

An aerial view of a large red and white offshore supply ship, likely a TUG (Tugboat), sailing on the ocean. The ship has a white superstructure and a red hull. It is equipped with various deck facilities, including cranes, storage tanks, and a helipad. The ship is moving towards the right, leaving a white wake in the blue water.

# *Proposals on developing sustainable ship recycling industry*

*Presented by EmergenSea*



[1] Global Core Research Center for Ships and Offshore Plants

# INDEX



## Introduction

Background and current issue



## Problem

1. Lack of cooperation
2. Insufficient financial resources



## Proposal

1. Amendment to Hong Kong Convention
2. Applying for MPTF



## Conclusion

Sustainable Ship Recycling industry

## *BACKGROUND AND CURRENT ISSUE*





*How do you think of this picture?*

## Introduction The overview of current Ship Recycling Industry



### Ship Recycling Industry

- Drawing world's attention in recent days
- Mainly operation in developing countries
- Labor, Environmental problems

**Some problems with discarded vessels in developing countries**

## Introduction Safe and Environmentally Sound Recycling of Ship

### The Hong Kong Convention



### Limitation

Enacted in 2009



Planned to take effect in 2013



Not yet come into effect

IMO's efforts to solve problem regarding Ship Recycling

## *PROBLEM 1: LACK OF ATTENTION TO WORKER' S SAFETY*

## Problem 1 Lack of attention to workers



**IMO:** Marine Environment Protection Committee

**BASEL:** Technical Guidelines for the ESM of the full and partial dismantling of ships

**ILO:** Marine Environment Protection Committee

**BUT,**

Missing out **ILO's** contents about workers

One of the reasons The Hong Kong Convention has not taken effective



## Problem 1 Ambiguous Article

REQUIRMENTS FOR SHIP RECYCLING FACILITITES		
CHAPTER 3 – REQUIREMENTS FOR SHIP RECYCLING FACILITIES	Regulation 15	Controls on Ship Recycling Facilities
	Regulation 16	Authorization of Ship Recycling Facilities
	Regulation 17	General requirements
	Regulation 18	Ship Recycling Facility Plan
	Regulation 19	Prevention of adverse effects to human health and the environment
	<b>Regulation 20</b>	<b>Safe and environmentally sound management of Hazardous Materials</b>
	Regulation 21	Emergency preparedness and response
	<b>Regulation 22</b>	<b>Worker safety and training</b>
	Regulation 23	Reporting on incidents, accidents, occupational diseases and chronic effects

Unbalanced The Hong Kong Convention Regulations

## Problem 1 Convention's Regulation

### APPENDIX 1

[5]

#### CONTROLS OF HAZARDOUS MATERIALS

Hazardous Material	Definitions	Control measures
Asbestos	Materials containing asbestos	For all ships, new installation of materials which contain asbestos shall be prohibited
Ozone-depleting substances	<p>Ozone-depleting substances means controlled substances defined in paragraph 4 of article 1 of the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, listed in Annexes A, B, C or E to the said Protocol in force at the time of application or interpretation of this Annex.</p> <p>Ozone-depleting substances that may be found on board ship include, but are not limited to:</p> <p>Halon 1211 Bromochlorodifluoromethane Halon 1301 Bromotrifluoromethane Halon 2402 1,2-Dibromo-1,1,2,2-tetrafluoroethane(also known as Halon 114B2) CFC-11 Trichlorofluoromethane CFC-12 Dichlorodifluoromethane CFC113 1,1,2-Trichloro-1,2,2- trifluoroethane CFC-114 1,2-Dichloro-1,1,2,2-tetrafluoroethane CFC-115 Chloropentafluoroethane</p>	New installations which contain ozone-depleting substances shall be prohibited on all ships, except that new installations containing hydrochlorofluorocarbons(HCF Cs) are permitted until 1 January 2020.

### Regulation 20 – Specific

Safe and environmentally sound management of Hazardous Materials

[5] The Hong Kong Convention

10/30

## Problem 1 Convention's Regulation

### Regulation 22 – Ambiguous

Worker safety and training

- [6]
- 2 Ship Recycling Facilities authorized by a Party shall provide and ensure the use of personal protective equipment for operations requiring such use, including:
- .1 head protection;
  - .2 face and eye protection;
  - .3 hand and foot protection;
  - .4 respiratory protective equipment;
  - .5 hearing protection;
  - .6 protectors against radioactive contamination;
  - .7 protection from falls; and
  - .8 appropriate clothing.

[6] The Hong Kong Convention

## Problem 1 Convention's Regulation

### Regulation 20 – Specific

#### Safe and environmentally sound management of Hazardous Materials

APPENDIX 1

CONTROLS OF HAZARDOUS MATERIALS

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[7] The Hong Kong Convention

### Regulation 22 – Ambiguous

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[8] The Hong Kong Convention

## Obvious Difference Between Regulation 20 and 22

## *PROBLEM 2: INSUFFICIENT FINANCIAL RESOURCES*



## Problem 2 Reality in South Asia

### Unfair working condition

#### Representative Index

[9]

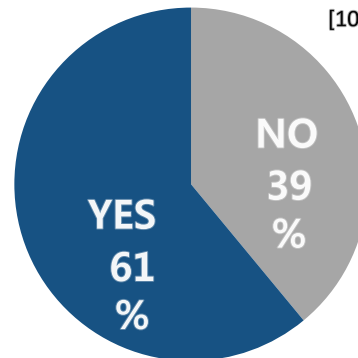
Working Hours	84h/Week
Average Wage	\$14/Week

[9] Industrial-Union, 2015

### Insufficient protective equipment

#### Use of PPEs

[10]

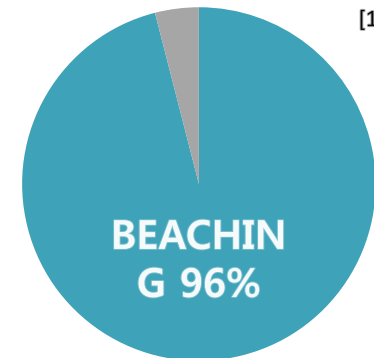


[10] Shipbreakingplatform, 2013

### Improper operation equipment

#### Major method

[11]



[11] Controversial Shipbreaking Dismantles Stakeholder Trust, J.-F. Helfre, 2013

The most fundamental problem is attributed to financial resources

## Proposal



**Reinforce  
worker safety regulation**



**Practical and economic  
support to developing  
country**

**We want to stimulate safe working environment**

## *PROPOSAL 1: AMENDMENT TO REGULATION 22*

## Proposal 1-1 Amendment to Regulation 22

2 Ship Recycling Facilities authorized by a Party shall provide and ensure the use of personal protective equipment for operations requiring such use, including;

- .1 Head protection;
- .2 face and eye protection;
- .3 hand and foot protection;
- .4 respiratory protective equipment;
- .5 hearing protection;
- .6 protectors against radioactive contamination;
- .7 protection from falls; and
- .8 appropriate clothing;
- .9 all the protective equipment shall not be at worker's expense; and**
- .10 all equipment shall be prepared with regard to type of work and risk**

**More details lead to lessening worker's burden**

## Proposal 1-1 Amendment to Regulation 22

3 Ship Recycling Facilities authorized by a Party may co-operate in providing for training of workers. Taking into account the guide developed by the Organization, the training programmes set forth in paragraph 1.2 of this regulation shall :

- .1 cover all workers including contractor personnel and employees in the Ship Recycling Facility;

**training programme shall make all workers (including contractor personnel and employees in the Ship Recycling Facility) aware of related laws, regulation, emergency evacuation;**

- .2 be conducted by Competent persons;

**be conducted by Specialist nominated by IMO;**

- .6 be documented.

**- document can be the proof of training  
- document shall show the name, position of all participants, date, time, place, pictures, details of next training and signature of IMO Specialist**

**Additional details about worker's training**





## Proposal 1-1 Amendment to Regulation 22

- 4 Workers shall be educated about the facilities and equipment the use before starting working
- .1 workers shall be aware of enough knowledge, skill, tentative danger and safety rules about working equipment; and
  - .2 employers shall confirm if worker has sufficient knowledge or not

## Proposal 1-2 Adding new appendix

### APPENDIX 8 DETAILS OF WORKER PROTECTIVE EQUIPMENT

PROTECTION	EQUIPMENT	REMARKS
HEAD	HELMET WITH STRAP	STRONG ENOUGH TO RESIST PENETRATION AND DEFLECT BLOW TO THE HEAD
FACE AND EYE	CLEAR, COLORED GOGGLE OR FACE SHIELD	IF THERE IS AN EXPOSURE FROM DUST, FLYING PARTICLES, OR HARMFUL HEAT, WORKER SHOULD WEAR IT.
HAND AND FOOT	PROTECTIVE GLOVES AND FOOTWARE	SUITABLE FOR SHARP OBJECTS, HEAT-RESISTENT
RESPIRATORY PROTECTIVE	APPROPRIATE FOR TYPE OF RISK	ESPECIALLY NEEDED WHEN THERE IS <ol style="list-style-type: none"><li>1. A RISK OF OXYGEN DEFICIENCY</li><li>2. EXPOSURE TO POISONOUS, DANGEROUS, OR IRRITATING FUMES</li></ol>

## Proposal 1-2 Adding new appendix

PROTECTION	EQUIPMENT	REMARKS
HEARING	EAR-PLUGS, EAR-MUFFS	ENOUGH TO PROTECT WORKER FROM HIGH LEVELS OF NOISE
FROM RADIOACTIVE CONTAMINATION	RESPIRATORS OVERALLS HEAD COVERINGS GLOVES, BOILER SUITS , IMPERABLE FOOTWEAR	WORKER SHOULD WEAR ALL THESE SETS WHEN HE WORKS IN AREAS WHERE UNSEALED RADIOACTIVE SOURCES
FROM FALLS	LIFE VEST LIFE PRESERVERS SAFETY HARNESES WITH SECURED LIFELINES	EQUIPMENT MAY VARY BY WORKING CONDITION
CLOTHING	WATERPROOF	ALL CLOTHING SHOULD BE WATER RESISTENT AND SLOW BURNING

### Specific guideline of Personal Protective Equipment

## *PROPOSAL 2: APPLYING FOR MPTF*

## Proposal 2 Applying for MPTF

### JP Ship Recycling Industry

MPTF

IMO

ILO

Governmental  
Institutes

1. Sustainable Ship Recycling Industry
2. Joint Programme : IMO, ILO, GOVERNMENT (4 countries)

**Financial aids through the MPTF**



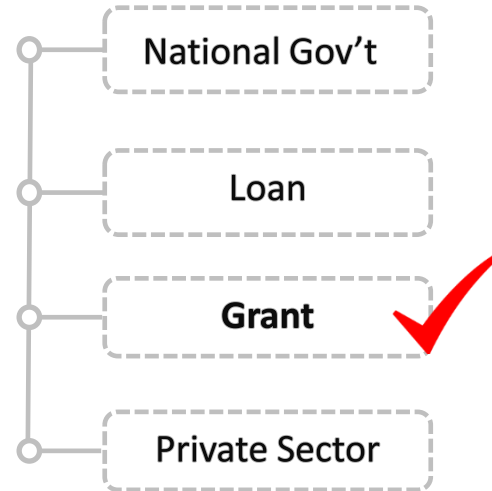
## Proposal 2 The concept of fund

### Eligible recipients



**70%** of world's ship recycling is done

### Types of financing



**Deliver total fund to 4 main developing countries**

## Proposal 2 The concept of fund

### Objectives

1. Ensure universal access to sustainable ship recycling industry
2. Promote the implementation of the Hong Kong Convention
3. Enable workers to relish sound working conditions

### Assistance Strategies

1. Purchase proper protective equipment
2. Guarantee minimum wage for workers
3. Prepare structured system to achieve compliance with the Hong Kong Convention

**Achieve sustainable Ship Recycling Industry through MPTF**

*CONCLUSION:  
ACHIEVING SUSTAINABLE SHIP RECYCLING INDUSTRY*

## Conclusion

Proposal 1

### REVISING HKC

- Referencing ILO guideline
- Concerning more about worker's safety
- Reducing ambiguity



### SHORT TERM EFFECT

Improving working environment  
Facilitating of HKC implementation  
Creating new jobs and income

**We expect sustainable Ship Recycling Industry**

## Conclusion

Proposal 2

### APPLYING FOR MPTF

- Raising funds to support workers in South Asia
- Supporting purchase to buy Protective Equipment
- Asking the world for help



### LONG TERM EFFECT

Developing sustainable Ship Recycling Industry

Constant conservation of marine environment

**We expect sustainable Ship Recycling Industry**



*It is not only for what we do that we are held responsible,  
but also for what we do not do.  
—Moliere*

*THANK YOU FOR YOUR KIND ATTENTION*