



NGO SHIPBREAKING PLATFORM

Boosting Ship Recycling in Germany: A Strategic Alignment with the Green Deal Framework

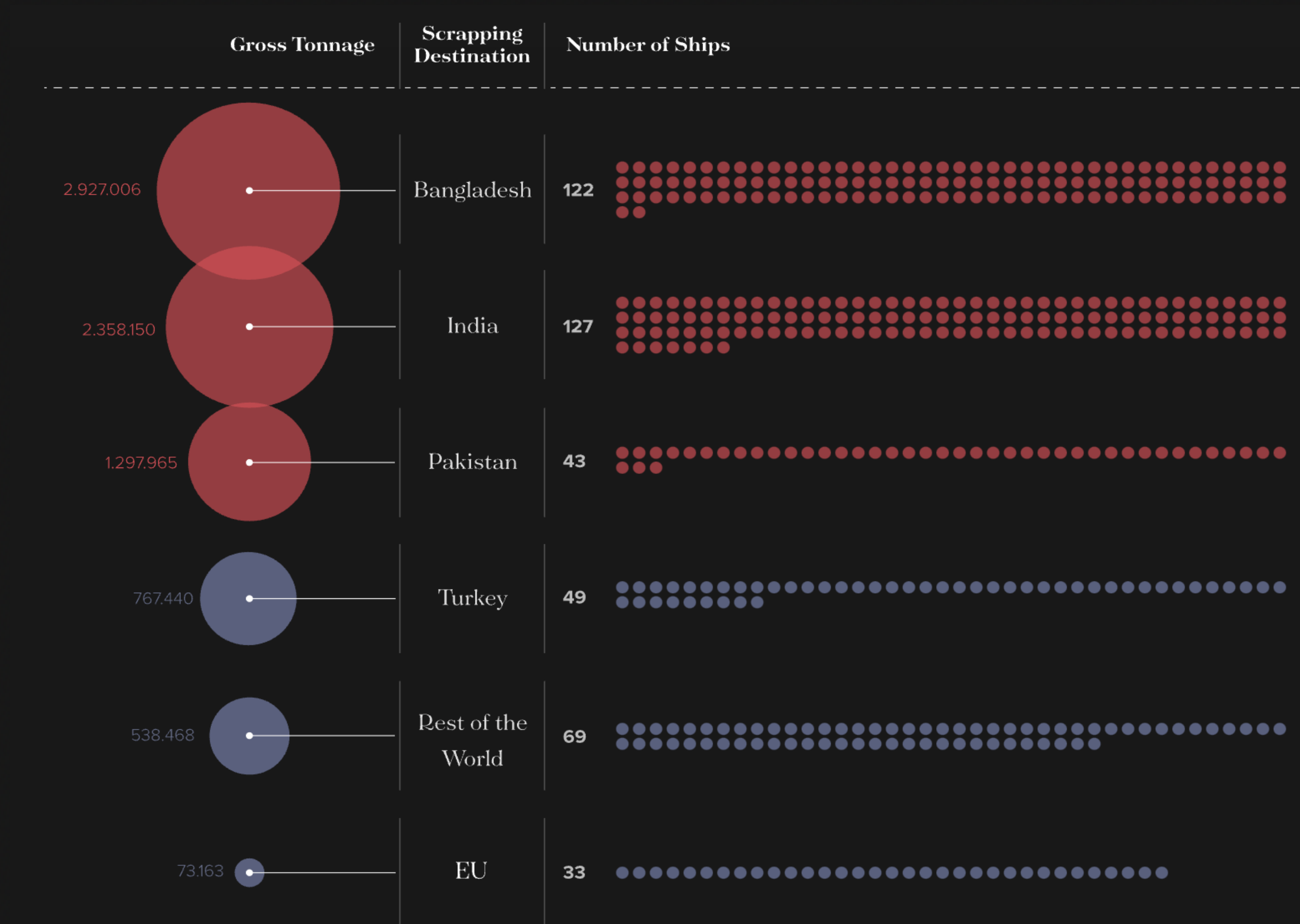
BY
BENEDETTA MANTOAN

Umweltgerechtes Schiffsrecycling in Deutschland, 7/11/2023



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The problem...

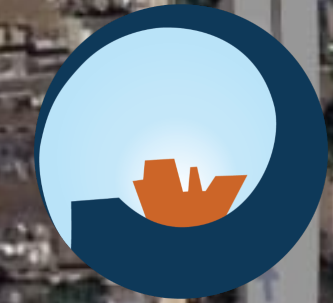


440 Number of deaths in the South Asian shipbreaking yards since 2009

Shipbreaking is one of the most dangerous jobs in the world according to the International Labour Organisation.

2022 Fatalities

Name	Age	Cause of death
Ranvikram Tripura	27	Fall from height
Mohammad Bakul Pramanik	57	Hit by iron piece
Ariful Sujon	27	Hit by iron piece
Akber Ali	36	Hit by iron piece
Md Rohim	60	Hit by iron piece
AbuBakr	42	Fall from height
Bulbul Islam	34	Unknown
Md Faruk	30	Hit by iron piece
Md Robul	39	Explosion
Soyedur Rahman	50	Unknown
Avinash Kumar Jayanti Ram	45	Hit by iron piece
Unknown	N/A	Explosion
Unknown	N/A	Hit by iron piece





No hospital

Poor or no downstream
waste management,
asbestos resold...

Dire living conditions

**lead, cadmium, copper,
organic tin compounds,
zinc chromium, plastics...**

Lack of infrastructure,
no containment

Dangerous working
conditions, no PPE

LARGE TIDE







Relevant legislation: two different regimes in force that are easy to circumvent



UNEP Basel Convention EU Waste Shipment Regulation

- Exporting-State Jurisdiction
- Adopted 1989, entered into force in 1992
- Controls transboundary movement of hazardous waste with a view to protect developing countries
- Basel Ban Amendment entered into force 2019

How to circumvent:

→ simply issue a false declaration of intent, such as “further operational use” or “repair work”...



EU Ship Recycling Regulation

- Flag-State Jurisdiction
- Applicable as of 31 December 2018
- List of approved facilities
- Independent third party audits
- Financial incentive can be added

How to circumvent:

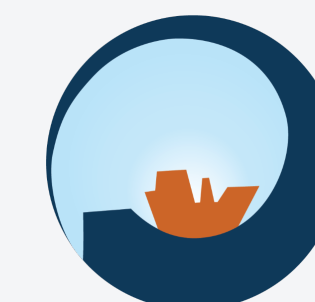
→ simply swap to non-EU flag, typically a Paris MoU grey- and black-listed flag...





IMO Hong Kong Convention

- Will enter into force in June 2025
- Does not ban beaching, criticised by over 100 organisations
- No requirements, beyond compliance with national standards, for the management of hazardous wastes once they leave the gate of the recycling facility
- Relies on flag state jurisdiction (prone to circumvention by flag-hopping to the grey- and black-listed EoL flags that are popular for last voyages to South Asian beaches)
- Proliferation of Statement of Compliance to yards, relying on checkbox assessments, overlooking OHS practices, labor rights, and the responsible management of hazardous waste downstream.
- Industry stakeholders are setting up voluntary standards going beyond the HKC (Maersk HKC+, Grieg Green “Yard Score”) including off-the-beach policy



A matter of price...

SOUTH ASIA

- Prices are around 450-500
USD\$ / LDT

TURKEY

- Prices are around 250-300
USD\$ / LDT

EUROPE

- Prices are around 100-150
EUR / LDT

LIGHT DISPLACEMENT TONNAGE (LDT)

Light displacement tonnage is defined as the weight of the ship with all its permanent equipment, excluding the weight of cargo, fuel, water, ballast, stores, passengers, crew, but usually including the weight of permanent ballast and water used to operate steam machinery. End-of-life ships are sold on the basis of USD per LDT as an indicator of the steel value.





tagesschau

Missed the program?



[Home page](#) ▶ [Investigative](#) ▶ [Charges for illegal ship scrapping in India](#)

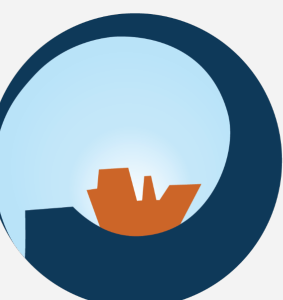


Illegal ship scrapping

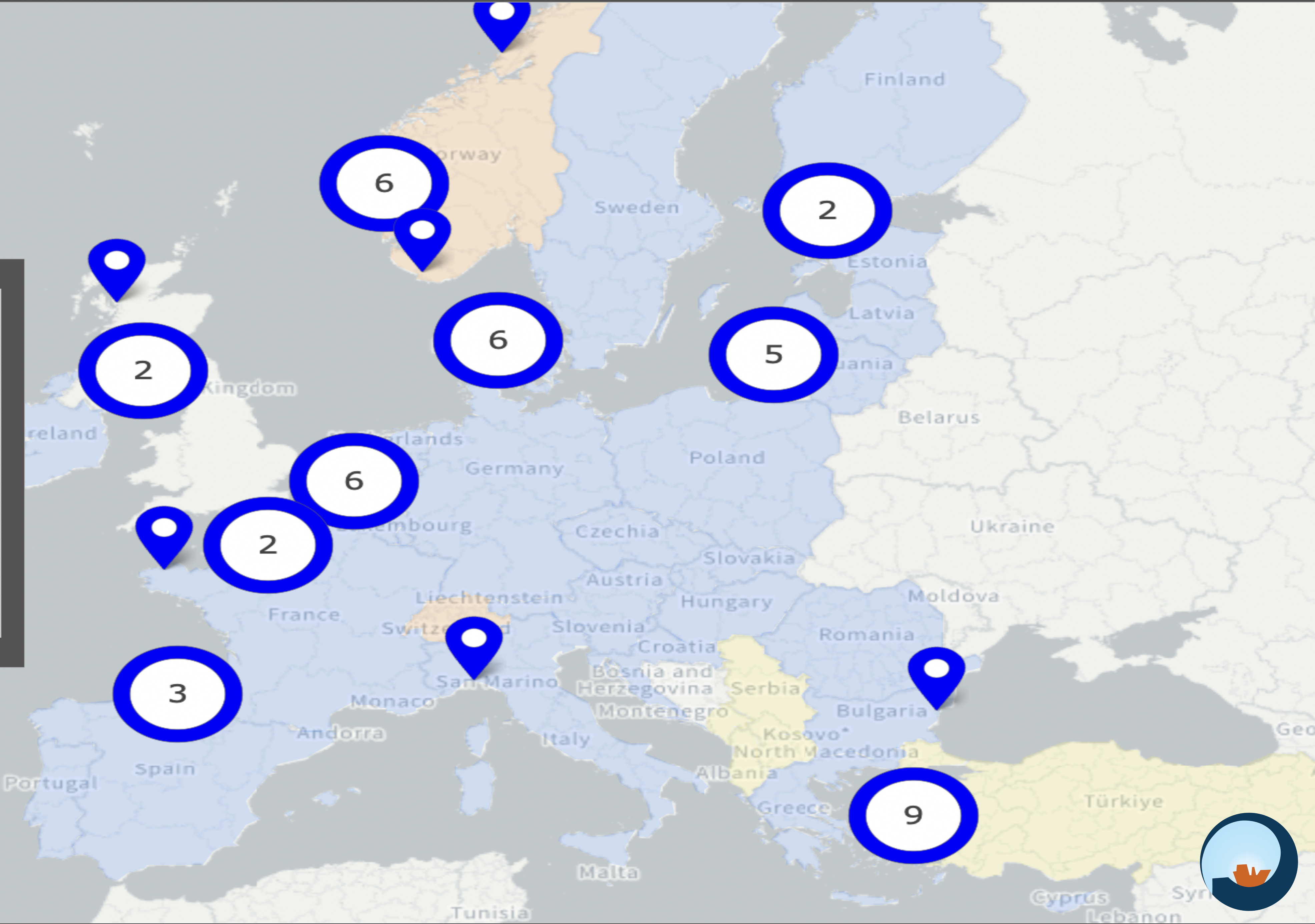
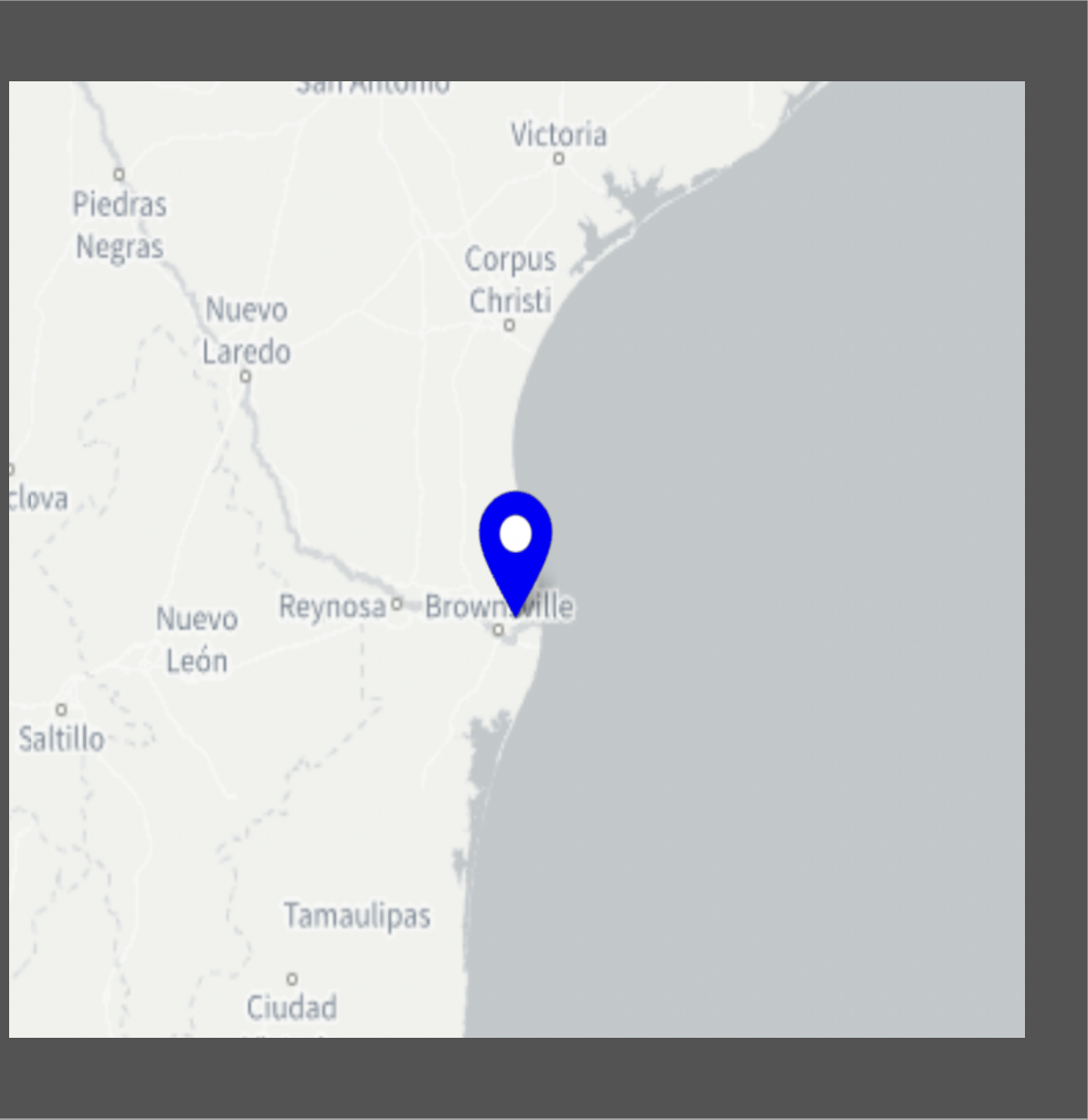
Will “Discovery’s” final journey lead to court?

As of: September 27, 2023 4:39 p.m

For the first time, the Hamburg public prosecutor's office has charged three defendants with the illegal scrapping of a ship in India - and is thus entering a difficult area. More charges could follow.

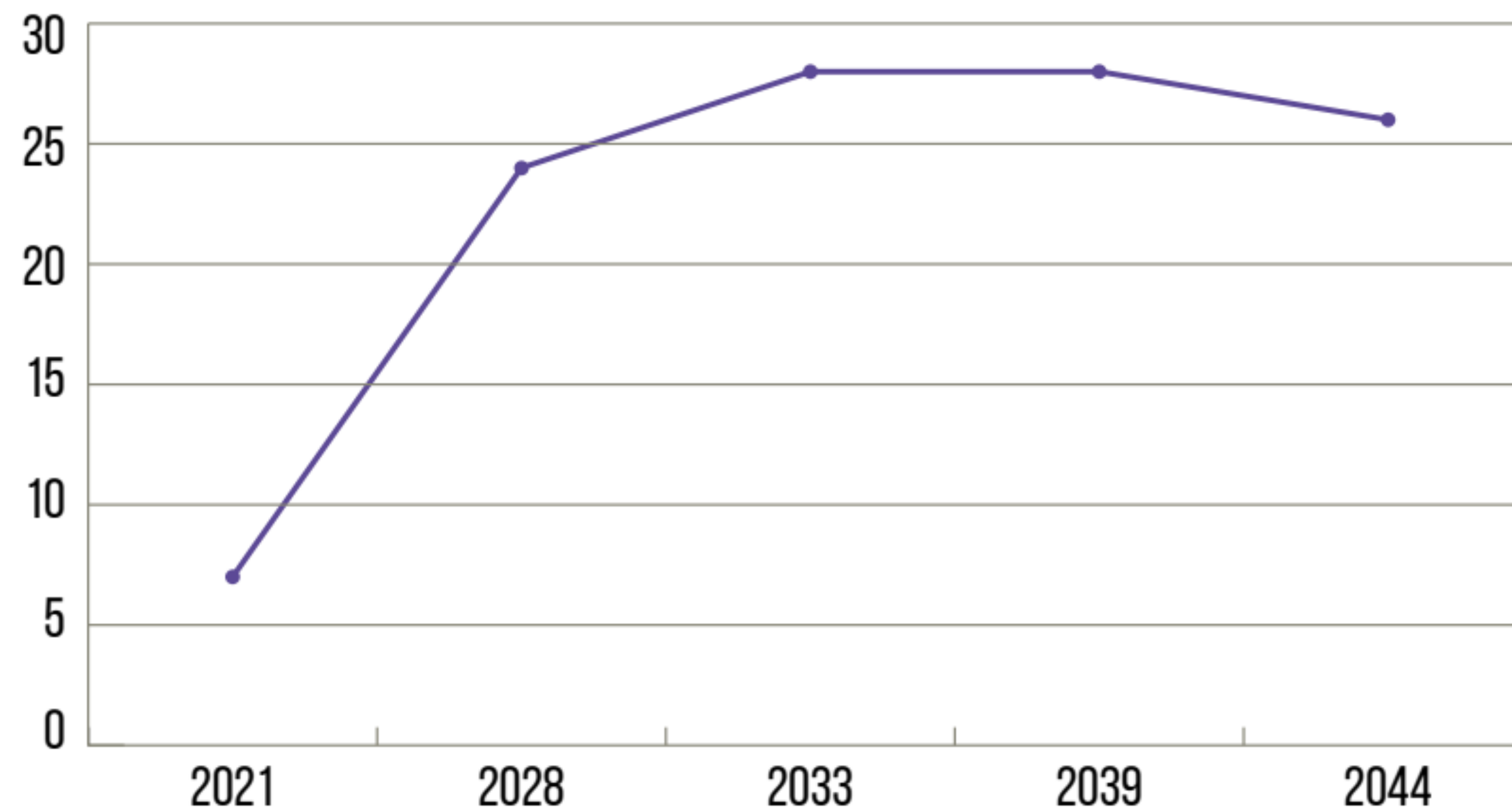


11th EDITION OF EU LIST OF APPROVED YARDS, 2023 (+USA BROWNSVILLE, TEXAS)



Need for capacity in the future

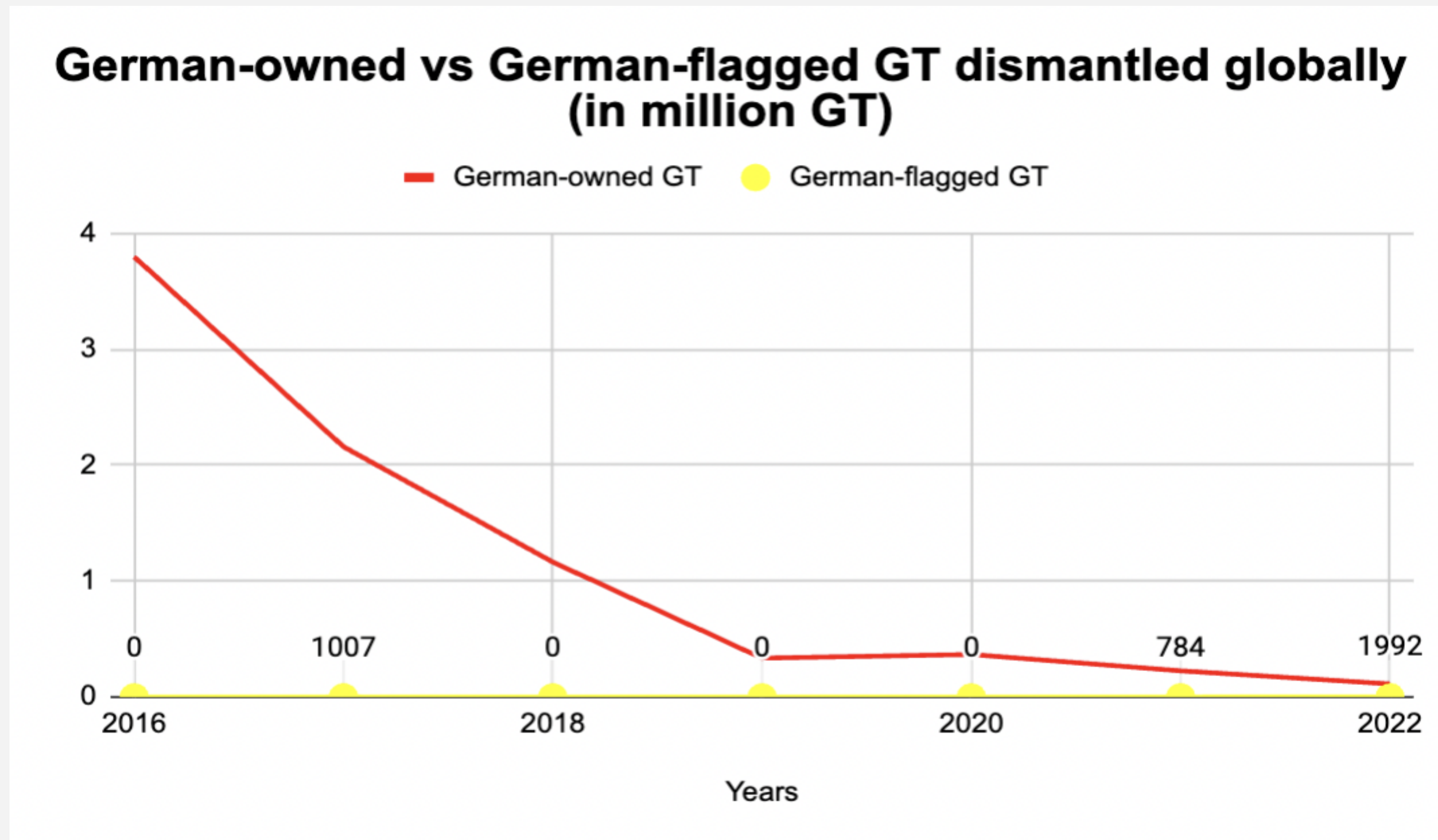
**PROJECTION : ANNUAL SHIP RECYCLING CAPACITY IN LDT
(LIGHT DISPLACEMENT TONNAGE) - MILLIONS**



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Focus on Germany: ownership vs flag

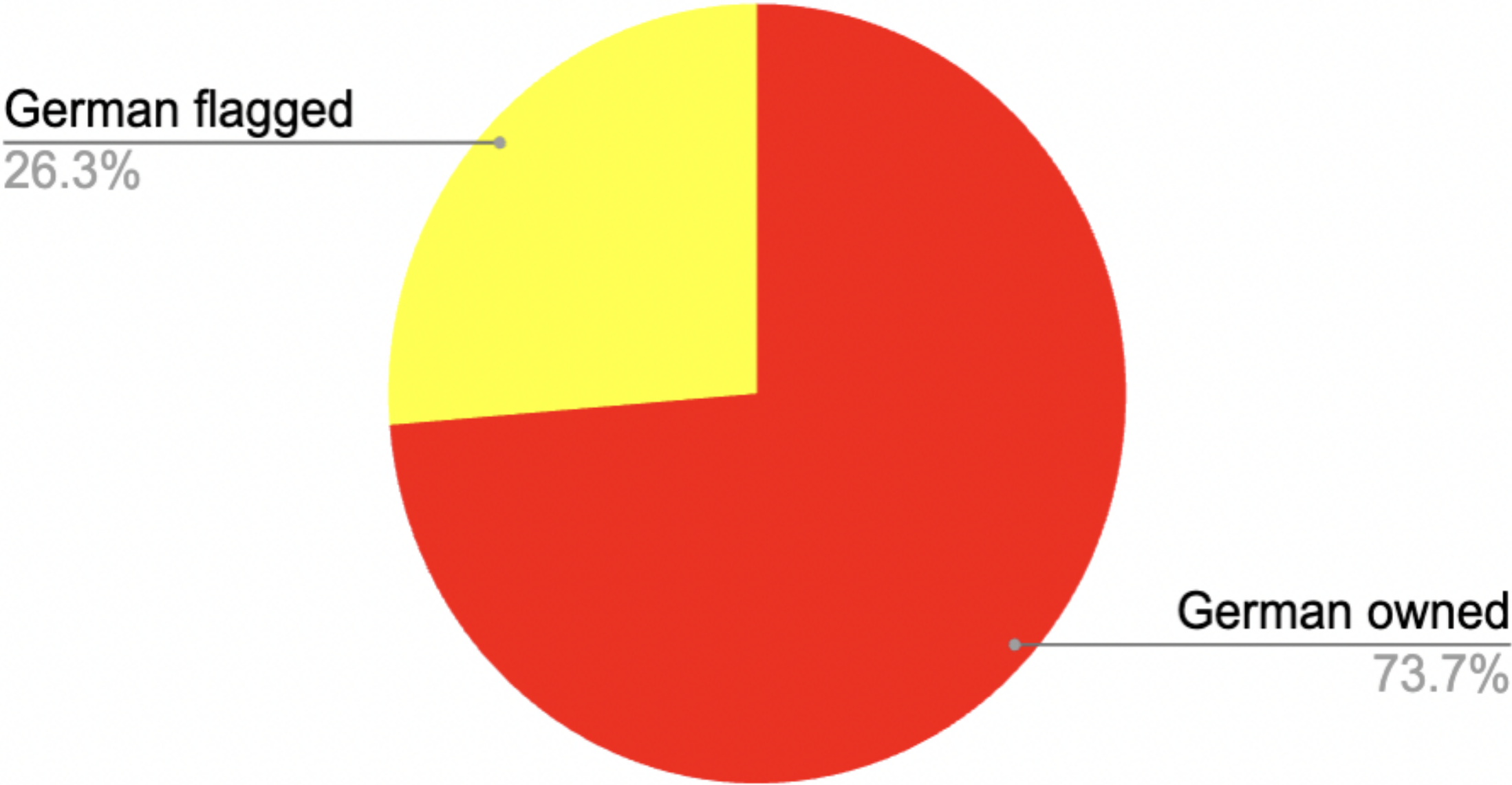


Source: NGO Shipbreaking Platform Dumpers annual list

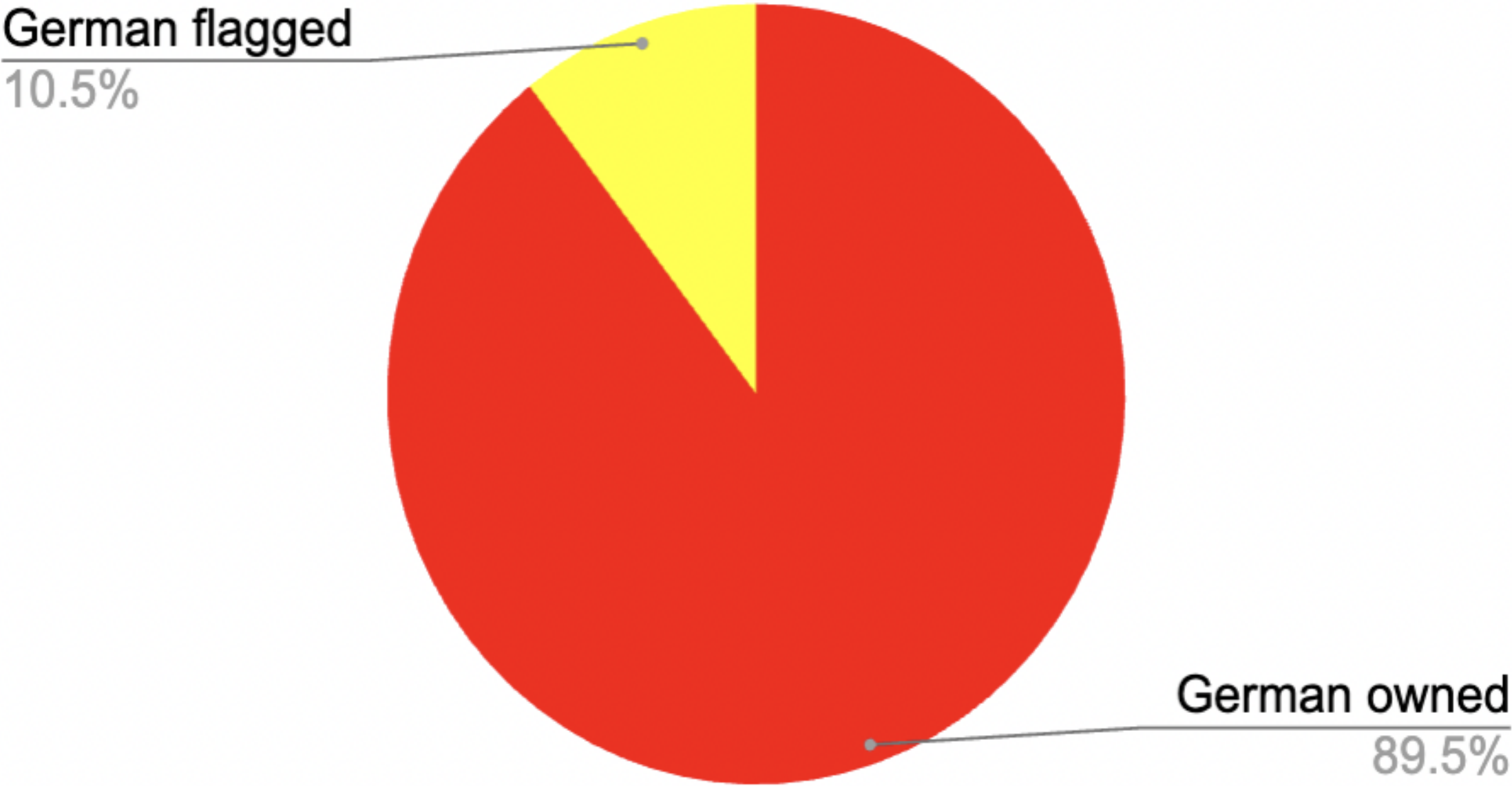


Focus on Germany: ownership vs flag

+20 years old # of vessels: German-owned vs German-flagged



+20 years old GT: German-owned vs German-flagged



Source: Commercial maritime databases





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...and the solutions!

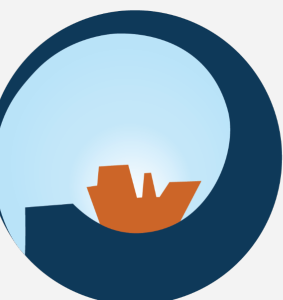
Solutions: Scrap steel the new golden goose

- Ship scrap steel offers significant batches of homogenous & valuable material: high quality demolition scrap E3 (Source: ArcelorMittal, Ship Recycling Lab 2022)
- Global demand for scrap steel is on the rise, with notable examples in the EU, Korea, Japan, and Brazil.
- The emerging concept of "Green Steel," (SteelZero, 2022) extends beyond GHG emissions to encompass the highest standards of ESG performance.
- Volumes of scrap steel generated by ship recycling are expected to grow in the next decade.







Solutions: Ship scrap steel recycling in Europe

- Scrap-based steel production is recognised as available-now technology to decarbonise the sector's emissions (ITRE Committee, "Moving towards Zero-Emission Steel", 2021);
- According to EUROFER, the EU-27 is expected to transition from a net exporter to a net importer of scrap steel in the coming decades. The organization's forecasts indicate that by 2050, the EU market will be importing roughly 25 million tonnes of scrap steel.
- Steel industry association is advocating for:
 - **including scrap steel in the list of Critical Raw Materials** and
 - foster a green steel market by keeping ferrous scrap in the EU for its proper treatment
 - stop the export to facilities which are less sustainable than those in the EU
- Industry leaders started are looking for securing good-quality scrap steel supply and **integrating ship recycling** into their material supply chain;



Map of EU steel production sites

-  Blast Furnace & Basic Oxygen Furnace
-  Blast Furnace only
-  Basic Oxygen Furnace only
-  Electric Arc Furnace



Blast Furnace & Basic Oxygen Furnace

Location	Hot Metal Capacity ('000 tonnes/year)	Finished Steel Capacity ('000 tonnes/year)	No. of furnaces
AUSTRIA			
DONAWITZ (Leoben)	1370	1570	2
LINZ	4340	6000	3
BELGIUM			
GHENT	4430	5000	2
CZECH REPUBLIC			
OSTRAVA	3200	3 – BF only	
TRINEC	2100	2400	2
FINLAND			
RAAHE	2400	2600	2
FRANCE			
DUNKERQUE	6800	6750	3
FOS SUR MER	5160	5100	2
GERMANY			
BREMEN	3960	3800	2
DILLINGEN	4790	2760	2
DUISBURG	11600	11560	4
EISENHÜTTENSTADT	2340	2400	2
SALZGITTER	4800	5200	3
VÖLKLINGEN		3240	BOF only
HUNGARY			
DUNAÚJVÁROS	1310	1650	2
ITALY			
TARANTO	9590	11500	4
NETHERLANDS			
IJMUIDEN (Velsen-Noord)	6310	7500	2
POLAND			
DĄBROWA GÓRNICZA	4500	5000	2
KRAKÓW	1310	2600	1
ROMANIA			
GALATI	3250	3200	2
SLOVAKIA			
KOŠICE	2850	4500	2
SPAIN			
AVILES		4200	BOF only
GIJÓN	4480	1200	2
SWEDEN			
LULEÅ	2200	2200	1
ÖXELÖSUND	1800	1700	2
UNITED KINGDOM			
PORT TALBOT	4770	4900	2
SCUNTHORPE	3590	3200	3

Electric Arc Furnace

Location	Capacity ('000 tonnes/year)	No. of furnaces	Location	Capacity ('000 tonnes/year)	No. of furnaces	Location	Capacity ('000 tonnes/year)	No. of furnaces
AUSTRIA								
GRAZ	365	1	GREECE			ROMANIA		
KAPFENBERG	180	1	ALMYROS MAGNISIA	1200	1	CALARASI	470	1
MITTERDORF	300	1	ASPROPYRGOS	400	1	HUNEDOARA	550	1
BELGIUM			ELEUSIS	800	1	OTELU ROSU	830	1
CHARLEROI	850	1	THESSALONIKI	600	1	RESITA	450	1
CHARLEROI (Marchienne au Pont)	350	1	VELESTINO	450	1	SLOVAKIA		
CHATELET (Chatelineau)	1000	1	HUNGARY			PODBREZOVA	350	1
GENK	1200	2	OZD	400	1	SLOVENIA		
BULGARIA			ITALY			CELJE STORE	150	1
PERNIK	1000	2	ACOSTA	260	1	JESENICE	500	1
CROATIA			BOLZANO	200	2	RAVNE	140	1
SISAK	350	1	BORGO VALSUGANA, TN	600	1	SPAIN		
SPUT	185	1	BRENO, BS	100	1	AMURRIO, ALAVA	150	1
CZECH REPUBLIC			BRESCIA, BS	1200	2	AMURRIO, ALAVA	360	1
OSTRAVA	120	1	BRESCIA, BS	650	1	AZPEITIA	800	1
PLZEN	150	2	CAMIN, PADOVA	600	1	BASAURI, VIZCAYA	740	1
FINLAND			CARONNO, VA	780	1	BILBAO	1100	1
IMATRA	360	1	CATANIA, SICILIA	500	1	CASTELLBISBAL, BARCELONA	2400	2
TORNIO	1300	2	CIVIDATE AL PIANO, BG	250	1	GALINDO, VIZCAYA	400	1
FRANCE			CREMONA	3850	2	GETAFE, MADRID	600	1
BAYONNE (Boucau)	1200	1	DALMINE, BG	700	1	JEREZ DE LOS	1300	1
BONNIERES SUR SEINE	550	1	LESEGNO, CN	600	1	CABALLEROS II		
CHATEAUNEUF, R. DE GIER	100	1	LONATO, BS	1100	1	LOIU, VIZCAYA	130	1
FOS SUR MER	480	1	LONATO, BS	600	1	LOS BARRIOS, CADIZ	1200	3
GARGENVILLE	700	1	LOVERE, BG	150	1	NARON, LA CORUNA	700	1
HAGONDANGE	460	1	ODOLO, BS	900	1	OLABERRIA	2450	1
IMPHY	90	1	OSOPPO, UD	2200	1	REINOSA, CANTABRIA	240	1
LE CREUSOT	150	1	OSPITALETTO, BS	150	1	SANTANDER, CANTABRIA	750	1
MONTEREAU	720	1	SAN ZENO NAVIGLIO, BS	800	1	SESTAO, BILBAO	2000	2
NEUVES MAISONS	800	1	SAREZZO, BS	540	1	SEVILLA	1300	2
ST.SAULVE	730	1	TERNI	1450	2	ZARAGOZA	500	1
TRITH ST LEGER	800	1	UDINE	500	1	SWEDEN		
UGINE	250	2	UDINE	770	1	AVESTA	500	1
GERMANY			VALLESE D. OPPEANO, VR	450	1	BJÖRNEBORG	95	1
BOUS/SAAR	350	1	VERONA, VR	1250	2	HAGFORS	120	1
BRANDENBURG	1800	2	VICENZA	170	1	HOFORS	500	1
FREITAL	90	1	VICENZA, VL	1200	1	SANDVIKEN	200	1
GEORGSMARIENHÜTTE	1100	1	LUXEMBOURG			SMEDJEBACKEN	480	1
GRÖDITZ	100	1	ESCH SUR ALZETTE	2250	2	UNITED KINGDOM		
HAMBURG	1100	1	POLAND			ALDWARKE	1220	2
HENNIGSDORF	1000	2	CHORZOW	145	1	ROTHERHAM	150	1
HERBERTSHOFEN	1180	2	CZESTOCHOWA	800	1	SHEPCOTE LANE (SMACC), SHEFFIELD	500	1
KEHL	2500	2	GLIWICE	250	1	TREMORFA, CARDIFF	1200	1
LINGEN	620	1	KATOWICE	65	1			
PEINE	1000	1	OSTROWIEC	900	1			
RIESA	900	1	STALOWA WOLA	240	1			
SIEGEN	600	1	WARSAWA	750	1			
SIEGEN	150	1	ZAWIERCIE	1340	2			
UNTERWELLENBORN	1100	1	PORTUGAL					
VÖLKLINGEN	300	1	MAIA (Porto)	600	1			
WETZLAR	400	1	SEIXAL	1100	1			
WITTEN	480	1						



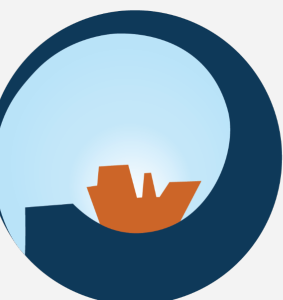
Solutions: coherence with the Green Deal

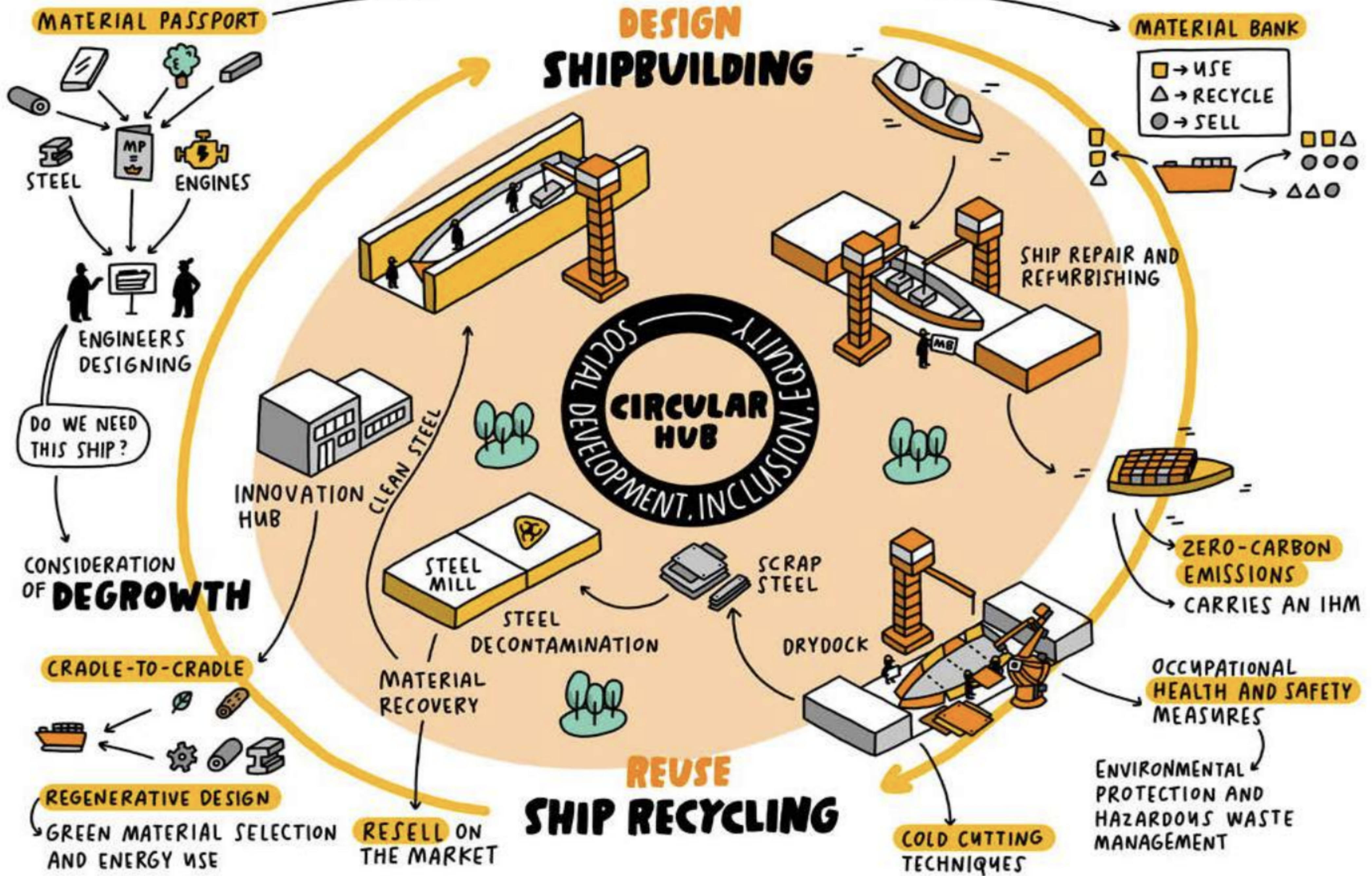
- Green Deal objectives:
 - 'restrict exports of waste that have harmful environmental and health impacts in third countries';
 - 'decarbonisation of the steel sector';
 - 'boost the market for secondary raw materials'
 - > Circular Economy Action Plan
- Agenda for a sustainable Blue Economy (2021) : 'For the recycling of large ships, the EU has a unique and ambitious set of standards in the Ship Recycling Regulation, that the Commission plans to revise by 2023 to possibly extend its scope and reinforce the existing regime'.



Solutions: coherence with the Green Deal

- A spectrum of opportunities:
 - From **IHM to Material Passport** for effective material recovery and substitution of hazardous materials;
 - The elaboration of **Best Available Techniques** for ship recycling;
 - Connect with the steel sector for local recycling of high-quality scrap and achieving decarbonisation of steel emission.
- Sustainable finance to assist a just transition -> ensure that investments for capacity building through tools such as the Taxonomy are combined with efforts in **securing steady supply chain of EoL vessels to recycling yards.**





Solutions: a stronger EU Ship Recycling Regulation

- One third of the beached vessels in South Asia are EU/EFTA-owned.
The decisions to scrap EU/EFTA owned vessels are taken in offices in Hamburg, Copenhagen, Antwerp and other shipping hubs.
70% of EU/EFTA owned end-of-life vessels do not have an EU/EFTA flag.
- > The Regulation needs to **extend its scope to cover beneficial ownership**



BREAKING OUT

ANCHORING CIRCULAR INNOVATION FOR SHIP RECYCLING



September 28, 2023

Trading Lives for Profit

How the Shipping Industry Circumvents Regulations to Scrap Toxic Ships on Bangladesh's Beaches





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Thank you!

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**BY
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