

## The University of California, Berkeley, released a report that compiles analyses and recommendations on the ‘Port and Harbor Decarbonization Plan for the Port of Yokohama.’

The University of California, Berkeley, has released a policy research report providing analysis and recommendations on the “Port and Harbor Decarbonization Plan for the Port of Yokohama.”

The report was prepared by Professor David Wooley, Director of the Environmental Policy Center at the Goldman School of Public Policy, University of California, Berkeley. Professor Wooley is a leading expert on port and energy policy, advising both the California State Government and the U.S. Federal Government, and has been conducting policy research focused on Japan’s Carbon Neutral Ports (CNP) initiative.

The City of Yokohama is pleased to announce the publication of this report and will continue to enhance the international presence of its port while advancing the City’s broader global strategies, taking into consideration the report’s findings and recommendations.

### 1 Key Findings and Recommendations (Excerpts)

#### ① Electric supply and grid infrastructure

If plans to expand electricity supply and power transmission and distribution infrastructure are not advanced in parallel with electrification, there is a possibility that decarbonization efforts will stagnate over a long period of time.

#### ② Hydrogen pipeline development

While the concept of hydrogen pipelines is an extremely complex and long-term undertaking, Yokohama has shown important leadership in these matters, and therefore dissemination of periodic updates could benefit other jurisdictions facing similar needs.

#### ③ Alternative marine fuels

It would be beneficial to further elaborate on the role of the Port of Yokohama in the electrification of domestic shipping as well as in the development of supply chains for decarbonized liquid fuels.

#### ④ Air pollution, GHG emissions, and impact assessments

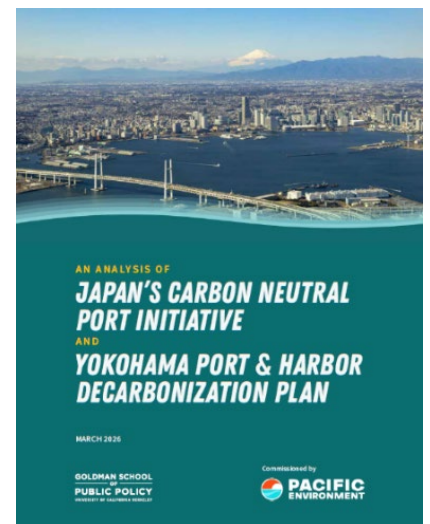
To gain a comprehensive understanding of GHG emissions from port activities, it may be necessary to reconsider the geographical scope of the Port Decarbonization Plan, since emissions from oceangoing vessels navigating or passing through the port area and from hinterland truck transportation are not included in the current assessment.

#### ⑤ Methane

Since methane is a powerful greenhouse gas with approximately 86 times the warming potential of CO<sub>2</sub>, it is desirable to consider setting methane emission reduction targets when updating the plan.

\*For more details, please refer to the link provided below the figure on the right.

This study was conducted in collaboration with [Pacific Environment](#), an environmental non-governmental organization (NGO) based in San Francisco, United States.



[English report](#)



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## 2 Comment from Professor David Wooley

The Port of Yokohama is at the forefront of port decarbonization worldwide. By addressing a wide range of emission sources and integrating port activities with broader economic and energy systems, Yokohama's comprehensive decarbonization plan provides a practical model that can inform similar efforts in Japan and globally. Its role is especially significant, given that ports serve as critical hubs connecting maritime trade, industry, energy, and public health.

At the same time, continued progress will depend on strengthening several key areas. These include expanding shore power and making it standard infrastructure, planning for significant growth in electricity demand and upgrading power infrastructure accordingly, and supporting the development of supply chains for zero- and low-carbon fuels.

By advancing these efforts, the Port of Yokohama can further solidify its role as an international leader and help shape global best practices in port decarbonization. Continued collaboration across government, industry, and international partners will help achieve these goals.



## 3 Comment from Director General Yasuhiro Shimbo

Since our first meeting in 2023, we have continued our exchange with Professor Wooley, and I sincerely appreciate his thoughtful and insightful recommendations on our plan. Among these recommendations, the need for expanding electricity supply and grid infrastructure is particularly significant. This insight is especially valuable given uncertainties surrounding growing electricity demand in port areas, including data centers.

The City of Yokohama has already begun examining green power supply options for the Yokohama waterfront area in 2024 in collaboration with TEPCO Power Grid, Inc. and Ocean Power Grid, Inc. (a subsidiary of PowerX, Inc.). In 2025, two additional companies joined this initiative. In light of Professor Wooley's recent recommendations, we recognize the need to further advance these efforts.

By advancing power supply and grid infrastructure studies, we will promote wider deployment of shore power and electric vessels, while supporting industrial development and decarbonization in the Yokohama waterfront area.



[Port of Yokohama's future vision for a "Carbon Neutral Port"](#)

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