資料３２－６

64th Meeting of the CIMAC EEC WG

Asia and Japan Marine and Power Plant

Japanese Domestic CIMAC WG5
JICEF
26th June 2019

NIGATA

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TOPICS

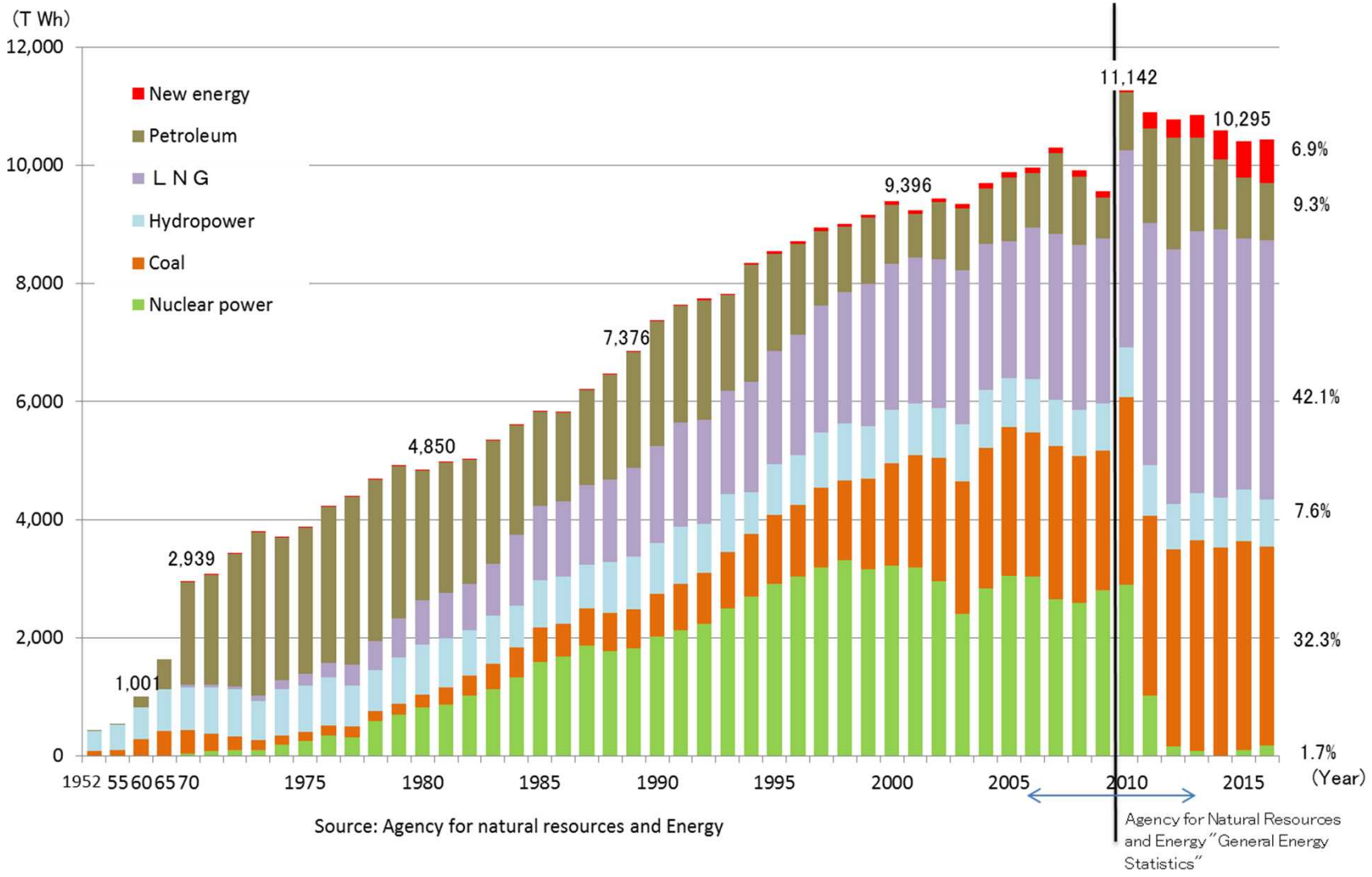
- Stationary situation in Japan
- Marine regulation in Japan
- Hong Kong waters
- Chinese Domestic Emission Control Areas
- The prohibition of discharge from scrubbers

Stationary situation in Japan

Stationary regulation of Japanese Government and Stationary regulation of Local authorities are no Change in Japan

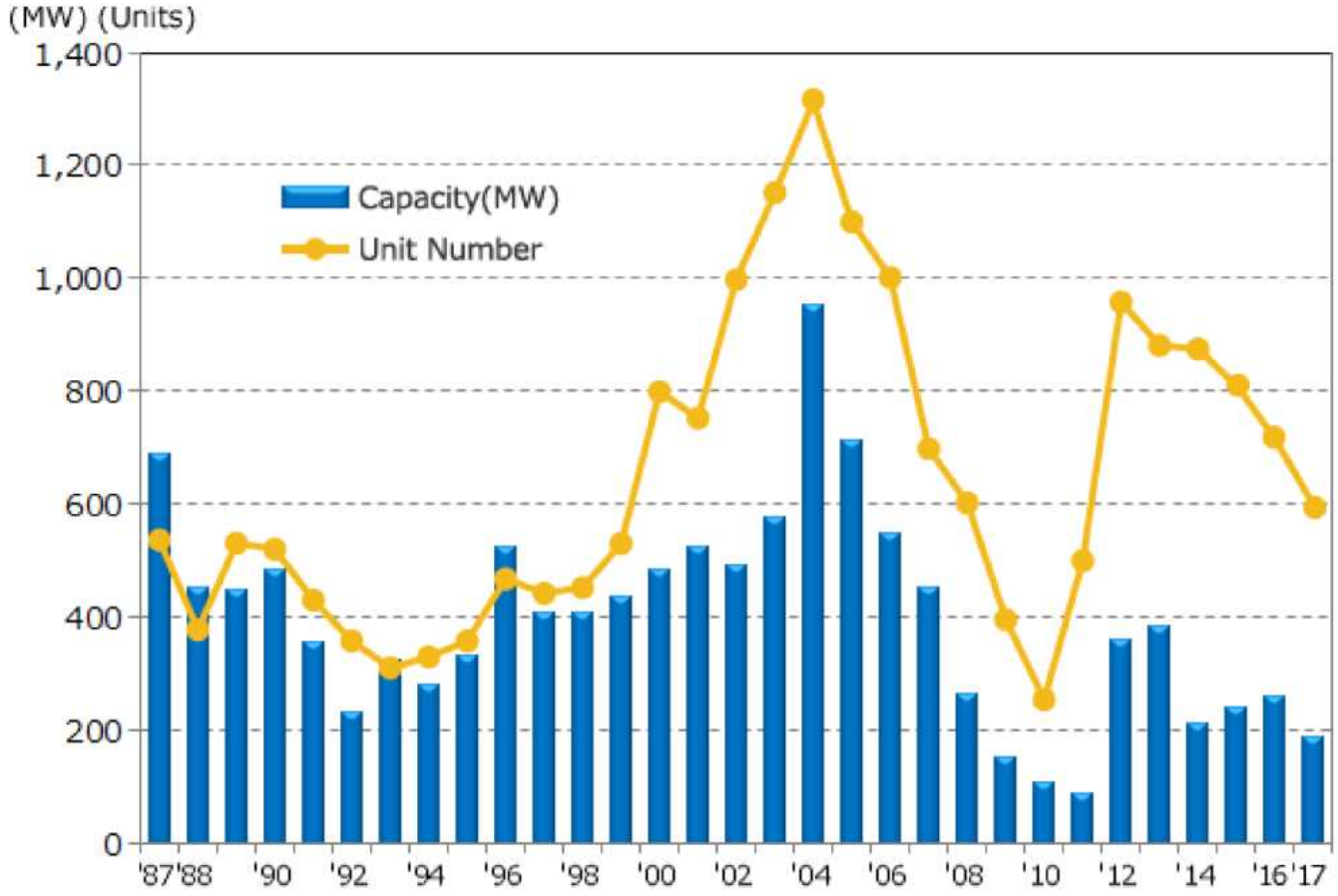
- **Air Pollution Control Act No. 97**
  (From February, 1988 for stationary engines)

Stationary situation in Japan



Stationary situation in Japan

Annual Number of Units and Capacity （as the end of March 2018）



Advanced Cogeneration and Energy Utilization Center JAPAN
https://www.ace.or.jp/web/en/currentstate/currentstate_0010.html

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Marine regulation in Japan

- **Marine : In accordance with IMO MARPOL ANNEX VI (mainly NOx, SOx and PM) IMO Tier Ⅱ applied ,Not set NECA**
  - **Inland Waterways : No emission regulation in Japan**
  - **GHG / CO_2 / fuel efficiency : in accordance with IMO MARPOL ANNEX VI (EEDI and SEEMP)**

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Hong Kong waters (1/2)

Currently, vessels berthing in Hong Kong waters (excluding the first hour after arrival and the first hour prior to departure) are required to use fuel oils whose sulphur content does not exceed 0.5% by weight, liquefied natural gas or other fuels approved by the Hong Kong authorities.
However, in accordance with the "Air Pollution Control (Fuel for Vessels) Regulation", not only vessels berthing, but also vessels sailing in Hong Kong waters on or after 1 January 2019 shall be required to use fuel oils whose sulphur content does not exceed 0.5% by weight, liquefied natural gas or other fuels approved by the Hong Kong authorities.

Source: ClassNK Technical Information No. TEC-1167

Hong Kong waters (2/2)

In addition, the following must be recorded in the vessel's log book, and this log book, the bunker delivery note and the written procedures for conducting a switching operation must be kept on board the vessel.

1. the date and time when the vessel enters the Hong Kong waters;
2. the date and time when the vessel exits the Hong Kong waters;
3. the date, time and position of the vessel when a fuel switch operation to compliant fuel is completed on the vessel;
4. the volume and sulphur content of the compliant fuel carried on the vessel for operating its specified machinery when a fuel switch operation to compliant fuel is completed on the vessel;
5. the date, time and the position of the vessel when a fuel switch operation to non-compliant fuel commences on the vessel; and
6. the volume and sulphur content of the compliant fuel carried on the vessel for operating its specified machinery when a fuel switch operation to non-compliant fuel commences on the vessel.

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Chinese Domestic Emission Control Areas (1/2)

From 1 January 2019, vessels navigating, berthing and operating within Domestic Emission Control Areas (hereinafter referred to as "DECAs"), which includes both costal control area throughout China and inland river control area, are required to use fuel oil which sulphur content does not exceed 0.5% m/m.
For more details, including the scope of the DECAs, please refer to Attachment 1 "Notifications from Ministry of Transport of the People's Republic of China".

Source: ClassNK Technical Information No. TEC-1171

Chinese Domestic Emission Control Areas (2/2)

Furthermore, the regulations are to be strengthened sequentially as per the following table.

Requirements of the regulations on the sulphur content of fuel oil

Applicable date	Requirements
From 1 January 2019	The sulphur content of fuel oil used on board should not exceed 0.5% m/m when operating within DECAs.
From 1 January 2020	The sulphur content of fuel oil used on board should not exceed 0.1% m/m when operating within inland river control area.
From 1 March 2020	Vessels which do not use alternative arrangements should load and use fuel oil as required in the regulation when operating within DECAs.
From 1 January 2022	The sulphur content of fuel oil used on board should not exceed 0.1% m/m when operating within coastal control area in Hainan waters.

In addition, from 1 July 2019, existing vessels (except for tankers) fitted with onboard devices for using shore power are required to use shore power when berthing at locations which have shore power supply capabilities inside the coastal emission control area for more than 3 hours, or inside the inland river emission control area for more than 2 hours except when using other alternative or equivalent measures.

Chinese Domestic Emission Control Areas (3/3)

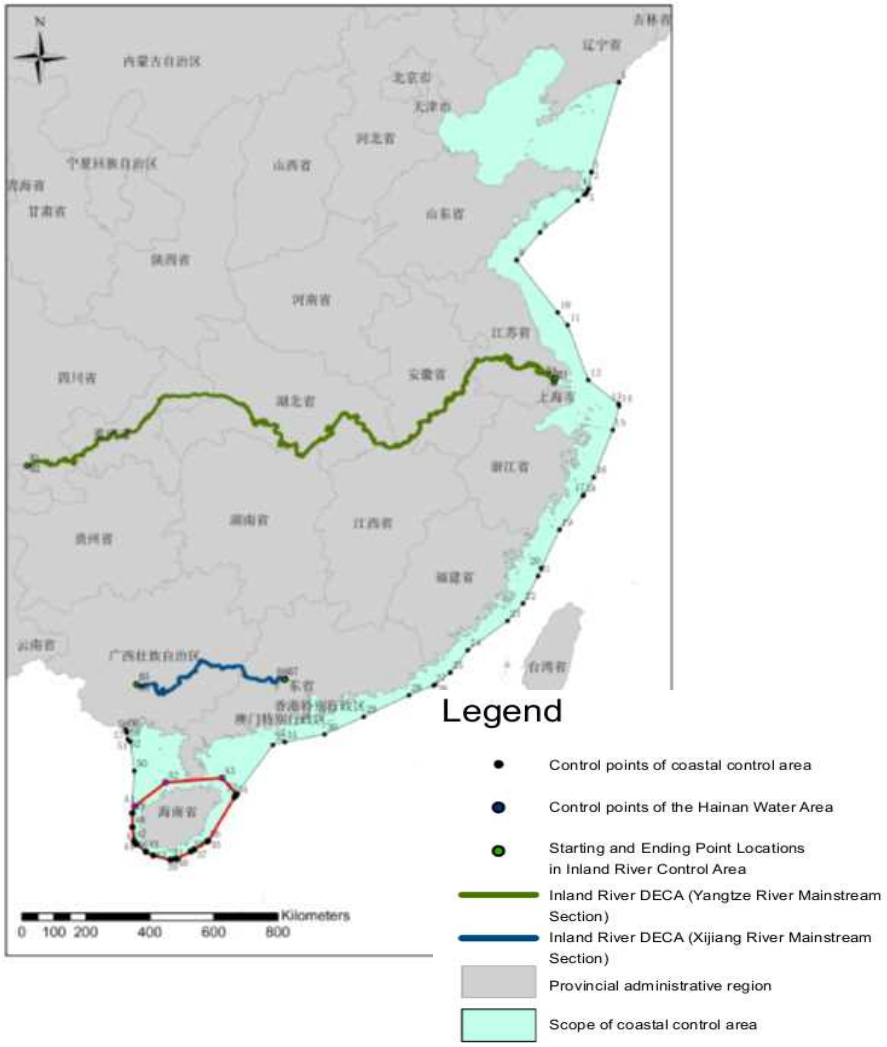

Figure 1 Geographic Scope of the Emission Control Area

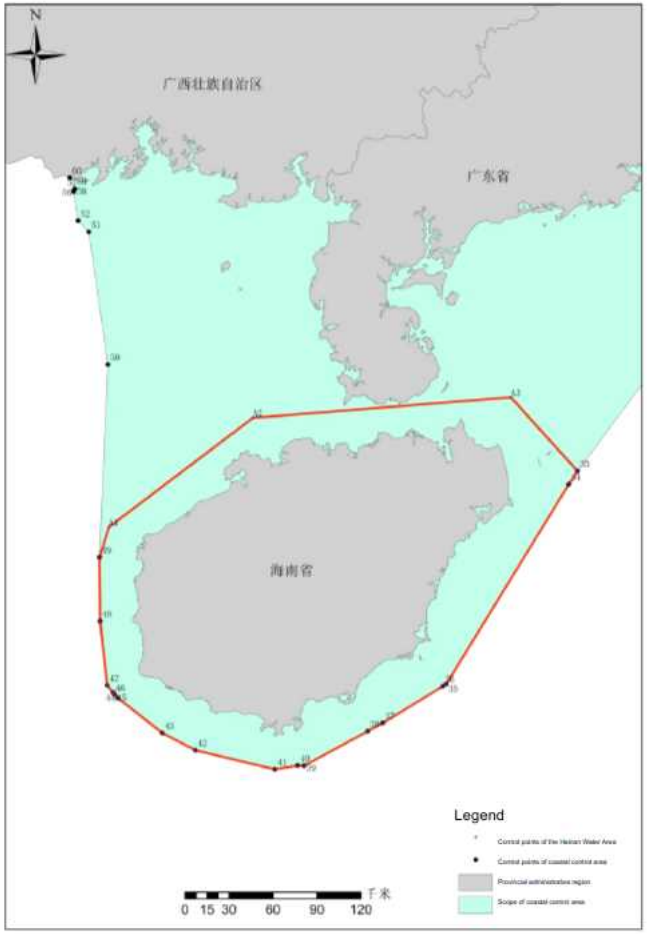

Figure 2 Geographic Scope of the Emission Control Area in Hainan Waters

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The prohibition of discharge from scrubbers

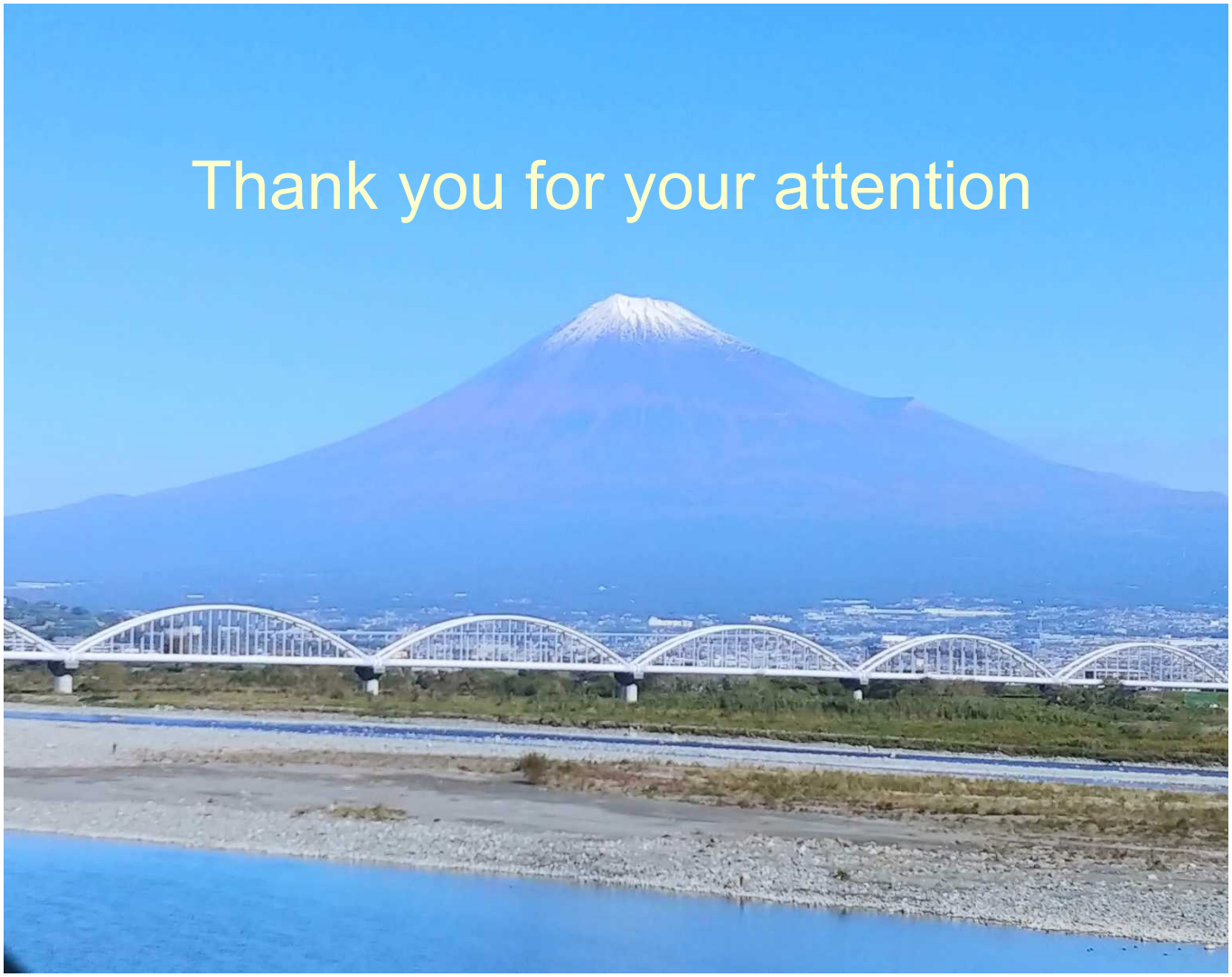
The Chinese Government published a notification on 29 December 2018 which contains additional information related to the prohibition of discharge from scrubbers.

The URL of the notification is as follows.
http://www.msa.gov.cn/page/article.do?articleId=D383773A-FC2C-4D64-976D-1B7E8CDC13AB

・According to this latest notification, discharge from scrubbers is prohibited in the following areas:

1. the port area of the Coastal Control Area (within 12 nautical miles of China coast);
2. the inland river control area (regulated waters of Yangtze River and Xijiang River); and
3. the Bohai area.

Source: ClassNK Technical Information No. TEC-1174


Thank you for your attention