Japan's Efforts for Environmental Issues in International Shipping

Presented by Masafumi SHUKURI Vice-Minister for Transport, Tourism and International Affairs Ministry of Land, Infrastructure, Transport and Tourism of Japan

Thank you Mr. Chair,

My name is Shukuri and Vice-Minister for Transport, Tourism and International Affairs, Ministry of Land, Infrastructure, Transport and Tourism.

In this presentation, I would like to introduce our actions for reduction of CO_2 emission and prevention of air pollution from international shipping.

Protection of marine environment is vital factor for sustainable development of international shipping and global actions are essential. Japan, as one of the major shipping and shipbuilding country, is actively contributing to this international issue with its highly developed technologies and long years of experience in the field.

<u>Slide 1</u>

Growth of the world seaborne trade has been increasing driven by growth of the world economy especially in recent ten years. CO₂ emission from international shipping increased simultaneously.

Today, every effort is taken to reduce CO_2 emission around the world. Unfortunately we have not yet established any international framework to control CO_2 emission from ships. It is essential for us to establish the framework to reduce CO_2 as soon as possible.

As shown in the circle chart on the left, proportion of ships registered in Annex I countries under the Kyoto Protocol is merely 18%. It suggests that global measures are required in order to reduce CO_2 emission from international shipping.

Slide 2

In this regard, we are of opinion that International Maritime Organization (IMO), with its knowledge and expertise, should take initiative and lead to set a package of measures to reduce CO2 emission from international shipping.

In addition, we believe that the measures should be the one that binds and applies equally to the all ocean-going vessels in order not to allow evasion and distortion to a unique and global market of international shipping.

We have submitted a proposal to the IMO on Energy Efficiency Index which assesses and indicates amount of CO_2 emission from individual ship. We believe that the index works effectively to reduce CO_2 emission.

In order to further improve energy efficiency, innovations in energy-saving technologies are essential. In this regard, we encourage research and development of energy-saving technologies in Japanese maritime sector, aiming 30% reduction of CO_2 emission.

Slide 3

Ships has been, at their design stage, assessed their performance at calm sea condition which ignores effects of winds and waves.

However, in reality, a ship sailing ocean encounters winds and waves and much reduces their speed.

Effect of actual sea state is substantive factor in energy efficiency.

Therefore we proposed the Energy Efficiency Index to the IMO, which reflects actual sea condition, based on intensive analyses and studies.

We believe that the index helps shipowners or operators to find out superior vessel in terms of energy efficiency at design stage, and that shipbuilders will endeavor to construct vessels with higher energy efficiency. The index will greatly contribute to reducing CO2 emission from ships in that way.

Slide 4

Regulations for prevention of air pollution from ships are enforced worldwide based on MARPOL Annex VI. At 58th session of Marine Environment Protection Committee of the IMO, last October, the amendments to MARPOL Annex VI were adopted to reduce air pollutant emissions from ships.

NOx emission limits for new engines will be strengthened by two steps and as for Sox emission allowable sulfur content in fuel oil is to be reduced gradually through three steps.

Slide 5

In implementation of with IMO regulations, we are currently conducting the five-year-programme on comprehensive research and development for advanced engine technologies. The programme has been participated by all the industry concerned such as engine manufacturers, shipbuilders and research institutes.

The Aim of our programme is to reduce NOx emission by 80 % maintaining the CO₂ emission level. Improvement of In-engine combustion technology, development of after-treatment device such as SCR (selective catalytic reduction) system with high-performance and minimized size are core parts of the programme.

Last but not least, I would like to emphasize importance of the role of IMO for taking appropriate actions to address maritime environmental issues and sound development of international shipping. Japan will actively contribute to IMO activities, collaborating with the countries gathering here, to challenge this global issue.

Thank you, Mr. Chairperson.