



August 19th, 2024 City of Yokohama Port and Harbor Bureau Blue Visby Services Ltd. NAPA JAPAN Inc.

Participated as the first Japanese port in the Blue Visby Consortium, which aims to reduce GHG emissions by optimizing ship navigation through the use of digital technology

The City of Yokohama participated in the Blue Visby Consortium (Hereinafter referred to as the "Consortium".), which aims to reduce greenhouse gas emissions from ships by optimizing ship navigation through the use of digital technology.

In the shipping industry, it is customary to "Sail Fast, then Wait", meaning "Sail fast and stay on standby near the destination", which results in more greenhouse gas emissions. According to the Consortium's analysis and empirical research, if vessels could jointly adjust their sailing speed and arrival time using the Blue Visby Solution (hereinafter referred to as the "System") to be built by the Consortium, it is estimated that greenhouse gas emissions could be reduced by more than 15%.

Through its participation in this consortium, the City of Yokohama will work to implement a carbon neutral port by encouraging the reduction of greenhouse gas emissions from ships.

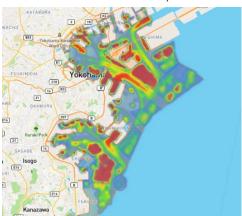
1 What is "Blue Visby Consortium"?

The Consortium consists of more than 30 organizations, led by NAPA (Head office: Finland, Japan Corporation: Kobe), a provider of data solutions for ship design and safe and efficient operation, and Stephenson Harwood, an international law firm (Location: London, UK.). In Japan, Class NK, Marubeni Corporation, Mitsui O.S.K. Lines, Ltd. and Development Bank of Japan Inc. participate in Consortium.

This system aims to optimize and distribute arrival times of groups of vessels heading for the same destination port. The optimal target arrival time is provided for each vessel while maintaining the scheduled arrival order, taking into account the performance of each vessel and conditions such as congestion and weather conditions at the destination port. We also aim to reduce GHG by determining the optimum sailing speed of each vessel for efficient navigation.

2 Background of our participation in the Blue Visby Consortium

Last October, the City of Yokohama became the first port in Japan to adopt and begin utilizing a service for visualizing emissions from ships. This service has enabled us to accurately determine the estimated values of greenhouse gas emissions from vessels of all types operating in the Port of Yokohama, while at the same time visualizing the large amount of greenhouse gas



emissions from vessels waiting offshore in the Port of Yokohama.

Although Japanese port administrators do not have the authority to require vessels to navigate in an optimal manner, by participating in this consortium, we aim to reduce GHG emissions from vessels in the Port of Yokohama by appealing optimal vessel operation through public-private partnership.

Screen of Maritime Emissions Portal (RightShip), a service that visualizes emissions from ships.

3 Operators of the Blue Visby Consortium, etc.

(1) Blue Visby Service Ltd. (Head office: London, U.K.)

Established in 2021. It represents the Consortium by organizing the participating businesses in the Consortium. NAPA, discussed below, is also a shareholder of Blue Visby Service, and Stephenson Harwood LLP, discussed below, provides legal advice to Blue Visby Service.

(2) NAPA Ltd. (Head office: Helsinki, Finland)

Established in 1989. It designs ships and sells operational support systems and services. More than 90% of new vessels are built by NAPA customers, and NAPA's ship design software has become a global industry standard in shipbuilding. NAPA Japan was established in Kobe in 2001 as NAPA's first overseas office and began providing services in Japan. In this consortium, it is responsible for the technical development of the Blue Visby Solution.

(3) Stephenson Harwood LLP (Stephenson Harwood International law firm. Location: London) International law firm established in 1875. Mr. Haris Zografakis, a Blue Visby founder, has more than 30 years of experience as a maritime lawyer and leads with industry players in various areas, including the decarbonization of shipping.

oComments from Naoki Mizutani, President of NAPA JAPAN Ltd.

To achieve Blue Visby's goal of eliminating offshore waiting and contributing to decarbonization, mutual cooperation among various maritime stakeholders, including shipowners, charterers, and ports, is indispensable. The Port of Yokohama's participation in Blue Visby, the first in Japan, is a major step forward. As the coordinator of Blue Visby in Japan, NAPA Japan would like to work with the City of Yokohama/the Port of Yokohama to create a cooperative mechanism and demonstrate the effectiveness for realizing Blue Visby.

4 Image of Blue Visby Solution initiative https://bluevisby.com/



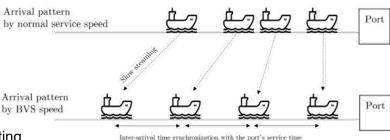


Image of optimizing and distributing arrival times of groups of vessels aiming at the same port through this system





Carbon Neutral Port Initiative at the Port of Yokohama

Contact

Hitoshi NAKAMURA, Director for Carbon Neutral Port Promotion, Port and Harbor Bureau,

E-mail: kw-seisaku@city.yokohama.jp

Naoki Mizutani, President and Representative Director, NAPA JAPAN Inc. Tel: +81-78-325-2160