

# Japanese Policy of Ship Recycling

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Deputy Director-General for Engineering Affairs,  
Maritime Bureau  
Masato Mori



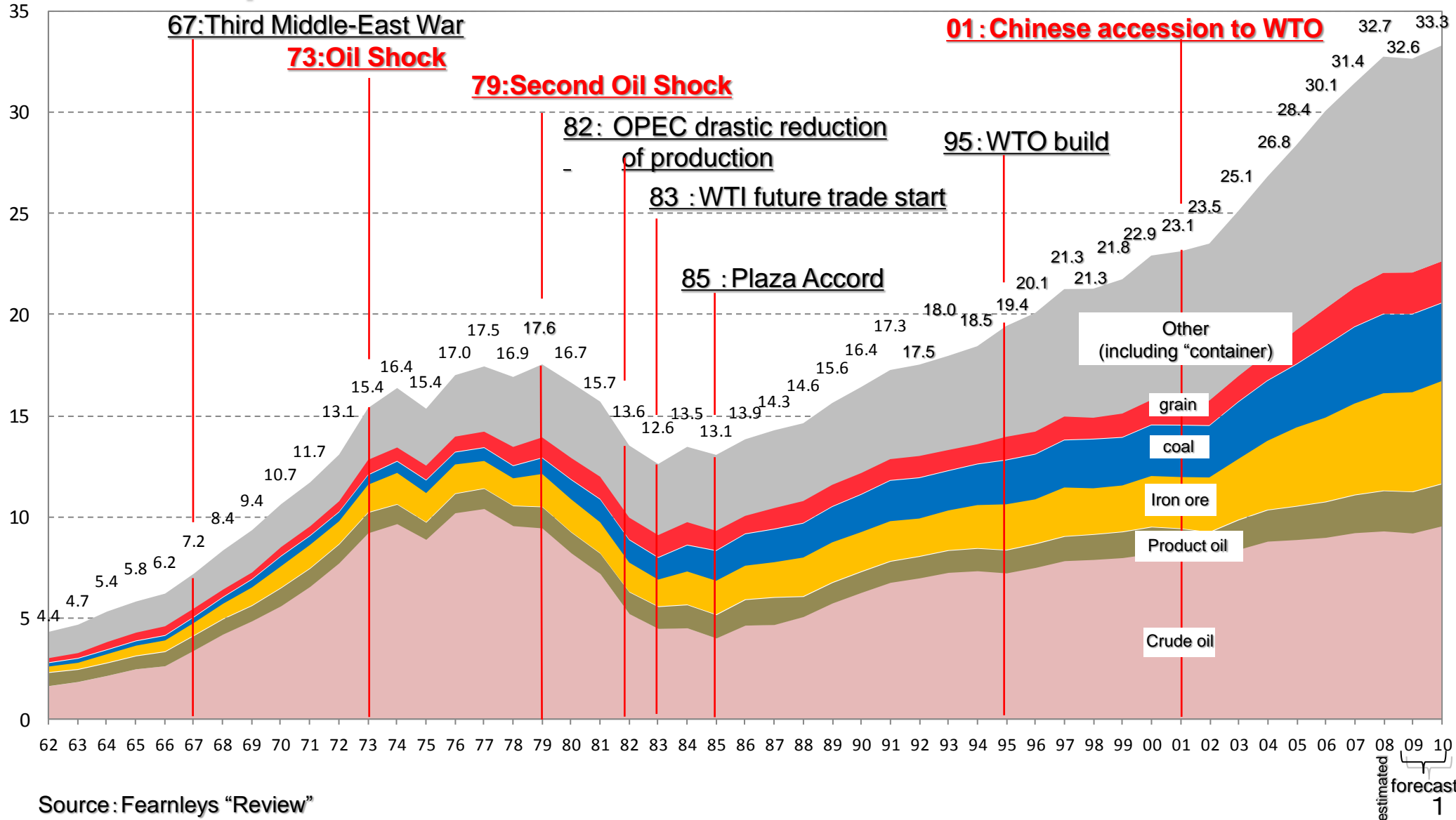


# World Shipping Market (Past Record and Forecast)

Feb. 2009 Forecast

- Basically increasing except after “oil shock”
- Rapid increase after Chinese accession to WTO

Bn ton·Mile

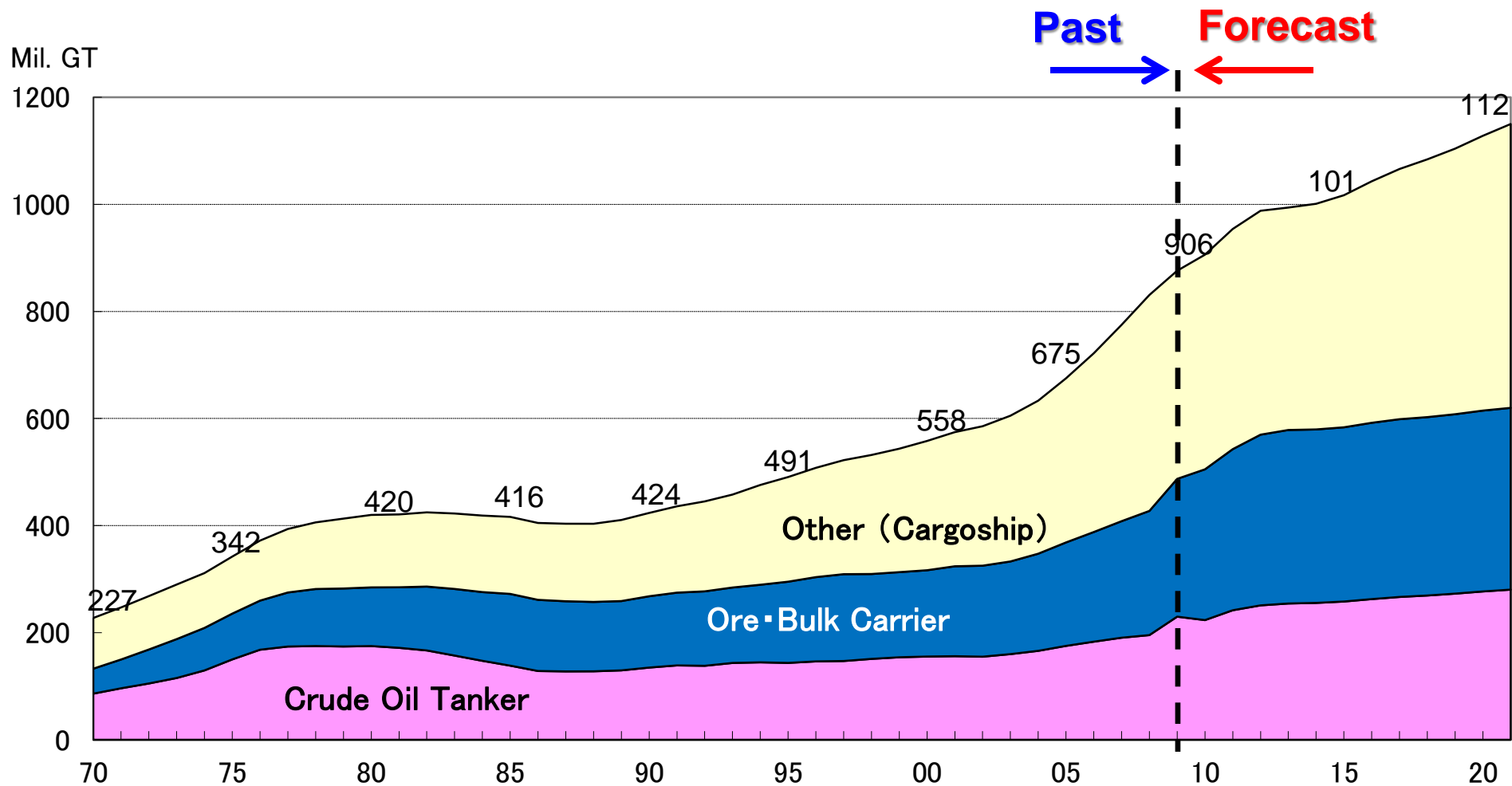


Source: Fearnleys "Review"

estimated forecast 1



# World Merchant Fleet (Past Record and Forecast)



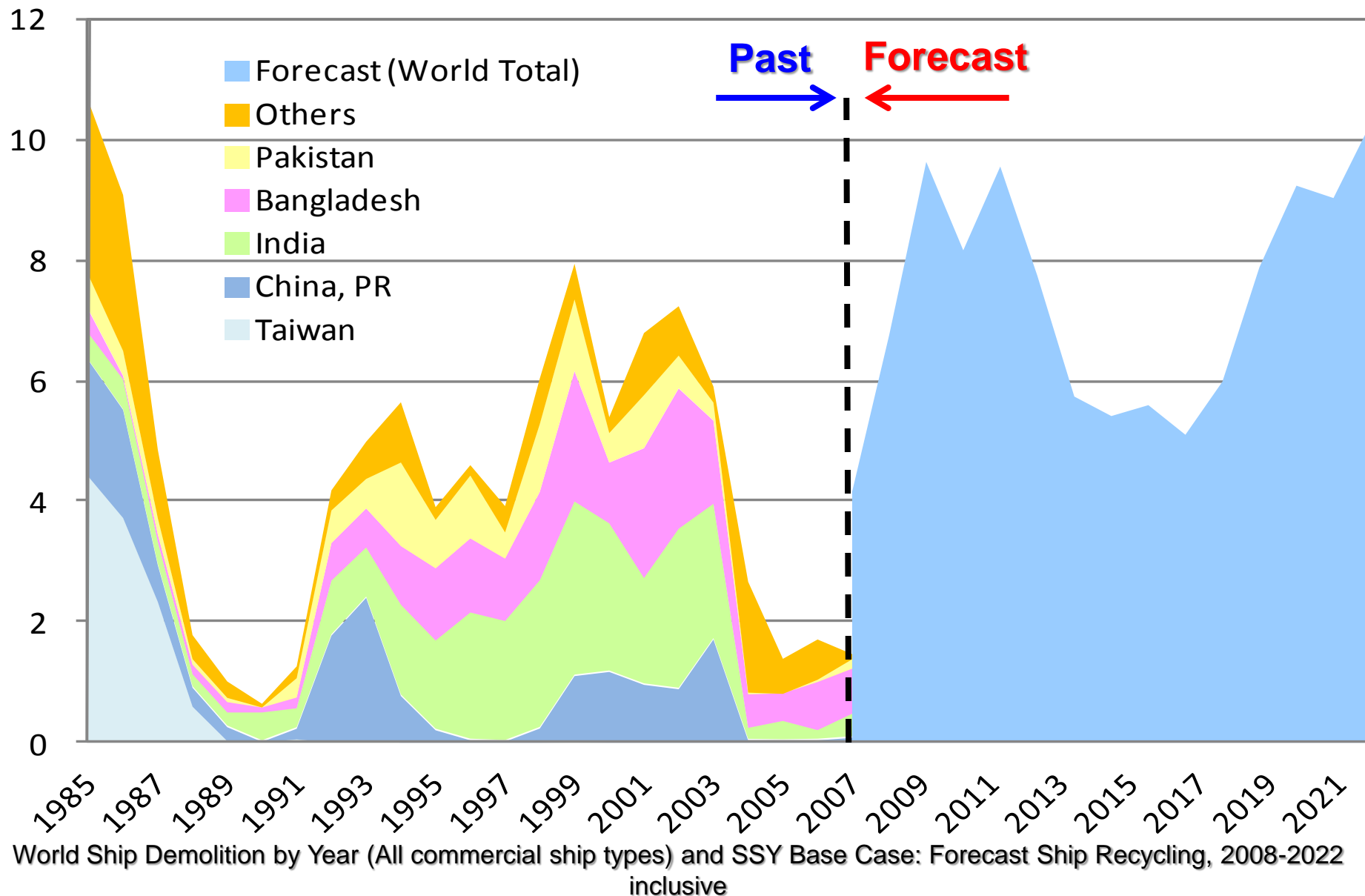
Source

1. Lloyd's Register (Statistical Tables(until 1991), World Fleet Statistics(from '92 to '08)), Clarkson Forecast(from '09)
2. More than 100 GT (until 2008) and more than 2,000 GT or DWT (from 2009)



# Ship Recycling(Dismantling) (Past Record and Forecast)

mil. LDT





## Ship Recycling Issue

- Poor working condition for ship recycling in developing countries
- Hazardous Material (Asbestos, PCB) pollution in Ship Recycling



To development  
of International control ...





## The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (adopted in May 2009)

### --Quote--

NOTING the growing concerns about safety, health, the environment and welfare matters in the ship recycling industry,

RECOGNIZING that recycling of ships contributes to sustainable development and, as such, is the best option for ships that have reached the end of their operating life,

### ➤ Application

→Ships (more than 500 GT) and Ship Recycling Facilities

### ➤ Contents

→Survey and Certificate of ships

- Control of ships' Hazardous Materials
- Development, maintenance and kept updating of the Inventory of Hazardous Materials
- Preparation prior to recycling

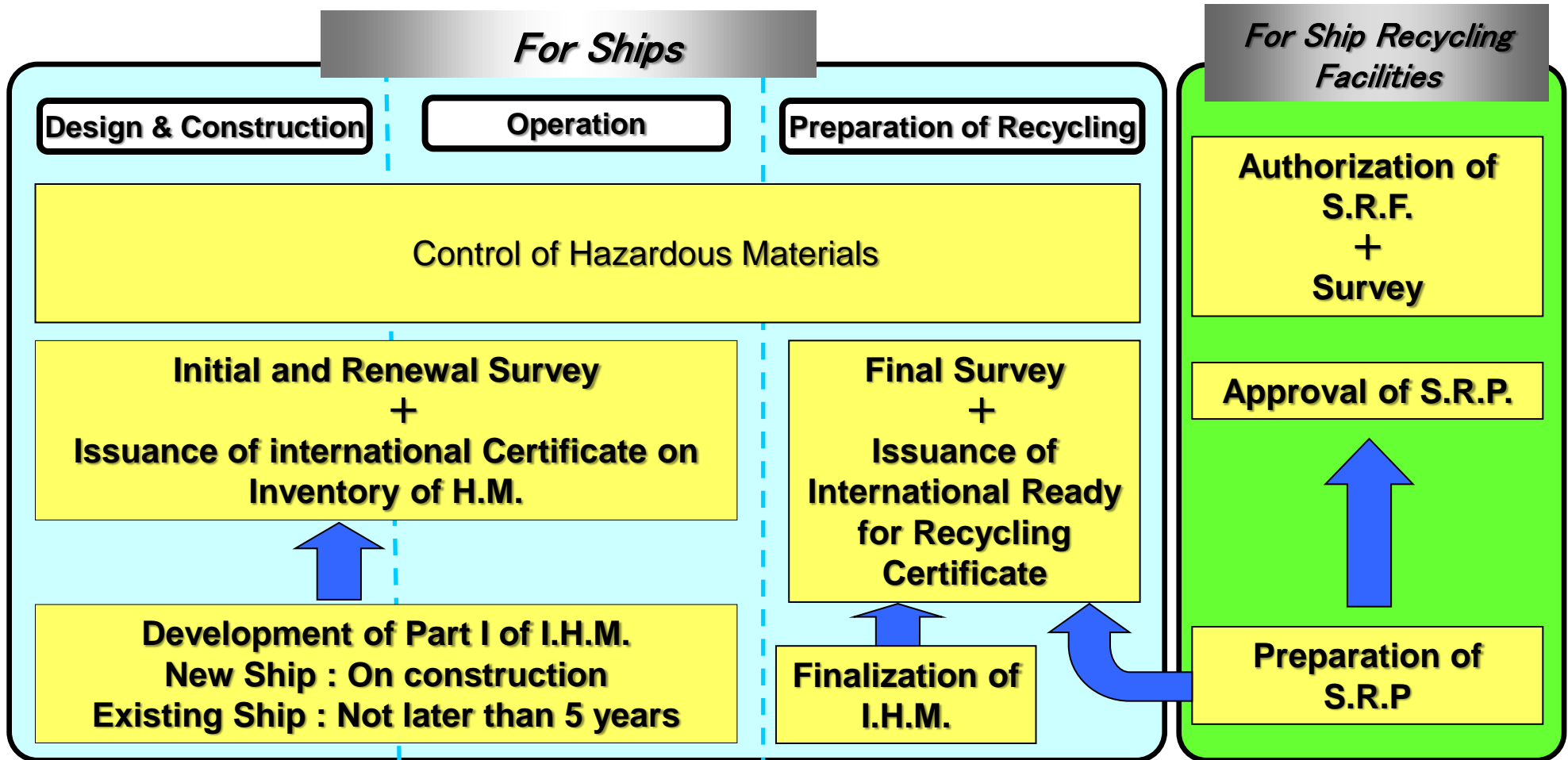
→Authorization of S.R.F

- Prevention of adverse effects to human health and the environment
- Safe and environmentally sound management of Hazardous Materials
- Development of Ship Recycling Plan





## <Requirement of Hong Kong Convention>



Entry into Force Condition

- ① not less than **15 States** have signed it;
- ② not less than **40 per cent** of the gross tonnage of the world's merchant shipping; and
- ③ the combined maximum annual ship recycling volume of the States during the preceding 10 years constitutes not less than **3 per cent** of the gross tonnage of the combined merchant shipping of the same States.

Japanese government has contributed to develop Hong Kong Convention including:

- Submission of the proposals of draft convention text and guidelines
- Undertaking coordinator of the IC group of guidelines (Inventory, Ship Recycling Facility, Ship Recycling Plan(SRP))





## Japan Ship Technology Research Association



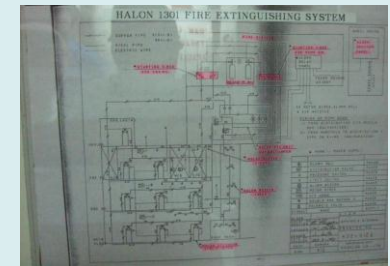
### Ship Recycling Project (sponsored by Nippon Foundation, 4 years)

- Ship Recycling Facility Research (Bangladesh, India and China)
- Management of Hazardous Material Research
- Trial of development of the Inventory
- Manual for development of the Inventory for existing ships
- Database of Hazardous Materials
- Seminar held every year .....



### Experts for Development of the Inventory for existing ships

- Formulation of the Inventory development worldwide system
- Database of Hazardous Materials
- ISO9000



# ClassNK

 **110**<sup>th</sup> Anniversary

- Trial of developing Inventory of Hazardous Materials for Existing Ships and Newly Built Ships
- Issuance of Statement of Fact
- Developing a software (Prime Ship INVENTORY) for Development of Inventory of Hazardous Materials
- Arrangement of Seminars on the Convention and Meetings with Owners, Shipyards etc.

- Establishment of Muroran Ship Recycling Study Group
  - 30 members (University, Company, Local Government, etc. )
  - Muroran Ship Recycling Study Group Meeting held 9 times



- Cabinet Office Project of Ship Recycling (2008~ 2009)
  - Feasibility study for ship recycling activities in Muroran
  - Recycling of Fishing Vessel (145 Gross Ton)





## —Pilot Model Project of Ship Recycling—

### Pilot Model Project

Pilot model Project of Ship Recycling will be carried out in a local city, and the Guideline For Ship Recycling System in Japan can be developed

- Framework Collaborative relationship among industry, government and university
- Ship Recycling demonstration experiment, Environment Assessment, Business Assessment, R&D of New technology and method.



**Ship Recycling System for an advanced country**

### Local Area which can be expected the ship Recycling business

Hopes for creation of new industry

#### Muroran / Hokkaido



Steel Company



Local related Company



Regional activation



Port Facility

- big port
- related facility



Ship owner





## Possible effect

○ Ensuring the Ship Recycling Capacity

○ Ensuring iron and steel material

- **35,000 ton** iron and steel from one VLCC Tanker

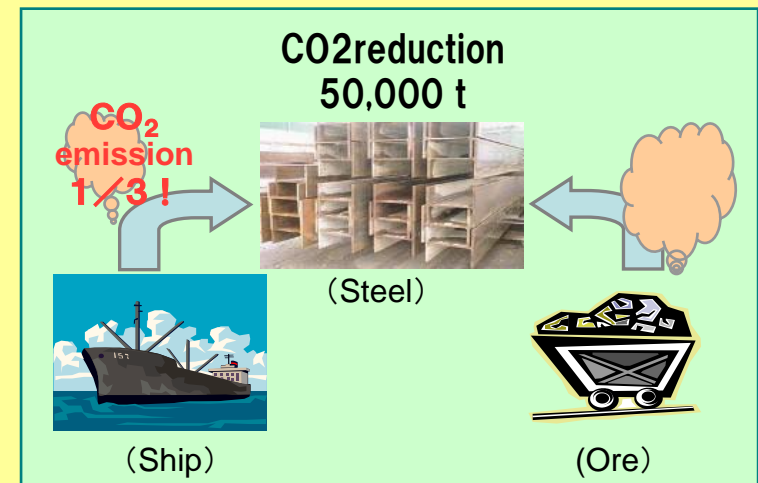
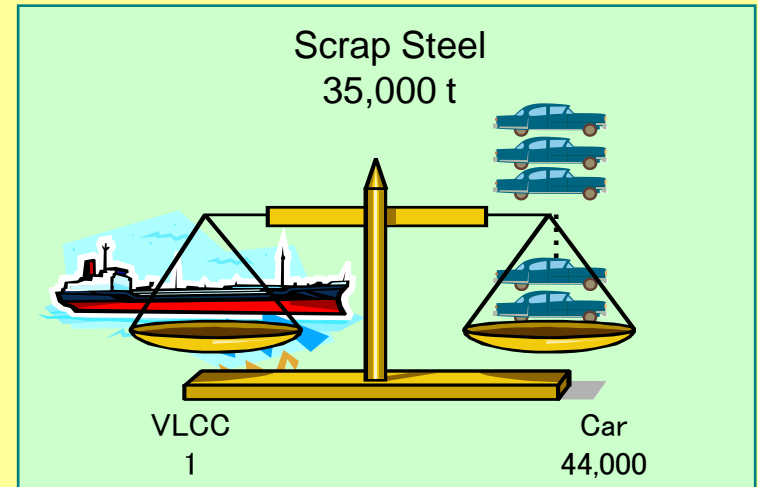
○ CO<sub>2</sub> reduction

- **50,000 ton** reduction from one VLCC Tanker

○ Local economy activation



*In case of recycling a VLCC Tanker*







## ➤ Hong Kong Convention

- **EU, India and China may ratify the Convention early, Japan also must ratify.**
- **Each country should promote the implementation of interim measures in a manner that is consistent with the Hong Kong Convention**

## ➤ Capacity Building

- **Ship Recycling Facility complied with the convention is limited. The Shortage of Ship Recycling Capacity can be concerned and it is need to support recycling capacity building.**



➤ **Policy**

Reduction of developing country burden / CO2 reduction

➤ **Issue**

- Rationalization of Recycling activity and Hazardous Material Management
- Stable business model (scrap steel from ship)

Thank you for your attention.

