Marinekommando

Annual Report 2015

Summary

MARINEKOMMANDO

Facts and Figures on
Germany´s Maritime Dependence

Annual Report 2015
Summary

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Facts and Figures on Germany´s Maritime Dependence

Summary

World Merchant Fleet

**Development of the
bulk carriers´ world tonnage**
in million dwt

660.39
630.53
596.33
541.26
474.52
405.92

2010   2011   2012   2013   2014   2015

**Capacity of the world merchant fleet as at
1 January 2015 by ship type**
(in dwt)

General cargo vessels
109.1

Crude oil tankers
435.3

Container ships
227.7

In total:
1661.0
million dwt

Chemical tankers
94.2

Passenger ships / Ro/Ro
6.4

Bulk carriers
738.6

LNG tankers
49.7

**Development of the
world tanker fleet´s tonnage**
in million dwt

579.2
567.9
555.2
547.4
523.6
501.2

2009   2010   2011   2012   2013   2014
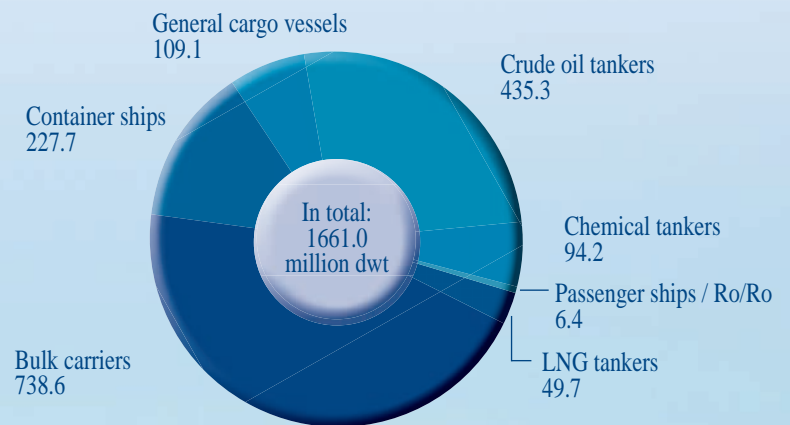
Development of the world merchant fleet´s deadweight tonnage by nationality of owners (ships > 1000 gt)

Rank		Country	Capacity in million dwt by flag			Percentage of foreign-flagged vessels %
2014	2015		national	foreign	total	
1	1	Greece	74.938	233.190	308.128	75.7
2	2	Japan	19.244	222.936	242.180	92.1
3	3	China	72.019	117.774	189.793	62.1
4	4	Germany	12.461	111.113	123.574	89.9
5	5	Korea	15.164	70.003	85.167	82.2

A deadweight tonnage of 308.1 million dwt

makes Greece the leading ship-owning by nationality of owners. Japan (242.2 million dwt) ranks second, followed by China (189.8 million dwt) and Germany (123.6 million dwt).

Construction orders for 40,6 million CGT

were on the books of the P.R. Cina at the end of 2014, with South Korea (31.2 million CGT) ranking second followed by Japan (17.4 million CGT) and Brazil (2.6 million CGT). Germany occupied the seventh place at 1.4 million CGT.

50422 seagoing ships

made up the world merchant fleet at the end of the period under review. Thus, a sea transport capacity of 1661 million dwt (+ 3.6 %) sailed the seas worldwide, of which bulk carriers accounted for 45 %, tankers for 35 % and container ships for 14 %.

5097 container ships

belonged to the world merchant fleet as at 1 January 2015, having a deadweight tonnage of 227.7 million dwt and a capacity of 18.2 million TEU.

Panama (20.6 %)

is by far the world´s largest flag state followed by Liberia (12.0 %). The Marshall Islands occupy the third place at 10.1 % and have seen the largest increase of all countries over the last 5 years (+ 15.2 %).

2950 new ships

with a total CGT of 36.5 million were delivered worldwide in 2014, including 415 tankers, 615 bulk carriers and 206 container ships. At the same time, 2744 new ships were ordered.

Container ship heading for the port of Hamburg on the River Elbe.

Facts and Figures on Germany´s Maritime Dependence

Summary

Canal Traffic

42 500 ships

passed through the Kiel Canal in 2014. Of these, 11 386 were small vessels and pleasure craft. In the area of commercial shipping, maritime traffic increased by 4.8 % to 32 589 commercial ships.

99 108 million tonnes of cargo

were transported through the Kiel Canal in the reporting year. The development of the ammount of cargo trans- ported varied between the types of cargo.

11 956 passages

of seagoing ships through the Panama Canal were re- corded for 2014, a fall of 89 ships (- 0.74 %) compared with the previous year. 8 467 ships were of the super- size class.

Kiel Canal passages

34879
33522
32589
30314
31399
31097

2009 2010 2011 2012 2013 2014

Passages through the Panama Canal

12855
12988 12869
12591
11956
12045

2009 2010 2011 2012 2013 2014

Total traffic through the Kiel Canal in 2014 by ship type

Ship type	Cargo in tons		Change from	Number of ships		Change from
	2013	2014	previous year	2013	2014	previous year
Dry-cargo ships / multipurpose carriers	28 753 567	30 789 666	7.1 %	12 231	12 594	3.0 %
Ro / Ro ships	2 898 679	2 821 856	-2.7 %	846	830	-1.9 %
Container Ships	38 617 393	41 186 345	6.6 %	5 947	5 867	-1.4 %
Oil tankers	2 170 172	2 059 700	-5.1 %	1 502	1 552	3.3 %
Gas tankers	525 791	565 402	7.5 %	201	112	-44.3 %
Chemical tankers	19 709 899	18 986 376	-3.7 %	4 498	4 332	-3.7 %
Others	2 113 751	2 698 200	27.6 %	5 872	7 302	230.6 %
Total	94 789 252	99 107 545	4.6 %	31 097	32 589	4.8 %
of which inland vessels	795 360	1 160 340	45.9 %	1 245	1 835	47.4 %

Passages through the Suez Canal

17993
17799
17224
17148
17228
16596

2009　2010　2011　2012　2013　2014

17 148 ships

passed through the Suez Canal during the reporting year (- 3.3 %). In the same period, a cargo volume of 822.3 million tonnes (2013: 754.5 million tonnes) was recorded. The highest number of ships recorded were container ships (6129), tankers (4053) and bulk carriers (3051).

5.47 billion USD

were earned in revenue by the Suez Canal Authority in 2014, this equates to an average cost per passage of 318 714 USD (+ 3.5 %).

Seafront overlooking the roadstead outside the Kiel Canal at Brunsbüttel. In 2014, a total of 99.8 million tonnes of cargo passed through the canal.

Facts and Figures on Germany´s Maritime Dependence

Summary

German Maritime Economy

33 million EUR

were granted for 16 research projects with 61 sub-projects as part of the „Maritime Technologie der nächsten Generation" (maritime technologies of the next generation" programme in the reporting year.

208 apprenticeship contracts

were signed with 46 shipping companies in 2014, 11 of which were terminated prematurely. 197 new contracts were in place as at 31 December 2014 - an increase compared with the previous year for the first time since 2012.

Turnover shares of the product groups 2014

Merchanical engineering 75 %

Electrical engineering 10 %

Services 12 %

Others 3 %
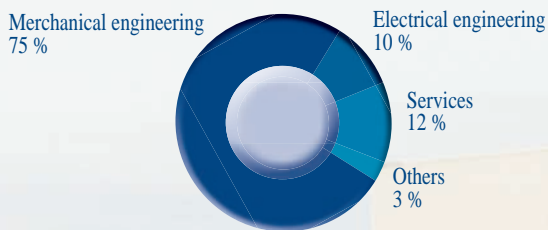
Personnel on German merchant ships as at 31 December 2014

Occupational category	German	of which female	other nationalities	of which female	Total
Captains, shipmasters	1088	11	79	-	1167
Deck officers	1268	80	330	0	1598
Engineer officers	1220	10	387	2	1607
Officer assistants	78	5	11	-	89
Ship mechanics	548	4	17	-	565
Deck personnel	848	16	1.363	20	2.211
Mechanical engineering personnel	295	4	518	10	813
Trainees	405	34	3	-	408
Others	959	272	933	47	1892
Total	6709	436	3641	79	10350

Nordic Yards shipyard in Warnemünde.

80000 employees

work in about 2800 different enterprises in the German maritime industry. In addition to shipyards and component and system manufacturers, the value chain of the German maritime industry also comprises various services providers in the engineering and business sectors.

A turnover of 6.4 billion euro

was generated in Germany by the 60 ship-building companies registered by the Federal Statistical Office. 72 % of this turnover were derived from exports. The companies employed 18000 people.

19 % of the total turnover

of the shipbuilding supply industry was generated in each of the federal states of Bavaria and Baden-Württemberg, followed by Schleswig-Holstein (18 %) and Hamburg (15 %).

A turnover of 11.9 billion euro

was generated by the 67000 employees of the German ship-building and offshore supply industry in 2014. The export rate was 74 %.

Turnover shares of the different market areas 2014

Merchant shipbuilding
70 %

Naval shipbuilding
18 %

Marine engineering
12 %
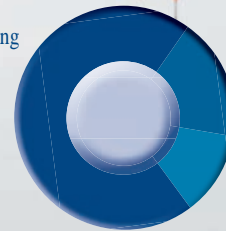
Facts and Figures on Germany´s Maritime Dependence

Summary

German Merchant Fleet

3645 ships

of 1000 GT and above were German-owned as at 1 January 2015 according to the Institute of Sipping Economics and Logistics. This accounts for 7.5 % of the world tonnage, ranking Germany fourth behind Greece, Japan and China.

368 seagoing ships

out of 3071 ships recorded in German shipping registers sailed under the German flag as at 1 January 2015. This is substantial drop from the 395 ships still registered in the previous year.

2703 merchant ships

operated under bareboat charter. The preferred foreign flagging is Liberia with 965 ships and 47.8 million dwt, followed by the Caribbean island state of Antigua and Barbuda (906 ships with 10.9 million dwt) and Malta (178 ships and 7.9 dwt).

Bulk transshipment in Rostock. 19.5 million tonnes of cargo were handled in the port of Rostock, an increase of 9.5 % compared with the previous year.

11 ships

changed from a foreign flag to the Federal German flag according to the VDR (German Ship-Owners' Association). Moreover, 3 newly built and 10 purchased ships were commissioned under the German flag. In all, a total of 24 ships were added to the Germany register.

28 ships

changed from the German flag to a foreign flag, 43 ships were sold abroad and one ship scrapped. On balance, the number of ships added to the German register was exceededv by the 72 ships removed from it.

1626 container ships

of more than 1000 GT belonged to the fleet managed by German ship-owners at the beginning of 2015. With a capacity of 5.28 million TEU these ships account for 29.0 % of the world fleet´s container-carrying capacity.

Types of shipping service provided by German

Type of shipping	German flag		Foreign flag			
			German register		Foreign register	
	Number	in 1000 GT	Number	in 1000 GT	Number	in 1000 GT
Tramp shipping	158	5 540	1 977	41 120	96	1 498
Liner shipping	106	5 075	56	2 600	14	386
Tanker shipping	35	368	307	10 038	12	303
Bulk carrier shipping	2	176	328	12 063	22	1 252
Passenger shipping	67	42	6	322	18	734
Refrigerated shipping	-	-	29	280	11	116
Total	368	11 213	2 703	66 478	173	4 289

**Development in number and tonnage of ships
under German disposition (100 GT and above)**

■ number of
Ships

■ in million
GT

89.13   89.14   86.41
                           81.98
83.66

62.09

3716   3798   3671
                            3477   3244
23.03   3105
1518
     2010
8.99

1990   2000   2010   2011   2012   2013   2014

Facts and Figures on Germany´s Maritime Dependence

Summary

German Foreign Trade

455.5 billion EUR

were obtained by value in seaborne foreign trade, up 3.2 billion euro or 0.7 % compared with the previous year. Wile, at 76.26 million tonnes, exports by volume only accounted for 31.7 %, euro exports by value, at 283.3 billion euro, contributed a share of 62.8 %.

Origin of foreign imports by value

Europe 70.0 %

America 8.0%

Asia 18.5 %

Africa 2.2 %

Australia and Oceania 0.3 %

42 % of German exports

consisted of automobile parts, machines and chemicals.
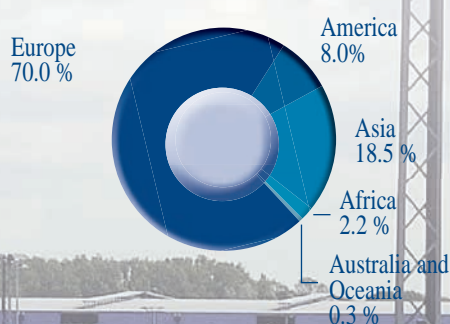
Development in exports in seaborne foreign trade

- Value in billion EUR
- Quantity in billion tonnes

127.0
169.6
155.1
248.7
283.3

55.2
64.0
46.3
71.0
76.3

2004　2006　2008　2010　2012　2014
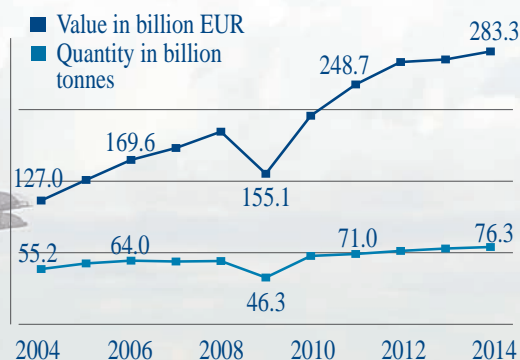
Germany´s top 10 exports goods in 2014

	Product	Billion EUR	Change from previous year
1	Automobiles and automobile parts	202.9	6.57 %
2	Machinery	165.8	1.3 %
3	Chemical products	107.1	1.3 %
4	Computer, electronic and optical products	89.5	5.4 %
5	Electrical equipment	68.5	2.2 %
6	Pharmaceutivals and similar products	61.6	6.2 %
7	Metals	50.3	-4.2 %
8	Food and animal feed	48.9	1.7 %
9	Rubber and plastics	39.9	2.3 %
10	Metal products	39.4	3.4 %

Industrial port of Bremerhaven. Germany's second busiest port with a freight tonnage of 53 643 million tonnes.

A foreign trade balance surplus of 216.9 billion EUR

(+9.7 %) was achieved by Germany in 2014. The country imported goods worth 917 billion EUR and exported goods worth 1133 billion EUR.

Transport modes in German foreign trade 2014
in billion EUR

Inland shipping
24.3

Road transport
1084.6

Sea transport
456.6

Air transport
213.9

Railway transport
56.7

Development of German foreign trade in million tonnes

1200

1000

911
977
993
875
959
979
1037

2004   2006   2008   2010   2012   2014
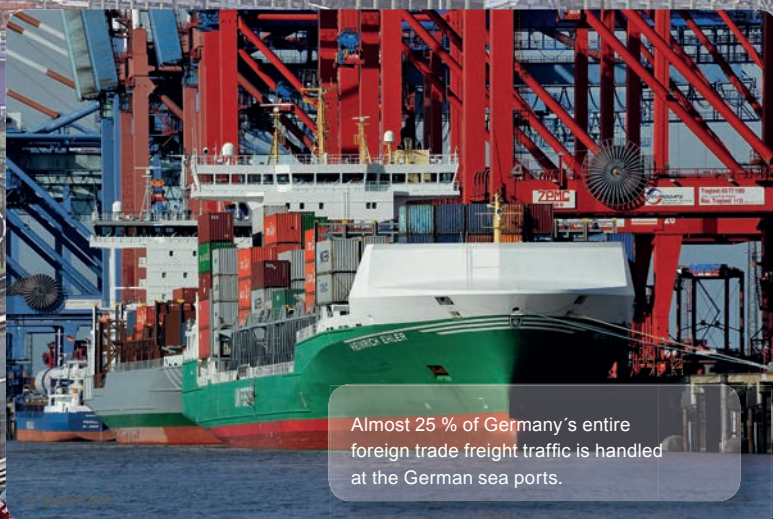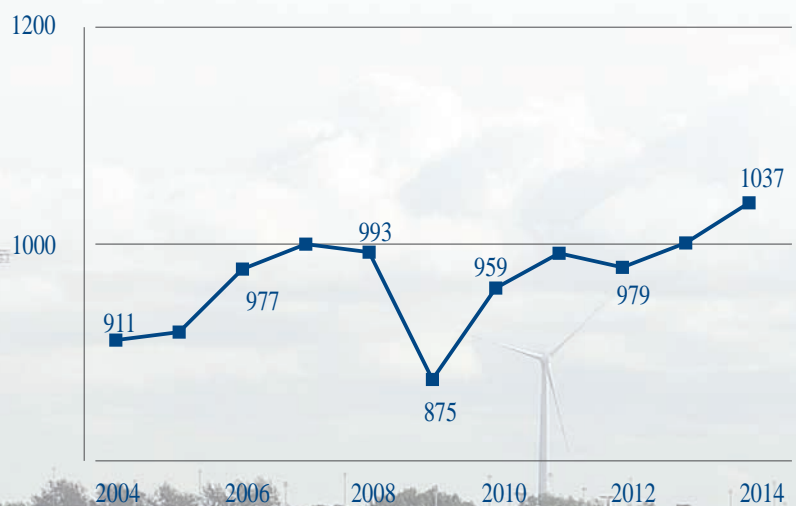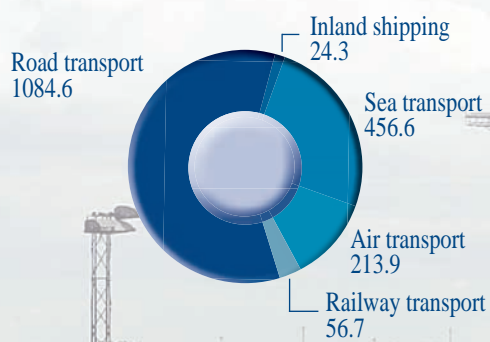
Almost 25 % of Germany´s entire foreign trade freight traffic is handled at the German sea ports.

moonway   moonway

moonwav   moonway

Facts and Figures on
Germany´s Maritime Dependence

Summary

Maritime Cargo Handled in Germany

A goods turnover of 303.9 million tonnes
was generated at German seaports last year (2013: 297.6 million ton-nes), with inbound traffic from abroad being the fastest-growing sector (+2.1 %).

15.9 million TEU of container traffic
were handled at German ports, up 2.3% from 2013.

126.0 million tonnes of sea freight
were handled in Hamburg in 2014. With 19.5 million tonnes, the port of Rostock handled the highest amount of freight traffic in the Baltic Sea area.

A turnover of 117.0 million tonnes
was generated in bulk commodities (+0.8 %). 87.95 million tonnes were imported from abroad, while 24.80 million tons were exported.

Ship Traffic in Germany

Bulk carriers
5 126

Break bulk cargo ships
13 081

Ro/Ro ships
66 614

Tank ships
4 927

Passenger ships
24 078

Other
2 026

Container ships
9 278
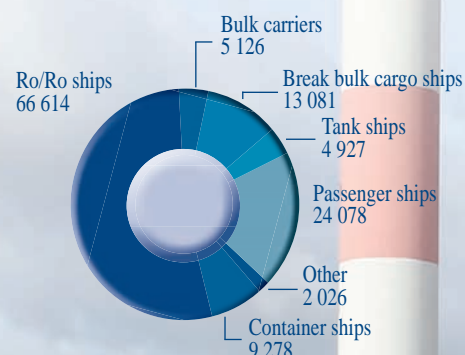
Ship arrivals in German seaports by ship type

Ship type	Ship arrivals	2013	Cargo in million t	2013
	2014		2014	
Container ships	9 278	- 15.9 %	128 672	3.9 %
Tank ships	4 927	11.8 %	48 500	1.5 %
Bulk carriers	5 126	2.4 %	58 196	2.6 %
Ro/Ro ships	66 614	2.5 %	38 709	- 0.9 %
Beak bulk cargo ships	13 081	1.0 %	23 398	1.0 %
Vehicle carriers	1 694	11.8 %	3 871	11.1 %
Special cargo ships	209	- 4.6 %	545	4.8 %
Passanger ships (w/o ocean liners)	23 710	- 14.8 %	-	-
Other ships types	2 020	5.0 %	2 170	- 29.3 %
Total	126 659	- 2.5 %	304 060	2.2 %

Development of goods handled at German seaports in million tonnes

350

320.6

302.8

303.9

300

298.8

271.8

276.0

262.9

250

2004   2006   2008   2010   2012   2014
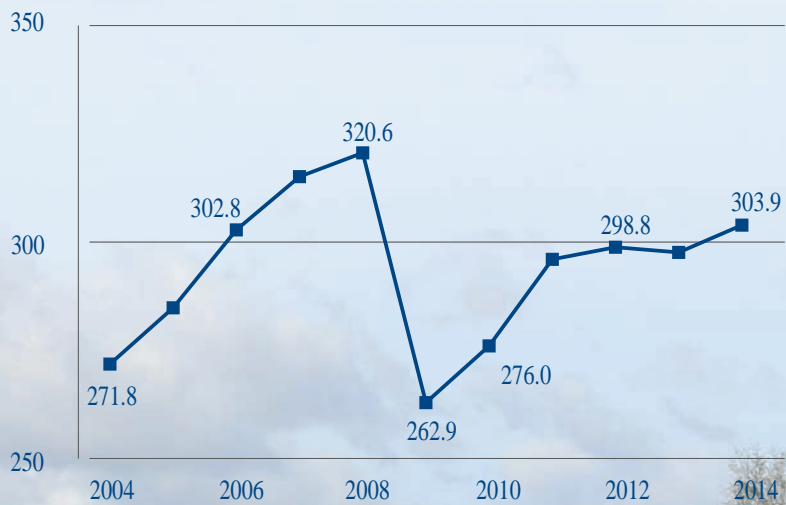
38.01 million tonnes
of coal, crude oil and natural gas were handled at German ports, a rise of 1.2 % from the previous year. The volume of agricultural produce, on the other hand, remained almost unchanged at 24.235 million tonnes.
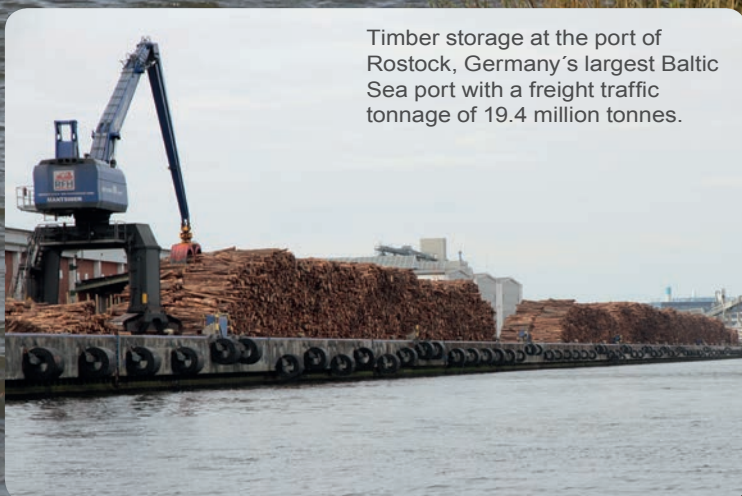
Timber storage at the port of Rostock, Germany´s largest Baltic Sea port with a freight traffic tonnage of 19.4 million tonnes.

Container ship on the River Elbe, heading for Hamburg. At 126.0 million tonnes (2013: 120.6 million tonnes), the port of Hamburg is Germany´s largest sea port followed by Bremen and Bremerhaven (66.4 million tonnes combined).

Facts and Figures on Germany´s Maritime Dependence

Summary

The German Fishing Industry

1319 fishing cutters

and open boats were part of the small-scale deep sea and coastal fishing fleet at the end of 2014, including 220 shrimp and flatfish trawlers and 47 mussel / special vessels.

14.0 kg of fish

and fish products were consumed per capita in 2014, up 0.5 kg or 3.7 % compared with 2013.

1.1 million tonnes of fishery products

were available in 2014, down 4 % from the previous year. 507 000 tonnes of sea fish, excluding herrings and their semifinished products, remained for the German market.

142 100 tonnes of fishery products

were delivered abroad by German fishing vessels in 2014.

In 2013 the number of German fishing vessels continued to decrease.

13900 tonnes of herring,

3500 tonnes of cod, 1500 tonnes of flatfish and 840 tonnes of pollock were handled at domestic ports. In addition, 11400 tonnes of brown shrimp and 6400 tonnes of mussels were landed. Overall, the landings by German fishing vessels totaled 62400 tonnes.

A turnover of 114.92 million EUR

was generated by the cutter fishing industry. With a total landed catch of 73400 tonnes, the revenue per tonne was 1566 EUR, slightly down from the previous year.

Development of the German fishing fleet including deep-sea fishing vessels

```
2 500

2211
        2117
2 000         1872
                  1767
                        1549
1 500
                              1326

      2004   2006   2008   2010   2012   2014
```
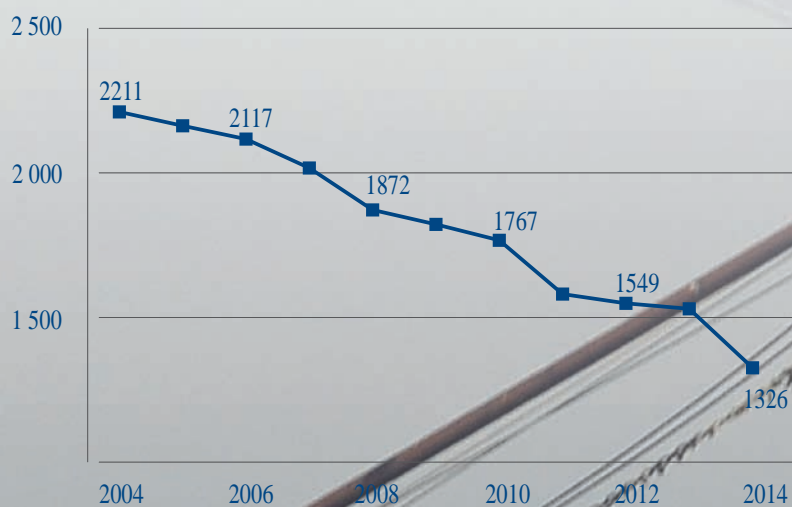
Fishing vessel entering the River Elbe and heading for the port of Cuxhaven.

Facts and Figures on Germany´s Maritime Dependence

Summary

Inland Shipping

Goods transported by inland shipping
in million tonnes

243.5   244.6
229.9   223.2   228.5
204.5

2006   2008   2010   2012   2014

At 52.4 million tonnes of goods,
the port of Duisburg handled the largest amount of freight traffic, followed by Cologne (12.0 million tonnes) and Hamburg (11.7 million tonnes).

228.5 million tonnes of goods
were transported on German rivers and canals in 2014, up 0.7 % compared with the previous year (226.9 million tonnes).

Goods transported by inland shipping by type of traffic in million t

Traffic relations	2013	2014	change in %
Total	226.9	228.5	0.7
of which:			
Traffic within Germany	54.7	55.6	1.7
Outward traffic	47.8	50.6	5.7
Inward traffic	104.5	103.9	-0.6
Transit traffic	19.8	18.4	-6.9

Inland waterway transport on the River Rhine at Duisburg.

2071 inland waterway vessels

having a cargo carrying capacity of 2.66 million tonnes, made up the German fleet of inland vessels in 2014, with the dry-cargo sector accounting for 72.6 % of the tonnage.

Freight traffic carried by inland transport 2014

Road 82 %

Rail 11 %

Inland shipping 7 %

6336

4786

3134

3230

2456

2071

1970 1975 1980 1985 1990 1995 2000 2005 2010 2014
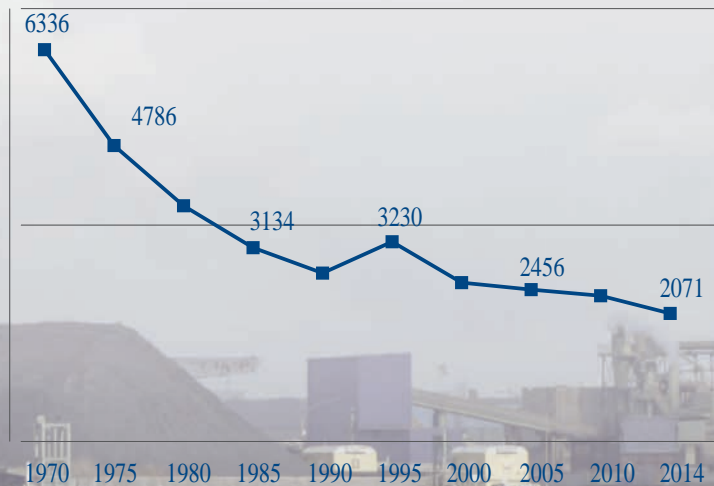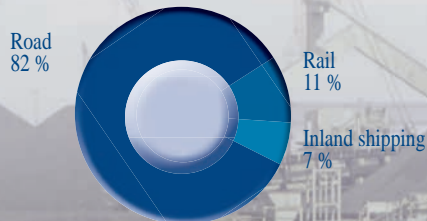
Vessels delivered by German inland vessel shipbuilders

Ship type	2010	2011	2012	2013	2014
Cargo ships, incl. tanker & pushboats	14	7	6	5	-
Passenger ships	15	9	15	20	31
Harbour craft/tugs/official and special duty ships	20	28	19	16	34
Total	49	44	40	41	65
Total value in million EUR	123	134	224	311	489

245 incidents

of piracy and armed robbery were recorded by the IMB PRC (International Maritime Bureau Piracy Reporting Centre) in 2014 - a decrease by 7 % compared with the previous year and by 18 % in comparison to 2012. Piracy was at its lowest level since 2007.

442 seafarers

were kidnapped in 2014 (2013: 304 seafarers). 4 crew members were killed, 13 persons were injured. 2014 also saw a significant rise in the number of hijacked ships (21) compared with the previous year. A total of 183 ships were boarded by pirates, 13 of which came under fire.

45 % of all ships boarded

were attacked in Indonesian waters and roadstead in the year under review. However, most incidents were merely cases of amateurish casual theft which cannot be compared to the more critical incidents off the African coast.

Regions with the highest level of piracy in 2014

Somalia, Gulf of Aden and Red Sea 11

Nigeria 18

Singapore 8

Vietnam 7

Bangladesh 21

Malaysia 24

India 13

Indonesia 100

Total: 245

Flag states affected by piracy incidents (>12) in 2014

Flag state	Incidents
Panama	44
Marshall Islands	36
Singapore	32
Rep. of Liberia	20
Hong Kong	16
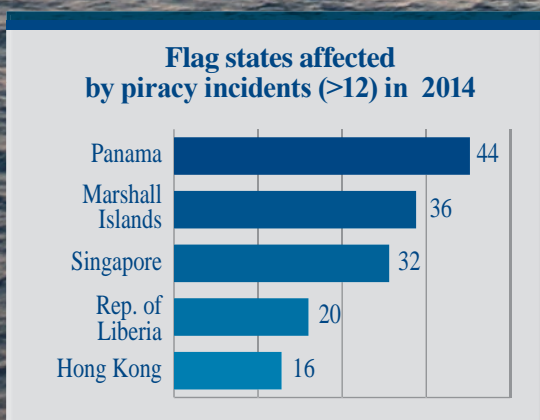
Italian destroyer ANDREA DORIA escorting a freighter of the UN World Food Programme at the end of 2014.

36 incidents

were reported in the region of the Gulf of Guinea. Some of the incidents were cases of armed robbery aimed at stealing goods and the crew´s valuables. Some groups of perpetrators specialized in hijacking tankers.

59 incidents involving tank ships

occurred in 2014, putting tankers, along with bulk freighters, at the top of the list of ship types involved in incidents in 2014.

11 attacks

by Somali pirates were reported in 2014. No merchant ships were hijacked in these attacks so that piracy remained at a low level in 2014.

Nationality of owners whose ships were attacked 12 times or more in 2014

Singapore	63
Greece	30
Germany	15
Great Britain	13
India	13
Hong Kong	13

Spanish marines checking and rendering assistance to Somali fisherman.
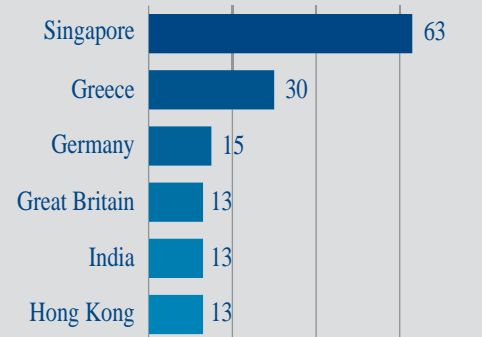
Task force flag ship JOHAN DE WITT conducting a surveillance operation off Somalia. In the fore, Swedish Navy fast patrol boats patrolling in its wake.

Facts and Figures on Germany´s Maritime Dependence

Summary

Maritime Refugee Movements

59.5 million people
were refugees at the end of 2014 (2013: 51.2 million).

220000 migrants
attempted to cross the Mediterranean Sea to illegally enter the European Union, most of them coming from Syria and Eritrea.

170760 illegal migrants
were detected in the Central Mediterranean in 2014. In addition, the Eastern Mediterranean (50830 migrants) and the Western Mediterranean (7842 migrants) also provided frequently used routes on the EU border.

Maritime refugees in the Mediterranean Sea

Year	Value
2010	14 260
2011	71 172
2012	23 254
2013	60 173
2014	220 194

Maritime refugee movements in the Mediterranean Sea in 2014

7 842
170 664
50 834
433
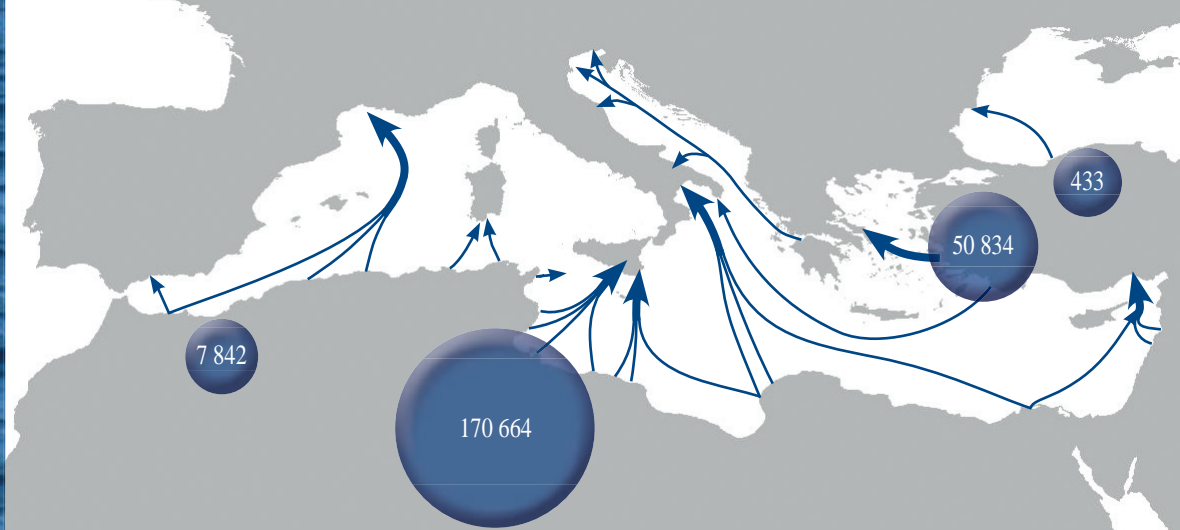
**Maritime refugees
in the Central Mediterranean Sea**

170 760

64 300

39 800

4 500

15 900

2008   2010   2012   2014
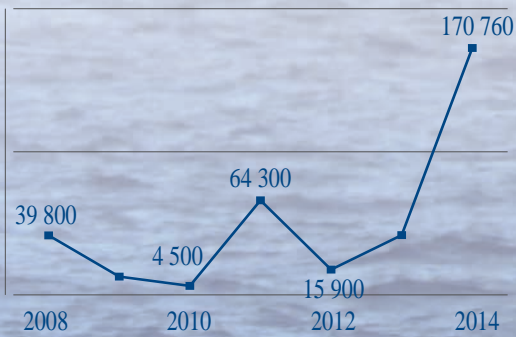
91500 people
tried to make the dangerous journey across the Gulf of Aden and the Red Sea. A total of 240 people are assumed to have drowned on this route in 2014.

120000 refugees
have fled Myanmar by boat headed for Thailand, Malaysia and Indonesia in the last three years, according to UN estimates.

**Top 10 refugees´countries of origin
in 2014**

Country	
Syria	3 883 585
Afghanistan	2 593 368
Somalia	1 106 068
Sudan	665 954
South Sudan	616 210
Kongo	516 770
Myanmar	479 001
Central African Republic	412 041
Iraq	369 904
Eritrea	363 077

**Maritime refugee movements
in the Gulf of Bengal in 2014**

215 incidents

of relevance to maritime policing were registered by the Federal Police. These included 27 cases of Collision Regulations violations. 36 environmental incidents were reported to the police and in 27 cases the police launched investigations against potential polluters.

Accidents at sea by sea area in 2014
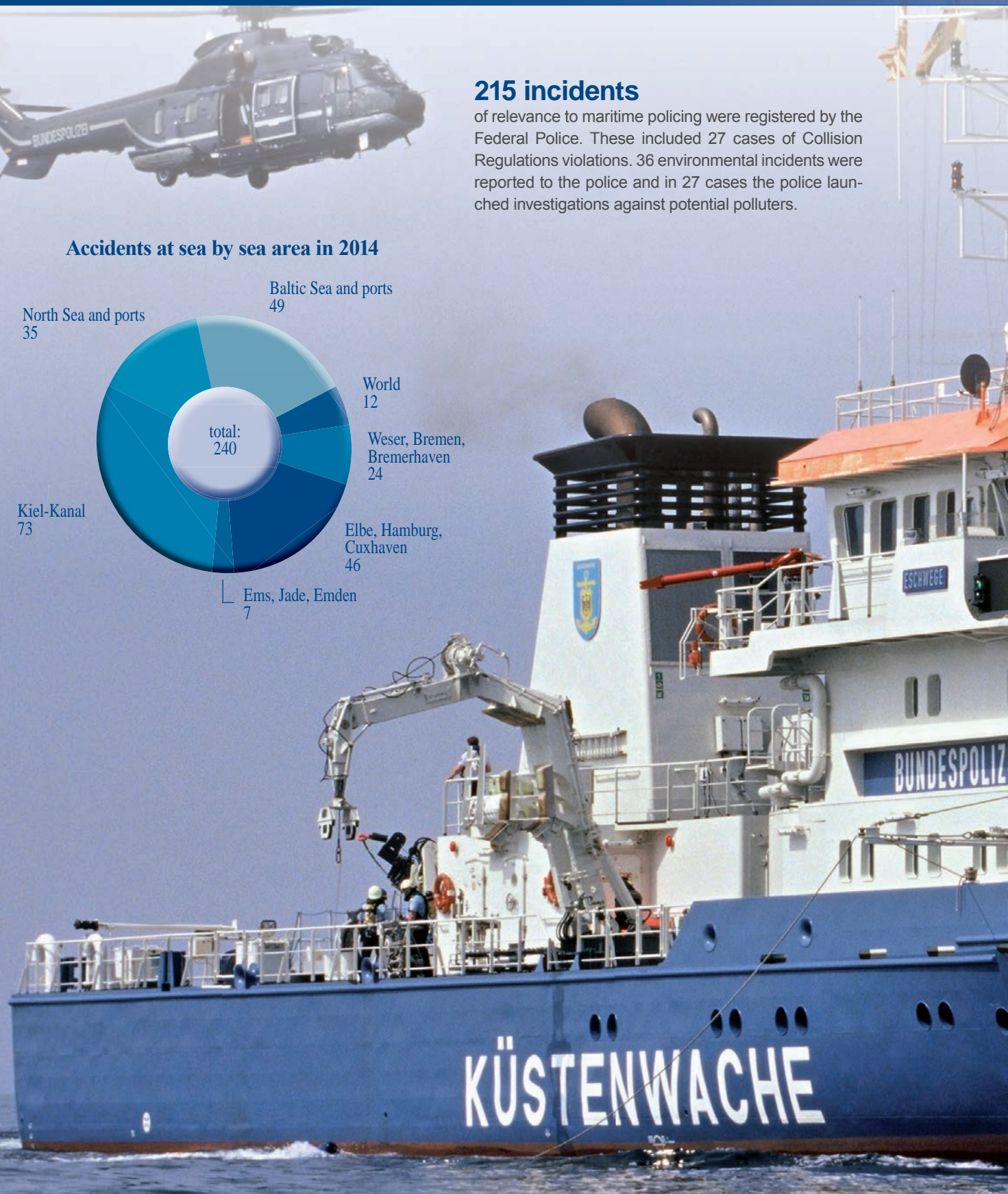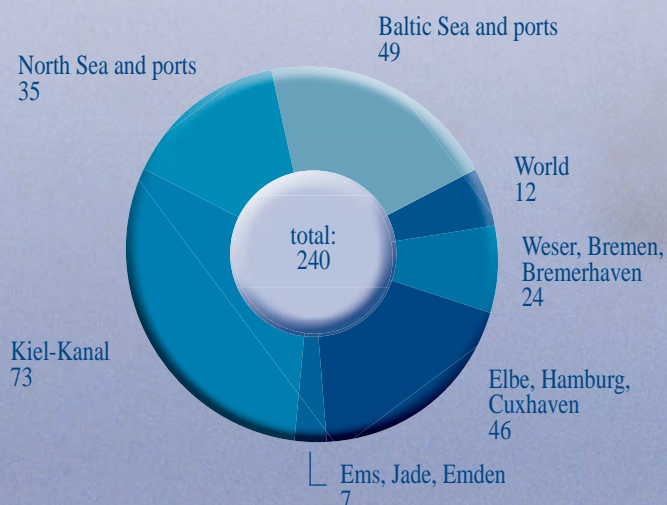
Baltic Sea and ports
49

North Sea and ports
35

World
12

total:
240

Weser, Bremen,
Bremerhaven
24

Kiel-Kanal
73

Elbe, Hamburg,
Cuxhaven
46

Ems, Jade, Emden
7

491 inspections

of fishing vessels were carried out by the fishery protection vessels of the Federal Office for Agriculture and Food. In addition to the onboard inspections, the inspectors made 1110 sighting reports of fishing vessels.

6781 regulation breaches

were identified by the Mecklenburg-Vorpommern Water Police in 324 cases of maritime accidents. 1056 of the regulation breaches were investigated for a suspected crime.

240 accidents at sea

were handled by the Federal Bureau of Maritime Casualty Investigation (2013: 239). Of these, 6 were classified as very severe and 20 as severe accidents. A total of 82 accidents happened aboard German-flagged seagoing vessels (2013: 56).

81684 people

have received rapid help from the German Maritime Search and Rescue Service (DGzRS) since its foundation. In 2014 alone, the DGzRS crews rescued 55 persons at sea, saved 713 people from imminent danger, transported sick and injured people from ships or islands to the shore in 438 missions.

Patrol boat „Eschwege"
(BP 26) of the German
Federal Police at sea.

Facts and Figures on Germany´s Maritime Dependence

Summary

German Navy

52 units of the fleet

called at 109 harbours in 28 countries as part of their training. The fleet participated in 17 exercises.

89 ships and vessels

as well as naval air force units comprising 51 aircraft and helicopters were available to the German Navy at the end of 2014. At the beginning of 2015, the Navy had a total personnel strength of 22966 soldiers.

160 SAR missions

(including 144 missions providing civilian emergency treatment) were completed in 2014. 121 persons were rescued and treated.

Composition of the Fleet 2014

Frigates 11

Fast patrol boats 6

Corvettes 5

Mine warfare forces 15

Submarines 5

Support vessels 24

Other 23
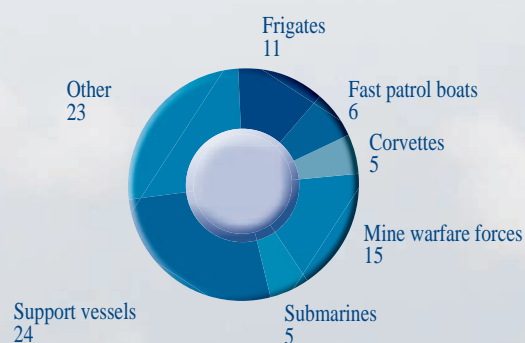
Frigate AUGSBURG and USN special purpose ship Cape Ray at sea.

On average, 150 Soldiers

of the German Navy took part in the UNIFIL mission. The mission´s troop ceiling was 300 soldiers. The mandate ends on 30 June 2016.

600 Tonnes of mustard gas

and components of the nerve agent Sarin were destroyed unter the protection of the OPCW MEM. Three German Navy frigates were engaged in this mission as escorts.

Corvette BRAUNSCHWEIG leaving Limassol harbour on Cyprus.

Missile firing from frigate BRANDENBURG in February 2015. The missile launched is an Exocet MM-38 type missile.

Participation in Operation ATALANTA 2014	
Unit	period
FGS HESSEN	30 NOV 13 - 02 APR14
FGS BRANDENBURG	30 MAY 14 - 07 AUG 14
FGS RHÖN	06 APR 14 - 02 JUL 14
FGS BERLIN	10 JUL 14 - 09 OCT 14
FGS LÜBECK	06 OCT 14 - 10 FEB 15
P3C ORION	JAN - DEC 2014

Summary

Global Energy Supply

226 billion tonnes of crude oil reserves

were still available at the end of 2014. In purely arithmetical terms, the reserves would be sufficient to meet the global demand for 53 years. Almost three quarters of the reserves are located in OPEC countries with Venezuela (more than 41 billion tonnes) and Saudi Arabia (36 billion tonnes) holding the largest share.

12 % of the global crude oil

(505.4 million tonnes) is consumed by China, ranking the country second among the top consumers behind the USA (866.6 million tonnes). At 110.3 million tonnes, Germany ranks eighth.

Global electricity generation 2013

Coal
41.0 %

Mineral oil
4.5 %

Nuclear energy
11.8 %

Natural gas
21.9 %

Renewables
20.7 %
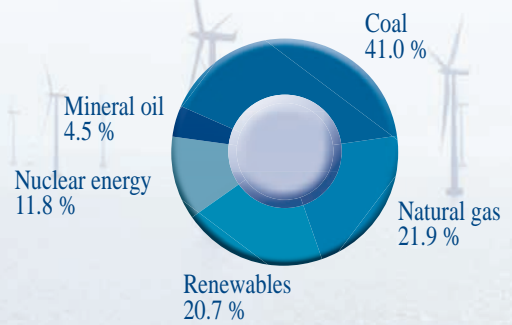
Offshore transformer station of the Lillegrund wind farm, Sweden. The wind farm was commissioned in 2008.

LNG-tanker at sea.

440 nuclear power station units

were in operation in 31 countries worldwide at the end of 2014. At 797.1 TWh produced, the USA is the greatest producer, followed by France (415.9 TWh) and Russia (161.4 TWh). Germany ranks seventh (92.1 TWh).

With 450 million consumers

the European Union is the second largest energy market.

1712 gigawatts of power

were produced globally from renewable energies in 2014, 1055 GW of which were produced by hydropower plants. More than 50% of the hydropower plants are located in China, Brazil, the USA and Canada.

369.6 gigawatts of power

were produced from wind energy by the end of 2014, up 16.2 % from the previous year, of which China produced the largest share (114.6 GW), followed by the USA (65.9 GW) and Germany (39.2 GW).

Gumusut-Kakap offshore drilling rig off the Malaysian coast in the South China sea.

Main oil-consuming and oil-producing countries 2014
in million tonnes

Consuming		Producing	
USA		Saudi Arabia	
China		Russia	
Japan		USA	
India		Canada	
Russia		China	
Brazil		United Arab Emirates	
Saudi Arabia		Iraq	
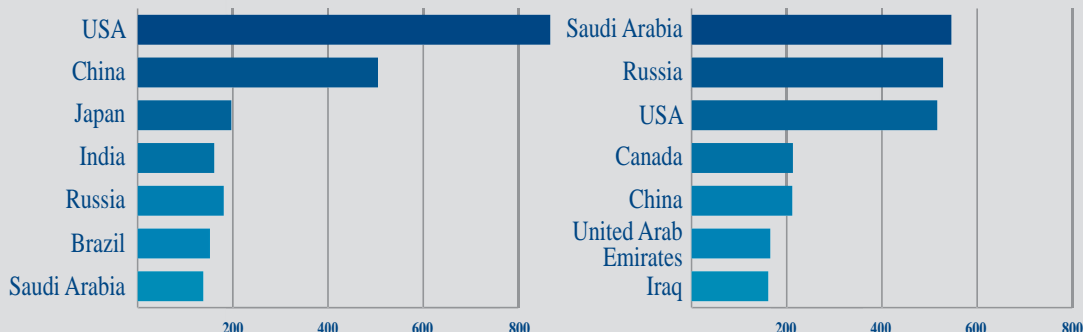
Summary

Energy Supply in Germany

315.0 billion kWh

of electricity were consumed by industry in 2014 (321.4 billion kWh in 2013). The consumption of private households decreased by 6.4 % to 127.3 billion kWh.

126.4 million tonnes of crude oil

had to be imported in 2014 with most of the oil supplies coming from Russia (30.0 million tonnes) and to a much lesser extent from Norway (15.2 million tonnes) and Great Britain (9.7 million tonnes).

446.2 million tonnes coal equivalent

was consumed in Germany in 2014, led by mineral oil (35 %), natural gas (20.5 %), hard coal (12.5 %) and brown coal (12.0 %).

Development in the domestic sales of fuels and fuel oil in million tonnes
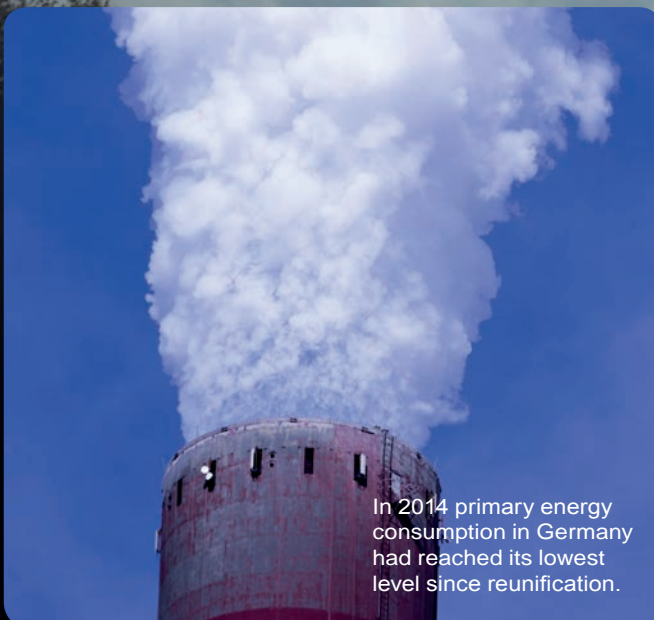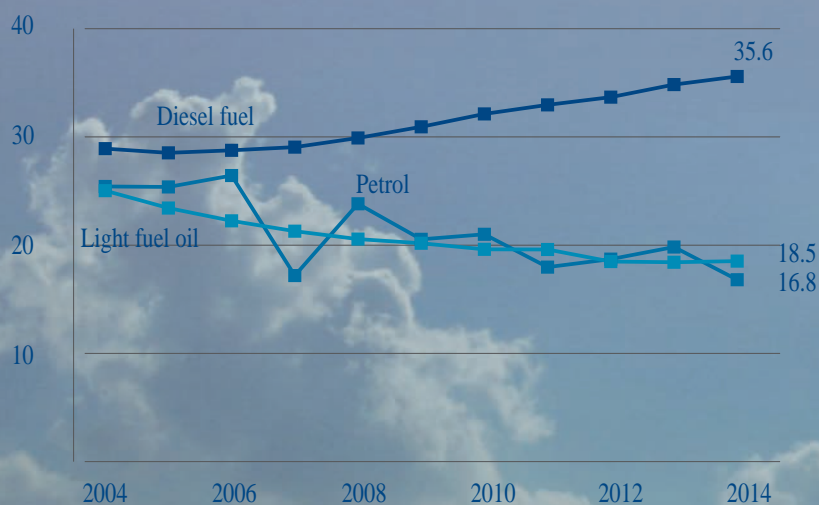
In 2014 primary energy consumption in Germany had reached its lowest level since reunification.

An overall investment of 18.8 million euro
was made in the construction of renewable energy installations in Germany in 2014 - an increase by 20 % following a decrease in 2013.

1.3 billion kWh
of energy were produced by offshore wind energy installations in Germany. The aggregate output of offshore and land-based wind power installations was 40.5 GW.

99.5 billion kWh of natural gas
were produced in Germany (10 % of the quantity required). 90 % were imported, with Russia being the primary supplier at 38 % of the total amount supplied, followed by the Netherlands (26 %) and Norway (22 %).

Primary energy consumption by energy source 2014

Hard coal 12.6 %

Brown coal 12.0 %

Renewables 11.1 %

Natural gas 20.5 %

Nuclear energy 8.1 %

Mineral oil 35.0 %

Primary energy consumtion in Germany by energy sources

Energy carrier	2013	2014	Change vs	2013	2014
	in million tonnes CE		previous year	Share in %	
Mineral oil	158.3	156.2	-1.3%	33.8	35.0
Natural gas	104.4	91.2	-12.6%	22.3	20.5
Hard coal	61.0	56.2	-7.9%	13.0	12.0
Brown coal	55.6	53.6	-3.6%	11.9	12.0
Nuclear energy	36.2	36.2	-0.1%	7.8	8.1
Renewables	49.3	49.6	0.5%	10.5	11.1
Other	7.6	7.6	-0.6%	1.6	1.7
Total	468.2	446.2	-4.7%		

Brown coal power plant in Nordrhein-Westfalen

Facts and Figures on Germany´s Maritime Dependence

Summary

Supply of Raw Materials

21.279 million tonnes of copper

were consumed in 2013. China was the top consumer at 44.6 % while Germany consumed 5.3 %. This is the third highest copper consumption worldwide and the highest consumption in the EU.

679 700 tonnes of refined copper

were produced in Germany in the reporting year, ranking the country sixth and, at a 3.2 % share of the world production, ahead of Poland, Spain, Belgium, Bulgaria and Sweden.

40 million tonnes of iron ore

were consumed in Germany in 2013. This demand was completely met by imports. More than half of the ore came from Brazil, Canada and Sweden.

13.219 million tonnes of zink ore

were produced around the world in 2013. The People's Republic of China, Australia and Peru were by far the largest producers achieving a combined share of 57 %.

Origin of iron ore and iron concentrate imports 2014

Brazil 57.2 %

Sweden 15.4 %

Canada 15.4 %

Other 12.0 %
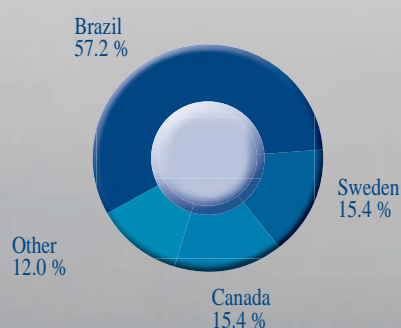
German imports of energy and mineral raw materials

	2012	2013	Change from	2012	2013
	Billion EUR		prev. year	Share	
Energy	104.1	99.4	- 4.5 %	69.3%	69.6%
Metals	43.7	41.1	- 6.0 %	29.1%	28.8%
Non-metals	2.4	2.3	- 3.8 %	1.6%	1.6%
Total	150.2	142.8	- 4.9 %		

331.5 million tonnes of raw materials

were imported into Germany in the reporting year, an increase in quantity by 3.1 % from the previous year.

Origin of imported iron waste and scrap 2013

Netherlands
19.7 %

Poland
18.0 %

Czech Republic
15.6 %

Other
46.7 %
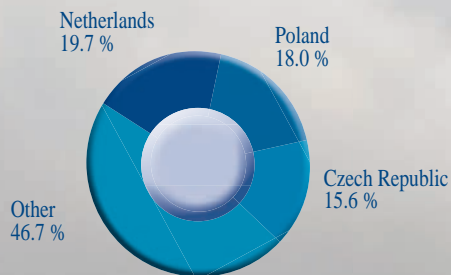
55 % of the raw materials

came from Europe (including the Russian Federation) in the reporting year, followed by South America (15.6 %), North America (8.9 %), Asia (6.3 %) und Australia/ Oceania (2.3 %).

Zinc mining production 2013 by country

in million tonnes

PR China	4.73
Australia	1.52
Peru	1.35
India	0.79
USA	0.79
Mexico	0.64
Kazakhstan	0.43

1   4   6   8   10
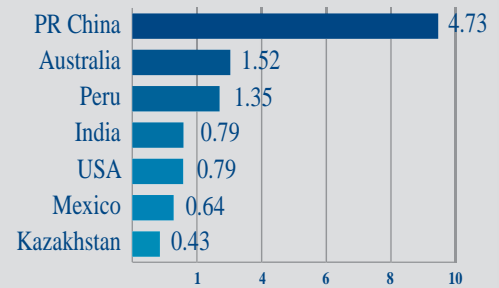
Bulk cargo handling in the port of Rostock.

Annual Report of the German Navy
Facts and Figures on Germany´s Maritime Dependence

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Final Remarks

The Annual Report of the German Navy was compiled by the Marinekommando, Naval Cooperation and Guidance for Shipping (NCAGS) Section in Hamburg.

It is based on publications issued by various associations, organizations and institutions and contains data on trade and maritime shipping as well as on the maritime industry and economy.

The section´s other main tasks include the Allied Worldwide Navigation System (AWNIS) and Naval Cooperation and Guidance for Shipping (NCAGS). In addition, the section trains licensed merchant seamen and employs them as reservists in exercises and operations of the German Navy. Thus, the section makes a contribution to maritime safety worldwide and at the same time acts as a point of contact and liaison with the Navy for the maritime industry.

We would be happy to receive comments and suggestions on this annual report.

The Editorial Team

Editorial Details

NOTES: