborin the Basic Policy of ports and harbours

- "The role that ports and harbours are to play in bringing about a decarbonized society" and other such particulars are to be clearly stated in the Basic Policy Harbour established by the Japanese government.
- O Facilities for refueling ships with hydrogen, fuel ammonia, and other power sources are to be added as port and harbour facilities that are subject to the Port and Harbour Act to encourage decarbonization in the shipping sector.
 - *Provisions for special tax exceptions (e.g., property taxes) are to be established in conjunction with this.

(2) Advancing decarbonization efforts in ports and harbours

- O Port management bodies (local governments) are to develop **port and harbour decarbonization plans** that establish public-private partnership efforts* to decarbonize ports.
 - *These are to include arranging for the facilities needed to receive hydrogen and facilities for supplying vessels with fuel that has a low environmental impact.
- The port management bodies are to organize port decarbonization councils consisting of the relevant local governments, logistics companies, and enterprises located in the port or harbour, and to have them discuss the preparation and implementation of the decarbonization plans.
- Provisions are to be made for special exceptions that allow port management bodies to be flexible in
 establishing restrictions on the use of structures within the areas they specify in order to implement
 their plans, such as plans for the concentration of industrial facilities related to hydrogen.

Through these measures, Japan will promote carbon-neutral port initiatives, contribute to strengthening the competitiveness of Japanese industries and ports, and help to bring about a decarbonized society, in collaboration with industrial facilities clustered near the waterfront area.

2. Reliably maintaining ports' and harbours' functions during pandemics and natural disasters

(1) Strengthening the system for the government to support port management bodies

- As in times of extraordinary disaster, the government will be able to take over the management of port facilities in the event of an outbreak of an infectious disease or other such risk.
- (2) Facilitating the use of private-sector businesses
- The government and port management bodies are to be granted the authority to enter the land at the time surveys are being taken for port and harbour construction works, in order to facilitate disaster recovery efforts.



Handling of the disembarkation of symptomatic passengers (Port of Yokohama)

Improving the efficiency and quality of port and harbour management

- (1) Private-sector operation of facilities in ports' and harbours' green areas which give back to the public to help bring activity to the area
- O Provisions are to be made for a **certification system to allow the lending of green areas** to private businesses that will **develop for-profit facilities** (such as cafes) in **port' and harbours' green areas** and that will return some of the profits they earn from those facilities by **renovating those green areas**.



Example of green area utilization (café; Port of Kobe)

Goals and Outcomes To help bring about a decarbonized Japan by creating depots for hydrogen and fuel ammonia at ports and harbours and by decarbonizing port and harbour areas

(KPI) •Volume of cargo such as hydrogen and fuel ammonia handled at ports (hydrogen equivalent): Almost zero (in 2020) ⇒ 1 million tonnes (in 2030) •Rate of introduction for low-carbon machinery that handles containerized cargo in ports and harbours (transfer cranes and straddle carriers):

 $43\% \text{ (FY2021)} \Rightarrow 60\% \text{ (FY2026)} \Rightarrow 75\% \text{ (FY2030)}$

●港湾法の一部を改正する法律(令和4年法律第87号)

背景·必要性

1. エネルギー・産業構造転換のために必要な港湾における脱炭素化の推進

○ 我が国の**運輸・産業分野の脱炭素化**に必要な水素・燃料アンモニア等の活用を本格化させるためには、産業が集積し海上物流の拠点である港湾におけるそのサプライチェーンの構築と利用促進が必要。我が国産業や港湾の国際競争力

臨海部に集積する産業と連携し、港湾における官民関係者が一体となった、 カーボンニュートラルポート(CNP)の取組を推進するための仕組みが必要。

2. パンデミックや自然災害等への対応

○ パンデミックや激**甚化する自然災害等の新たなリスク**に対応するため、

港湾機能を確実に維持するための体制の構築が必要不可欠。

(43.8%) (40.4%) 化学工業 (石油石炭製品を含む) (5.1%) (10.7%)

我が国のCO。排出量

計10.4億トン(2020年度)

CO2排出量の約6割を占める産業の

発電所・

製油所等 4.2億トン

多くは、港湾・臨海部に立地

その他

4.6億トン

出典:国立環境研究所HP資料より、港湾局作成

港湾脱炭素化推進計画に

定める取組の例

海運の脱炭素化を支える環境負荷

の少ない船舶燃料の補給サービス

液化水素のサプライチェーンの 構築に必要な港湾施設の整備

3. 民間を活用した港湾の管理、利用等の効率化と質の向上への対応

○ 地域の交流拠点としての役割を担う港湾緑地等の**老朽化、魅力の低下**等に対応するため、 **民間活力を最大限活かして**、緑地等の再整備と魅力向上を効果的に推進する仕組みが必要。

法律の概要

1. 港湾における脱炭素化の推進

①港湾の基本方針への位置づけの明確化 等

- 国が定める港湾の開発等に関する基本方針に「脱炭素社会の実現に向けて港湾が果たすべき役割」等を明記。
- 港湾法の適用を受ける港湾施設に、**船舶に水素・燃料アンモニア等の動力源を補給するための施設を追加**し、
- 海運分野の脱炭素化を後押し。 ※併せて税制特例(固定資産税等)を措置

②港湾における脱炭素化の取組の推進

- 港湾管理者(地方自治体)は、官民の連携による港湾における脱炭素化の取組*を 定めた**港湾脱炭素化推進計画**を作成。
 - ※水素等の受入れに必要な施設や船舶への環境負荷の少ない燃料の供給施設の整備等
- 港湾管理者は、関係する地方自治体や物流事業者、立地企業等からなる 港湾脱炭素化推進協議会を組織し、計画の作成、実施等を協議。
- 水素関連産業の集積など、計画の実現のために港湾管理者が定める区域内に おける**構築物の用途規制を柔軟に設定できる特例等を措置**。
- **臨海部に集積する産業と連携して、カーボンニュートラルポート(CNP)**の取組を推進し、 **我が国の産業や港湾の競争力強化と脱炭素社会の実現に貢献**

2. パンデミック・災害の際の港湾機能の確実な維持

①国による港湾管理者を支援する体制の強化

- 非常災害と同様に、**感染症等のリスク発生時**にも、**国による港湾施設の管理代行**を可能とする。
- ②民間事業者の活用の推進
- 災害復旧工事等を円滑化するため、国、港湾管理者が委任した者に、港湾工事のための調査時に おける土地立入権限を付与。



感染症を発症した乗客の 下船対応(横浜港)

3. 港湾の管理、利用等の効率化と質の向上

- ①民間事業者による賑わい創出に資する公共還元型の港湾緑地等の施設整備
- 港湾緑地等において、収益施設(カフェ等)の整備と当該施設から得られる収益を還元して緑地等のリニューアルを行う民間事業者に対し、緑地等の貸付を可能とする認定制度を措置。



緑地の活用例(カフェ)(神戸港)

【目標・効果】 港湾における水素・燃料アンモニア等の受入拠点形成や港湾地域の脱炭素化等により、

が国の脱炭素社会の実現に貢献

(KPI)・港湾における水素・燃料アンモニア等の取扱貨物量(水素換算):ほぼゼロ(2020年)⇒100万トン(2030年)・港湾においてコンテナ貨物を取り扱う低炭素化荷役機械(トランスファクレーン、ストラドルキャリア)の導入割合:

系に何え成成(アルカアル ス ボアドルギャカ)の等人計画: 43%(2021年度)⇒60%(2026年度)⇒75%(2030年度)