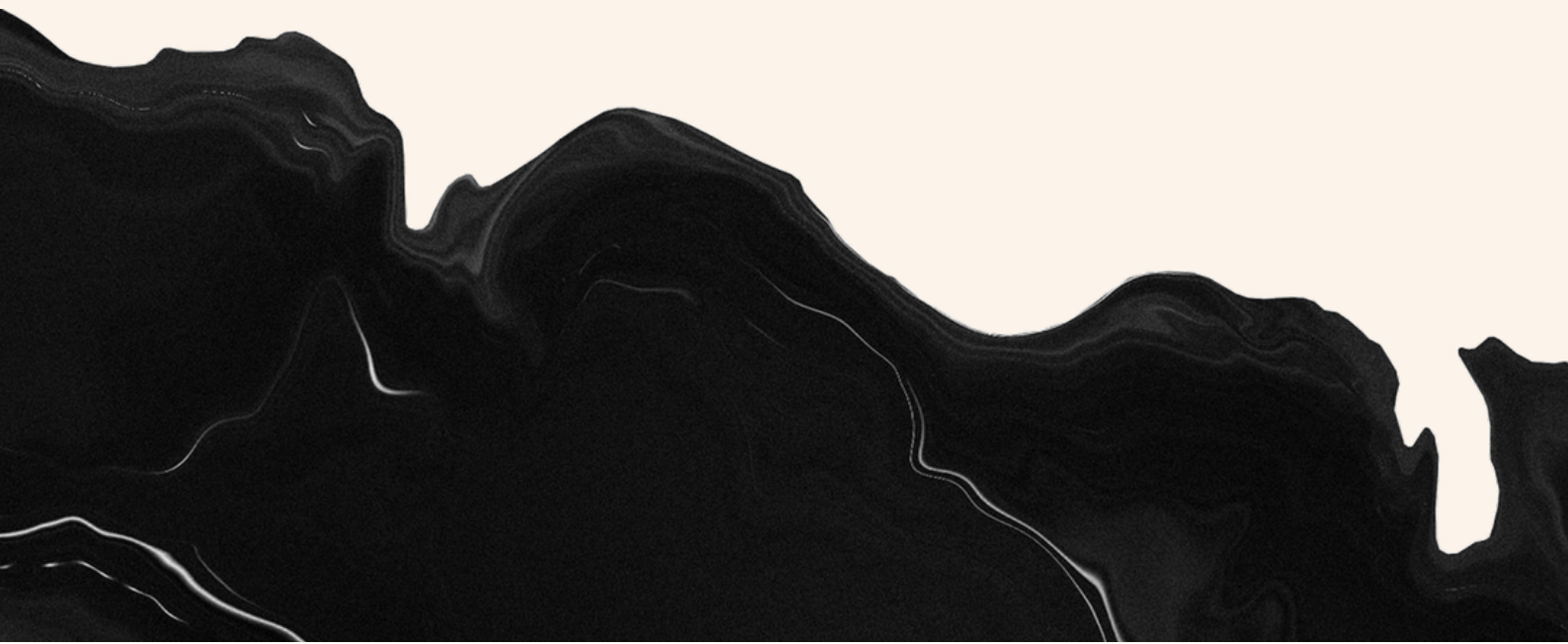




SOUTH ASIA QUARTERLY UPDATE

31



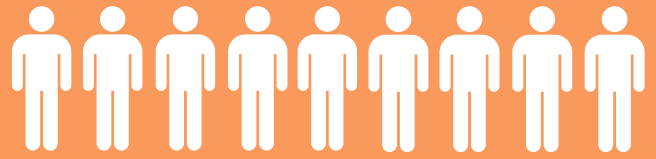
VISION & MISSION

Vessels are recycled in facilities that ensure clean, safe, and just practices that provide workers with decent jobs. Vessels will be toxic-free and no longer cause harm to workers, local communities, or the environment at end-of-life.

To act as a catalyst for change by effectively advocating for clean, safe, and just ship recycling globally. This necessitates denouncing dirty and dangerous practices, such as the dumping of end-of-life vessels on the beaches of developing countries. Our commitment to finding sustainable global solutions is based on the respect of human and workers' rights and the principles of environmental justice, producer responsibility, 'polluter pays', and clean production.

OCTOBER 2022
SAQU #31

In this quarterly publication, we inform about the shipbreaking practices in South Asia, providing an overview of accidents that took place on the beaches of Bangladesh, India and Pakistan, relevant press media as well as research. We aim to raise public awareness about the many negative impacts of shipbreaking in South Asia as well as developments aimed at the protection of workers' rights and the environment.



5

*workers suffered an accident
on South Asian
shipbreaking beaches*

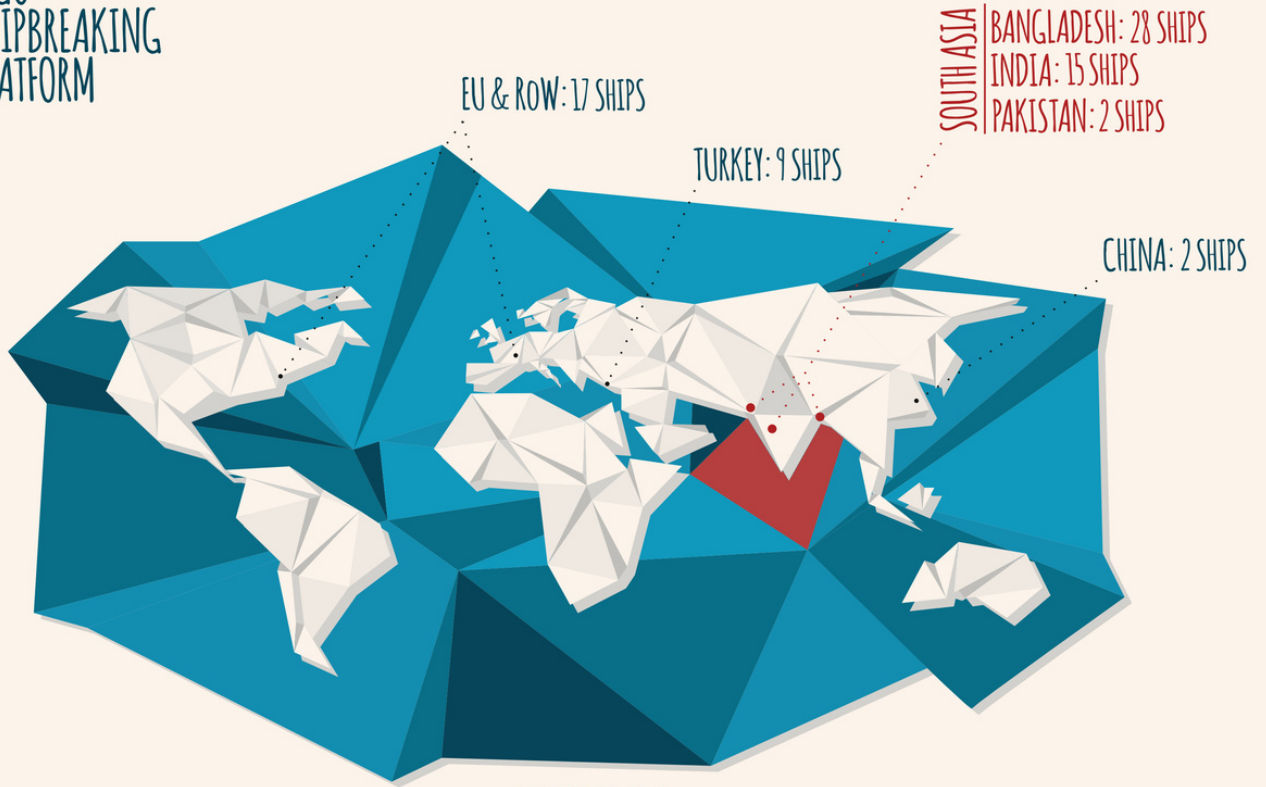


62%

*of ships ended up on South
Asian beaches*

03

SHIPBREAKING RECORDS



TOTAL
73 SHIPS DISMANTLED WORLDWIDE
 JULY - SEPTEMBER 2022



ON THE BEACH

OFF THE BEACH

04

ACCIDENTS

BANGLADESH

On August 1, Md.Abdur Rohim (40) fell from height and got burnt with a torch at M.M. shipbreaking yard while dismantling the ETC MENA (IMO 9229427), a vessel owned by Egyptian Tanker Co.

On August 2, Motin (35) got burn injuries due to a fire onboard the JENGA (IMO 9073438), a vessel beached at Ferdous Steel. The vessel is owned by Singaporean company Berge Bulk. The breaking of the same vessel caused injuries to two other workers on March 3 and April 27.

On August 6, Md Mahabul (43) was hit on his hand by a falling iron plate. The worker was dismantling the FSO LADINDA (IMO 7361269) owned by Indonesian company EMP Malacca Strait SA at Kabir Group shipbreaking yard in Madambibir.

On August 23, Md Balal (45) suddenly died while working at Kabir Group shipbreaking yard in Madambibir. No accident was reported and it is believed that the worker died from a stroke.



05

On September 1, Md Kamal (23) fell from a height of 1.5-2 meters and got injured in his spine. Kamal was working onboard the ship ATLANTIC ENERGY (IMO 7702401) at Kabir shipbreaking yard in Shitalpur. The owner took Md Kamal to the hospital and kept all the papers. Md. Kamal is now recovering at home since he is not able to work.

It is important to note that Kabir Group is contesting the reports provided by local sources to the Platform regarding the accidents at Kabir's yards.

PAKISTAN

On 23 July, all labourers were evacuated after a fire broke out during the scrapping of a ship's fuel tank in Gadani. The vessel was beached at Plot No.64. No casualties were reported.

INDIA

The Business Standard reports that an accident happened in Alang on June 16. Following a worker's death, the police started an investigation regarding safety standards at the concerned yard.

DEVELOPMENTS IN INDIA

INDIA'S PLAN TO DOUBLE SHIPBREAKING CAPACITY IN ALANG

As announced last year, India is looking into doubling its shipbreaking capacity in Alang-Sosiya with the aim of Gujarat becoming a global centre for ship scrapping. The intention was discussed at the "International Conference on Green Ship Recycling & Vehicle Scrapping" in September, which highlighted the potential of Alang as a vehicle scrapping hub. According to India's secretary of the Ship Recycling Industries Association, about 40% of the plots based in Alang are not operational, and, of the 130 plots leased out, 114 have a so-called statement of compliance with the Hong Kong Convention (HKC), even though the Convention has not yet entered into force. While some have welcomed the HKC as an incentive for the industry to upgrade its yards and practices, it has been denounced by over 100 civil society organisations for greenwashing the beaching method and not addressing the human rights and environmental concerns of current practices in South Asia. The Director General of Shipping, Amitabh Kumar, furthermore affirmed that the Basel Ban Amendment prohibits ships from OECD countries to be broken down in facilities located in non-OECD countries.

ECONOMIC CHALLENGES IN ALANG

As reported by the Financial Express, there are three current main problems faced by the shipbreakers of Alang: higher cost of adhering to safety and pollution norms, higher charges from the Gujarat Maritime Board for housing and rental of plots, and the devaluation of the rupee against the US dollar. These factors have driven ship owners to shift their attention to the neighbour country Bangladesh. The secretary of the Ship Recycling Industries Association, Haresh Parmar, said that *"20 to 25 ships come every month at Alang's recycling yard, but since the past two months, hardly six ships have been dismantled"*. The prices of ships have gone up due to the global economic crisis and the price per ton has now reached \$500-600.

07

CRUISE SHIP ZENITH DISMANTLED IN ALANG

The cruise ship Zenith arrived in Alang in September. The Zenith was renamed SINGA (IMO 8918136) before reaching Anupama Steel for dismantling. Whilst major cruise lines such as CARNIVAL have committed to use EU-approved recycling yards, other unscrupulous owners are still opting for the more profitable beaches of South Asia. As revealed by the Platform and BBC's File on 4 in 2021, several passenger ships, including the COLUMBUS, the MAGELLAN, the MARCO POLO and the RIGEL I, illegally left EU waters for scrapping in India under the false pretext of further operational use. The Celebrity Horizon (IMO 8807088), Zenith's sister ship, has been dismantled in Aliaga, Turkey, another destination for end-of-life ships that has been recently under high scrutiny due to unsafe working conditions.

DEVELOPMENTS IN BANGLADESH

BANGLADESH: SHIPBREAKING INDUSTRY TEMPORARILY CLOSED

In July, Bangladesh has temporarily closed its market after price falls due to a 20% devaluation of its currency. The decline in the shipbreaking activities was furthermore caused by the restriction from Bangladesh's Central Bank in giving letters of credit of above \$3m to yard owners. Moreover, the Bangladesh Bank declared the need for central approval for letters of credit over \$5m and suspended letters over \$25m except in exceptional circumstances.

INJURED WORKER SUES KSRM

A shipbreaking worker has filed a case against Kabir Steel Re-Rolling Mills (KSRM) following an accident in 2016. After the accident, KSRM authorities paid only one month of medical expenses. Since the family was not able to cover treatment expenses, the worker filed a complaint with the Department of Inspection for Factories and Establishments (DIFE) in May 2017, but the company stopped providing treatment costs after September 2021. The worker, Mohammad Moniruzzaman Munna, is accusing the company of physical harassment when he went to the yard and demanded his compensation. The court took cognizance of the matter and called the accused to appear in court and pay their dues.

DEVELOPMENTS IN PAKISTAN

PAKISTAN FOCUS ON BLUE ECONOMY

The Pakistan Navy is supporting and incentivising the development of a Blue Economy in the country. Blue Economy aims to boost economic growth, social inclusion, and raise people's living standards while maintaining sustainability in different activities centered on coastal development, shipping, and port infrastructure. The aim is also to revive the shipbreaking sector as it is estimated to contribute \$10 million to GDP annually and, according to the Minister of Defense of Pakistan, it is an opportunity for the "development of an efficient ship-breaking industry". The Platform urges Pakistan to look at sustainable ship recycling "off the beach" and to ensure adequate facilities for downstream waste management.

ECONOMIC CHALLENGES IN GADANI

The works at shipbreaking yards in Gadani were halted due to heavy rains in the Balochistan region in August. The shipbreaking plots were flooded while five to six ships were being dismantled. Also, the industry has been affected by the high dollar prices. According to the Ship Breakers Association, no ship has arrived at the yards since June due both to the high cost of the dollar and the heavy rains that affected millions of people in Pakistan, including in Balochistan and Gadani. Pakistan is limiting the import of ships in order to pay attention to its own foreign reserves, after the country faced a terrible natural disaster, and hundreds of lives have been lost.

09

STEEL MILLS IN THE SHIPBREAKING INDUSTRY IN SOUTH ASIA

STEEL AND CIRCULAR ECONOMY

Ship recycling is considered a sustainable way of reusing end-of-life vessels as the materials are recovered and re-used. The life span of ships is approximately 25 years and their demolition represents a source to obtain valuable resources, mainly steel. The ship recycling industry can be a green industry if properly integrated into the circular economy model. For example, for every tonne of carbon steel scrap recycled, a saving of 1.4 tonnes of CO₂ is achieved. However, to ensure true circularity, ship recycling can only be considered environmentally sound and safe if the management, storage and disposal of all hazardous materials and wastes onboard the vessel is done in a manner that does not expose workers, local communities and the environment to harm. Moreover, recycling scrap steel has economic gains compared to the importing and processing of virgin iron ore. The development of green technologies in the ship recycling process will not only reduce the environmental and safety risks, but also help create a cost-effective and efficient input of scrap to the steelmaking process. Achieving circularity in ship recycling contributes to sustainable development and is in line with the 12th Sustainable Development Goal (SDG) - “Ensure sustainable consumption and production patterns”.



10

Scrap steel from end-of-life vessels is considered a high-quality secondary raw material for further reprocessing within the steel plants. As much as 90% of the weight of a ship is made up of structural steel. Even though present in lower quantities, non-ferrous scrap metals such as copper are also particularly valuable. Copper can typically be recovered from the ship's cabling by stripping off the insulation but it is also present in transformers or electric motor windings. Other valuable non-ferrous metals include aluminium and zinc used to protect the hull against corrosion and fouling.

STEEL RE-ROLLING MILLS IN SOUTH ASIA

The cutting and removal of an end-of-life vessel's steel structure on a tidal beach itself is extremely hazardous, creating serious risks for the workers involved in these operations. In addition, the ship's steel is also laden with paints that contain heavy metals and other hazardous materials that release toxic fumes when cut with gas torches.

“ When cutting iron, the smoke enters our lungs, it burns through the masks. I am giving my actual life to this company. If the worker is healthy, he can work for life. But they do not think like that. This is a bishakto dhua [poisonous smoke]. The masks they give us are not specialized masks. The smoke, the gas, enters our shorir [bodies, health]. ”

Source: Living with toxic development - Shipbreaking in the industrializing zone of Sitakunda, Bangladesh. Camelia Dewan. 2020.

As steel is cut, pounded, and hammered at shipbreaking sites, metal fragments and rust furthermore accumulate on the beach. Several compounds may be found in ship steel. Copper, nickel and lead compounds are the two most common contaminants found in the soil at the ship breaking sites. Also, the dismantling of metal parts contributes to the contamination of the environment with chromium.

11

The steel parts that are recovered at the shipbreaking yards in South Asia go primarily to the steel re-rolling mills, and in lesser amounts to the steel smelting industries, which are often located in the areas surrounding the yards. The scrap steel is generally heated and re-rolled into reinforcing rods for the construction industry. Ship paints covering the steel contain many heavy metals which are rarely removed prior to torch cutting and re-rolling. Of particular concern is the way ship paints, asbestos and mercury are ignored not only at the yards, but also downstream. Workers at the steel re-rolling mills and surrounding communities are therefore also exposed to severe health risks due to the release of dangerous and toxic fumes, including dioxins, during the re-rolling of the steel.

Hot cutting and re-rolling processes produce toxic fumes, including leaded vapours of which long-term inhalation can cause chronic cumulative lead poisoning. PCBs and solid foam in the ship can release toxics under high temperature (2).

In **Gadani**, Pakistan, according to available data from 2013, around 70% of ship scrap steel was sent to re-rolling mills in Karachi. Around 95% of the revenue of the industry came from the sale of ship scrap steel.

In **Bangladesh**, as much as ninety percent of the steel rolling mills are dependent on the steel that can be recovered from the shipbreaking industry. Most shipbreaking yard owners in Chittagong are leading national steel conglomerates. Some Bangladeshi yards own their re-rolling mills, so they can sell directly to the construction industry. Indeed, almost 60% of raw materials for approximately 350 local steel industries were supplied from ship breaking activities. The steel factories are located on the sites of former forest hills, and, as a result of the scrap metal processing, trees have become fruitless due to the dust that covers them.

(2) A solution is represented by water jet cutting technology, for example, as a cold working process only uses water and abrasives in the cutting process, which does not produce hazardous pollutants and preserve the ecological environment. There is no impact on ecological sustainability and pollution and greenhouse gas emissions can be reduced compared to conventional hot cutting processes.

12

“

The [steel] re-rolling mills, garments and other factories are also dirty industries that dump things into our local canals and out into the ocean. This canal is now a black and pinkish stream with chemical effluents from industries. There are chemicals everywhere now. These industries, especially shipbreaking, have ruined the area.”

”

Source: Living with toxic development - Shipbreaking in the industrializing zone of Sitakunda, Bangladesh. Camelia Dewan. 2020.

Also, in **India**, the raw material for steel re-rolling industries located in Bhavnagar district is sourced from the ship breaking industry in the form of plates. There are around 1800 operating mills and the sector is largely dominated by small and medium size enterprises. According to the Bhavnagar Steel Re-Rolling Mill Cluster, there are around 120 re-rolling-mills in the Bhavnagar district, of which 90 are operational with an estimated capacity of 5.2 million tons/per year. Bhavnagar has the biggest steel re-rolling mill cluster in Gujarat, where 80% of mills use steel plates from Alang. There are two common processes of re-rolling: hot rolling and cold rolling. By rolling metal through successive rolling mill stands in reheating furnaces that use coal as the main energy source, steel sheets/slabs/ignots/billets are heated to about 1,150°C–1,250°C depending on the type of raw material. As a result, the re-rolling industry in India is inefficient. In fact, more than 10% of the emissions from the steel industry come from re-rolling mills.

Compared to the use of iron ore to produce steel products, scrap steel has obvious advantages in terms of reduced CO₂ emissions. However, the re-rolling process used in South Asia to process contaminated scrap steel causes harm not only to the environment but also to workers' health. The steel products are also of lower quality, steel is down-cycled resulting in its potentially unsafe use and reducing the possibility of extending its lifecycle.

RESEARCH & READINGS

2020

Camelia Dewan

The article is part of the Norwegian Research Council-funded project "(Dis)assembling the life cycle of containerships." Dewan explains how Bangladeshi stakeholders may accept toxic exposure as a price for domestic economic growth and potential employment by framing the shipbreaking industry as 'toxic development'. Testimonies of Bangladeshi shipbreakers are presented in this article.

[Living with toxic development - Shipbreaking in the industrializing zone of Sitakunda, Bangladesh](#)

2022

On 20 and 21 September, the NGO Shipbreaking Platform organised the "Ship Recycling Lab", a two-day event in which new technologies, ethical circular economy models, strategic policies for the steel industry, and many other topics related to ship demolition, ship design, waste management and material recovery were discussed. The first edition of the magazine Breaking Out was launched at the event, aiming to cut across sectors and look at the latest technologies and policies relevant to ship recycling in the 21st century.

[Breaking Out: Anchoring Circular Innovation for Ship Recycling.](#)

OUR REPORTS

NGO Shipbreaking Platform

[Breaking Out: Anchoring Circular Innovation for ship recycling](#) (2022)

[The Toxic Tide - Data and figures](#) (2021)

[Contradiction in terms: European Union must align its waste ship exports with international law and green deal](#) (2020)

[Study Report on Child Labour in the Shipbreaking Sector in Bangladesh](#) (2019)

[Behind the Hypocrisy of Better Beaches](#) (2019)

[Recycling Outlook. Decommissioning of North Sea Floating Oil & Gas Units](#). (2019)



To ensure that safe and clean ship recycling becomes the norm, and not the exception, the Platform will continue to inform policy makers, financial and corporate leaders, as well as researchers and journalists. With a broad base of support both in orientation and geographically, including membership in ship owning as well as shipbreaking countries, the Platform plays an important role in promoting solutions that encompass the respect of human rights, corporate responsibility and environmental justice.

WILL YOU JOIN US?

**IF YOU SHARE OUR VISION PLEASE MAKE A DONATION
TO SUPPORT OUR WORK OR CONTACT US TO FIND OUT
HOW WE CAN WORK TOGETHER!**

**SUPPORT
OUR WORK**



Since 2009, around 7000 ships were scrapped in South Asia, causing 435 deaths and 366 injuries. The figures on accidents are likely to be much higher. Occupational diseases are not even registered in these statistics and are difficult to monitor.

WE ARE NOW CALLING FOR YOUR SUPPORT TO HELP INJURED WORKERS AND ASBESTOS VICTIMS IN BANGLADESH. CHECK OUT OUR FUNDRAISING CAMPAIGN FOR MORE INFORMATION BY [CLICKING HERE](#) OR ON THE IMAGE BELOW.

FUNDRAISING CAMPAIGN

HELP PROVIDING TREATMENT TO
INJURED WORKERS AND ASBESTOS VICTIMS
IN BANGLADESH



DONATE NOW



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WE THANK THE EUROPEAN COMMISSION AND THE LIFE PROGRAMME FOR THEIR SUPPORT.

Engineering 

WE THANK THE ROYAL ACADEMY OF ENGINEERING AND THE LLOYD'S REGISTER FOUNDATION FOR THEIR SUPPORT UNDER THE INTERNATIONAL COLLABORATION 'ENGINEERING X'.