

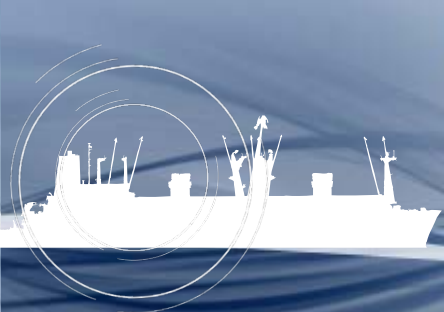
Players in the Ship Recycling Industry

- Ship Owners
- Brokers
- Cash Buyers (GMS)
- Local Reps of Cash Buyers
- Ship-Recyclers



Cash Buyers – Who are they?

- Cash Buyers are not brokers.
- Cash Buyers are PRINCIPALS/TRADERS. They buy vessels on cash basis from ship owners and resell to ship recycling yards on Letters of Credit.
- Cash Buyers take delivery of vessels on both “delivered” and “as is where is” terms.
- IMO’s Hong Kong Convention on Ship Recycling will consider Cash Buyers as OWNERS of vessels.

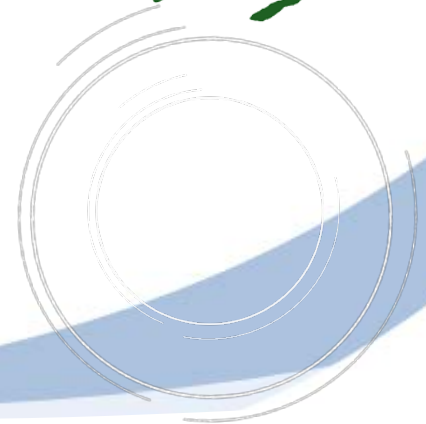
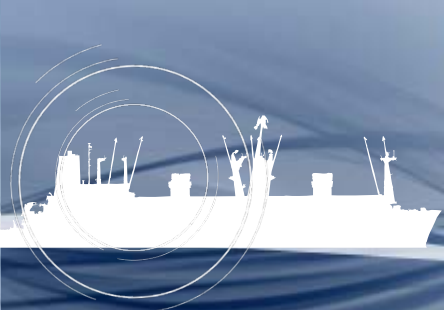


GMS Profile

- World's largest Cash Buyer
- World's FIRST ISO 9001:2000 certified Cash Buyer
- World's FIRST Cash Buyer to develop and promote a Green Ship Recycling Program
- Exclusive representatives in all of the major ship recycling markets in the world (Bangladesh, China, India, Pakistan and Turkey).



WORLD SHIP RECYCLING TRIANGLE



Where it's done

- Indian subcontinent
 - **India (200)**
 - **Bangladesh (35)**
 - **Pakistan (50 of 125)**
- China (20)
- Turkey (25)
- These 5 countries account for almost 98% of the ships recycled
- Different GDPs: From USD 675/person in Bangladesh to about USD 43,000 per person in Turkey
- Large DOMESTIC appetite for steel
- Ship recycling contributes from 2% (Turkey) to 50% (Bangladesh) of local steel requirements.



- WHETHER shipowners have got young, old or mixed age fleets, scrapping will be at the forefront of their minds at the moment.
- They are either considering selling old inefficient vessels, which are having difficulty securing work in the charter market, or are hoping that their peers will get rid of some tonnage to bring down the huge fleet growth created by record newbuilding deliveries over the past three years.



Commercial influences on a scrapping decision

1. Financial condition of the owner (Cash flow of the company)
2. Age and size of vessel
3. Market expectations – CHARTER RATES
4. Operating costs – BUNKER PRICES
5. Selective Charterers
6. Better designed and efficient newer ships
7. LACK OF CAPITAL
8. Scrap prices
9. State of second hand market
10. Book value of vessel in relation to its scrap or resale price
11. Alignment of management policies/attitudes with market expectations



DEMAND and SUPPLY

- Historically Demand has exceeded Supply. But today some markets are reaching saturation levels.
- The continued weakening of charter rates in the last year saw 2011 become the third biggest year ever for demolition with 41m dwt sold for scrap, according to Braemar Seascope. This was not far off the 43m and 44m dwt dismantled in 1986 and 1985, when the shipping industry was coping with similar fundamentals.
- But in contrast with 30 years ago, the majority of ships sold last year for recycling were bulk carriers not tankers, at 24m dwt. Back in 1985 only 8m dwt of bulkers were scrapped compared with 25m dwt of tankers



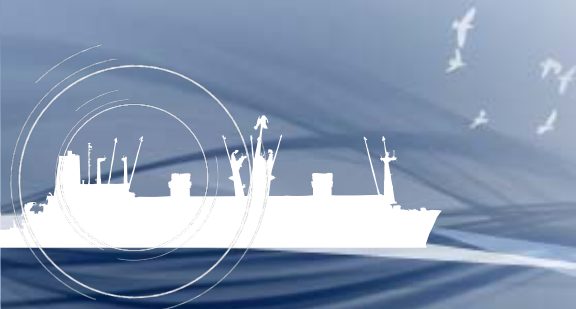
Shipbuilding to Ship Recycling?

- Dalian Shipbuilding Industry Co's marine services arm will create a cradle to grave one-stop shop for shipowners.
- The country's largest shipbuilder, a state-owned subsidiary of China Shipbuilding Industry Co, is building a state-of-the-art green yard on Changxing Island, in the Liaoning province of northern China.
- European yards



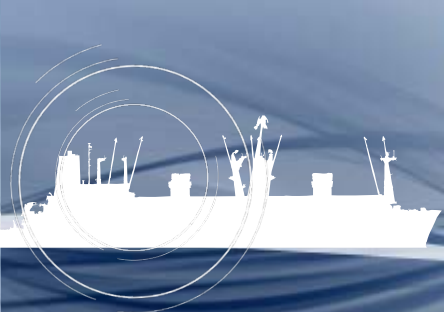
Challenges

- Despite substantial opportunity in ship recycling today, financial institutions are wary of investing in industry due to stakeholder concerns of Headline Risk
- Despite ongoing developments and continued investment in facilities and training, media continues to emphasize outdated reports and images



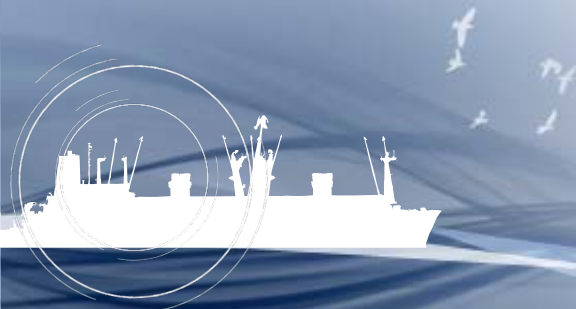
Baltimore Sun – April 15, 1998

- Gary Cohn and Will Englund, reporters for The Sun, won a Pulitzer Prize in investigative reporting for a series of stories exposing the extraordinary hazards to workers and the environment caused by the little-known industry that scraps old ships.
- Their sweeping account of migrant workers maimed and killed in sloppy and unregulated shipbreaking operations from Baltimore to India prompted the U.S. Navy to drop a plan to send retired warships overseas for scrapping.



International life of a Ship

1. Newbuilding
2. Chartering
3. Flag
4. Crew
5. Finance
6. Insurance
7. Management
8. **RECYCLING: why should it be different?**



SOCIO-ECONOMIC BENEFITS OF SHIP RECYCLING



Electrical Cables



Chilling Compressors



Engine



Furniture



Steel Scrap



Kitchen Ware

Waste
<2-4%
(only!)



Spare Parts



Re-Rollable Steel



Pipes



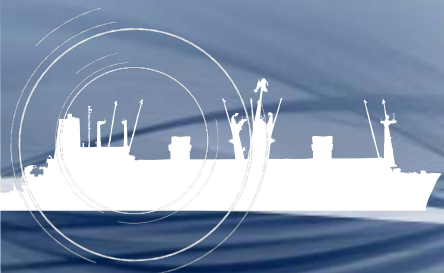
Motors

Ship recycling is, without question, a Green industry!



SHIP RECYCLING – Environmental

- Scrap steel reduces related water pollution, air pollution, and mining wastes by about 70%.
- It takes four times as much energy to make steel from virgin ore.
- Benefits of using Iron and Steel (ferrous metals) instead of virgin ore to make new steel:
 - Savings in energy 74%
 - Savings in virgin materials 90%
 - Reduction in water use 40%
 - Reduction in water pollution 76%
 - Reduction in air pollution 86%
 - Reduction in mining wastes 97%
 - Reduction in consumer waste generated 105%



SOCIO – MACRO ECONOMIC BENEFITS OF SHIP RECYCLING

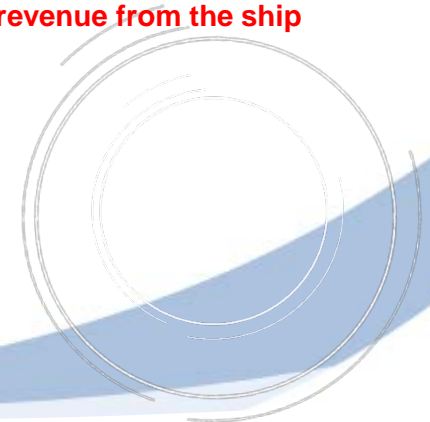
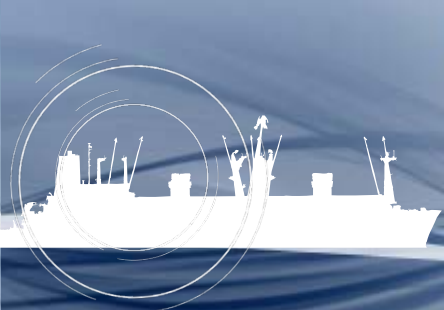
- Ship recycling forms part of the socioeconomic structure of the economies in Indian subcontinent. It is responsible for creating jobs ranging from about 50,000 jobs directly on the yard to over 300,000 in the supply chain, shops and re-rolling mills, with dependents in extended families estimated to reach over 500,000.
- Ship recycling provides more than half of Bangladesh's steel supply, making it a strategic industry in that country.

	Bangladesh	Pakistan
National steel production	2.2–2.5 m tons	3 m tons
Scrap steel from ship breaking	Up to 1.5 m tons	Up to 800,000 tons
Ship breaking steel's contribution To production	50%	15%
No. of re-rolling mills	250 to 350	330
Scrap yards (total no.)	40 active	30 active (132)
Estimated no. of workers in yards	22,000	6,000–8,000

Source: World Bank report of Dec 2010 titled "SHIP BREAKING AND RECYCLING INDUSTRY IN BANGLADESH AND PAKISTAN"

Ship recycling generates large amounts of revenue for various Government authorities through the payment of taxes.

Every year the Government of Bangladesh collects almost 9000 million taka (~ USD 119 M) in revenue from the ship recycling industry through import duty, yards tax and other taxes.



1. Re-rollable Scrap

1. 50% of the revenue.....90% of the LDT.
2. Used by re-rolling mills to make Mild Steel (MS) rods and bars which are used by the construction industry in India

2. Melting Scrap (10%)

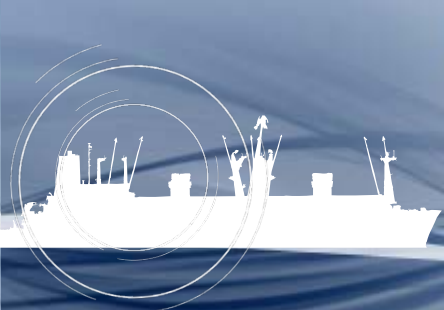
3. Reusable items

1. Machinery: Generators, Motors, Pumps, etc
2. Spare Parts, Furniture, etc

4. Non-ferrous items

1. Propeller, Cables, Condensers, etc

5. Fuel



Reality

1. Industry has evolved with better safety standards and environmental regulations.
2. Yards are in the spot light (good and bad). Also, national oversight leading to increased regulation in local markets.
3. Continued investment by home nations, outside entities and corporations in core facilities and infrastructure (eg Norway, Japan).
4. Due to large number of ships destined for recycling and increasing number of ISO certified yards, more ships will be recycled 'green' than ever before



Reality

1. Banning ships to be recycled in the Indian subcontinent is neither logical or ethical.
2. Free international trade.. not illegal
 1. Ban movement of iron ore because miners are working in allegedly poor conditions?
 2. Ban movement of coal to power plants because it causes pollution?



Reality

- “GMB’s environmental engineer Atul Sharma appraised the delegation about the planned developments for safe hazardous waste disposal. He said the new treatment storage and disposal facility spread over 1 lakh (100,000) cbm will be ready March 31, while an effluent treatment plant that can treat 30 kilo litres per day of waste will also set up. GMB is also setting up an incinerator at Alang that will clear 5 tons of hazardous waste per day.” *The Times of India, 15/2/2012.*
- “USD 22.5M to be invested in hazardous waste treatment and incinerator upgrades”. *Tradewinds. 15/2/2012.*
- “We are moving in the right direction. Just wait and see. Bangladesh’s shipbreaking industry will soon be recognized as a global example for its environment-friendly growth and expansion”. *Bangladesh Industries Minister Dilip Barua in United News of Bangladesh, 8/10/2011*



GMS-GL GSRP

1. GL will supervise/certify the preparation of the Inventory of Hazardous Materials (IHM).
2. GL will vet the ship recycling yard to ensure compliance with international quality standards and issue report.
3. GL will approve the Green Ship Recycling Plan for the vessel.
4. GL will approve the Facilities Management Plan, which is ship specific and confirms the yard's ability to recycle the vessel. It includes the waste management facilities at they yard and training capabilities of the workers to safely remove, transport and dispose hazardous materials
5. GL will supervise and audit the ship recycling process.
6. GL will review and approve the final report on the ship recycling process.
7. GMS will manage the coordination and completion of the above project and will remain the responsible entity for the owners and the yards.

GMS GSRP (Green Ship Recycling Program)

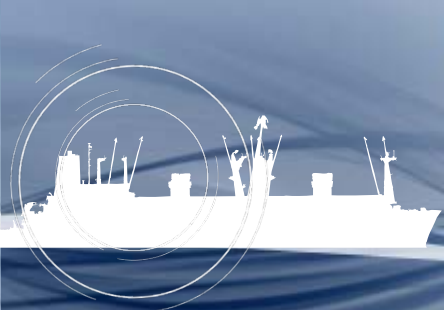
1. GMS can offer a Safe and Environmentally Responsible Ship Recycling program, which is fully compliant with IMO's Hong Kong Convention guidelines and meets the requirements of most international and domestic laws.
2. GMS GSRP can be either certified by GMS or against extra payment audited and certified by Class GL
3. GMS indemnifies the sellers against potential claims
4. GMS GSRP is neither country nor yard specific, thereby providing owners an opportunity to recycle their ship at best paying country and yard.
5. GMS continues to push Green Recycling agenda both on International stage and at local levels to ensure Green recycling evolution



The 3 E's of SHIP RECYCLING

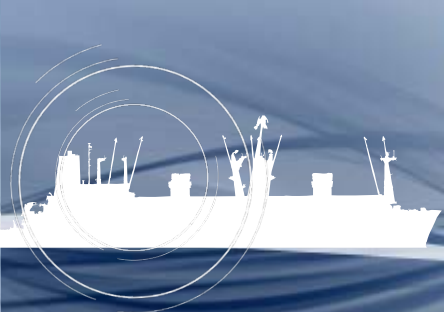
**BOTTOM LINE: Both LOCALLY and INTERNATIONALLY,
Ship recycling is good for the:**

- **ENVIRONMENT**
- **ECONOMIC** viability of world trade
- **EMPLOYMENT** opportunities



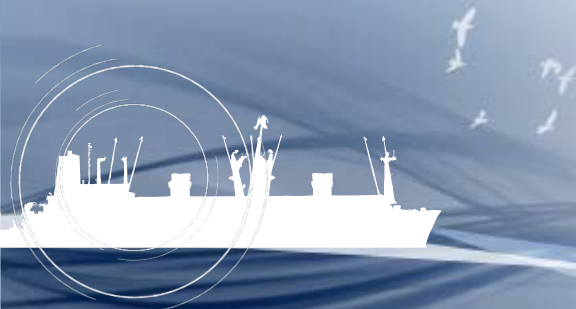
Most delegates that participated in the deliberations leading up to the Hong Kong Convention:

1. IMO
2. ILO
3. Basel Secretariat
4. BIMCO
5. Environment Ministries of France, UK, Japan, Norway
6. Classification Societies



AGAINST Ship recycling

1. Some NGOs: Platform for Ship Recycling
2. Vested Interest Groups (e.g. Domestic Ship Recycling)
3. Few politicians keen on bringing jobs to their districts



Investment Opportunities

1. Ships for recycling are liquid assets with financing periods ranging from 15 – 90 days. Unlike newbuildings, this industry has: high volumes; quick turnover; low risks and capital infusion per ship.
2. Residual vessel of a vessel can be benchmarked against the value of steel.
3. High Barriers to Entry
4. With an average value of USD 5 M/vessel, industry turnover for 2012 is estimated at USD 6 Bill ($1600 * \$5M$)
5. Scrap Vessel generates 15-25% of the newbuilding values



Where will the world's ageing fleet go?



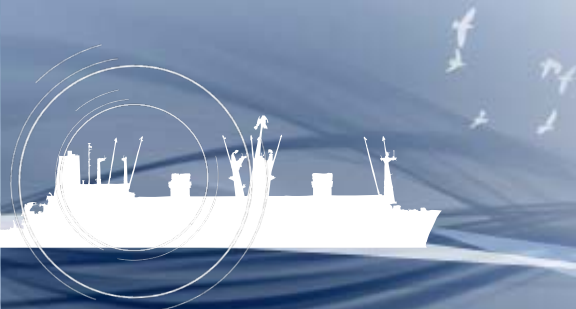
US Navy – Lessons Learned

Last year, the U.S. Navy decided to go back to the breakers (where ships are broken up for scrap). Four retired aircraft carriers (USS Constellation, USS Forrestal, USS Independence and USS Saratoga) were to be scrapped instead of sunk, or simply allowed to rust away while tied up. These ships were taken out of service between 1993 and 2003 and have been waiting since then while a decision was made on their disposition. But there are seven carriers waiting to be scrapped and the navy has an economic disaster on its hands. Keeping carriers in reserve costs \$100,000 a year, but it can cost over a billion dollars to scrap one of them. Since the 1990s, sending warships to the scrap yard has not been considered a viable alternative. It's all about pollution, bad press and cost.



.....The real nightmare begins in 2013, when the first nuclear powered carrier (the 93,000 ton USS Enterprise) is to be decommissioned. The cost of dismantling this ship (and disposing of radioactive components) will be close to \$2 billion.....Going to the breakers is now seen as viable because of more efficient breaking techniques, and higher prices for recycled metals.

Source: StrategyWorld, February 2012



Thank you!

