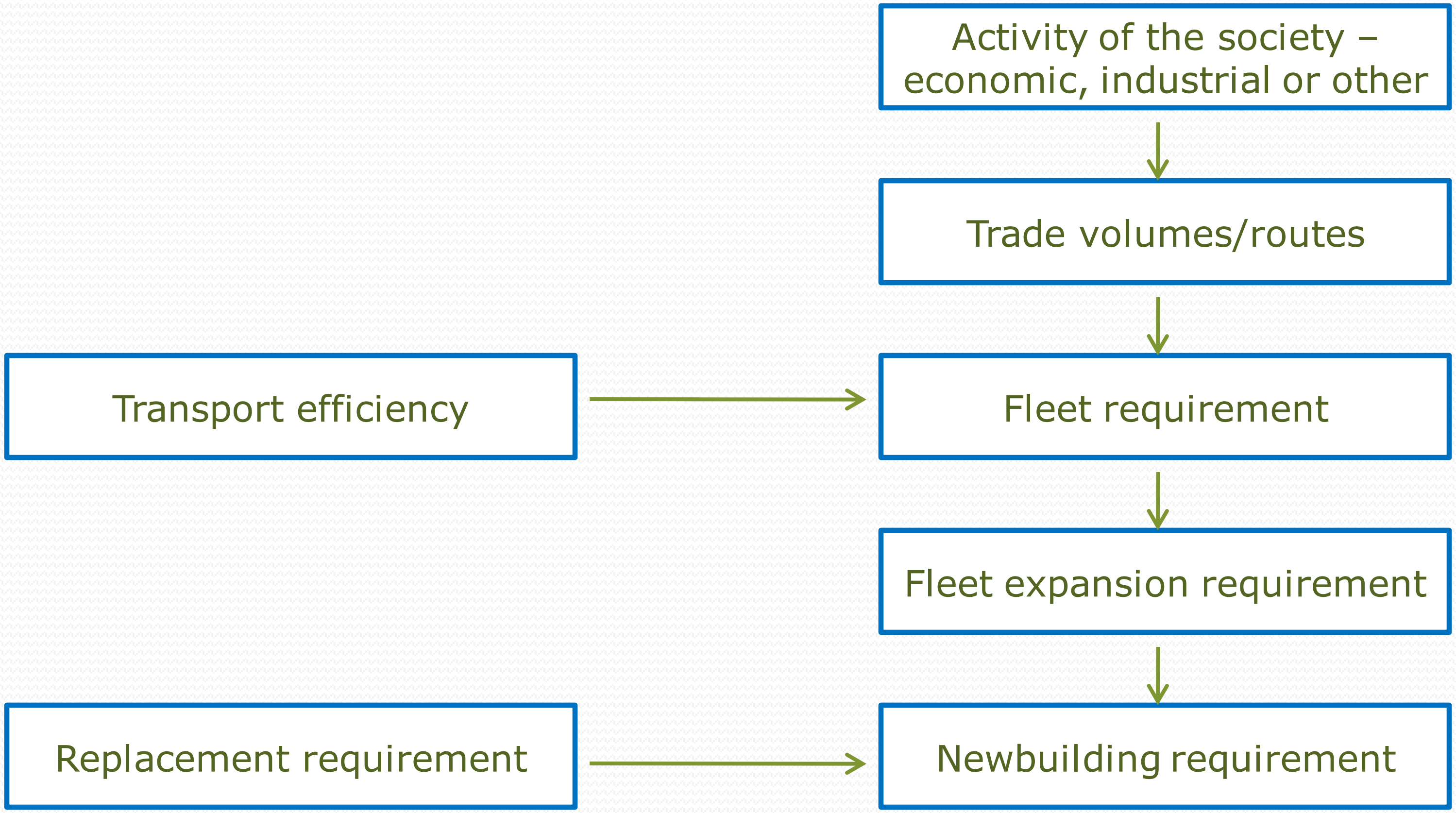
DEMAND AND SUPPLY

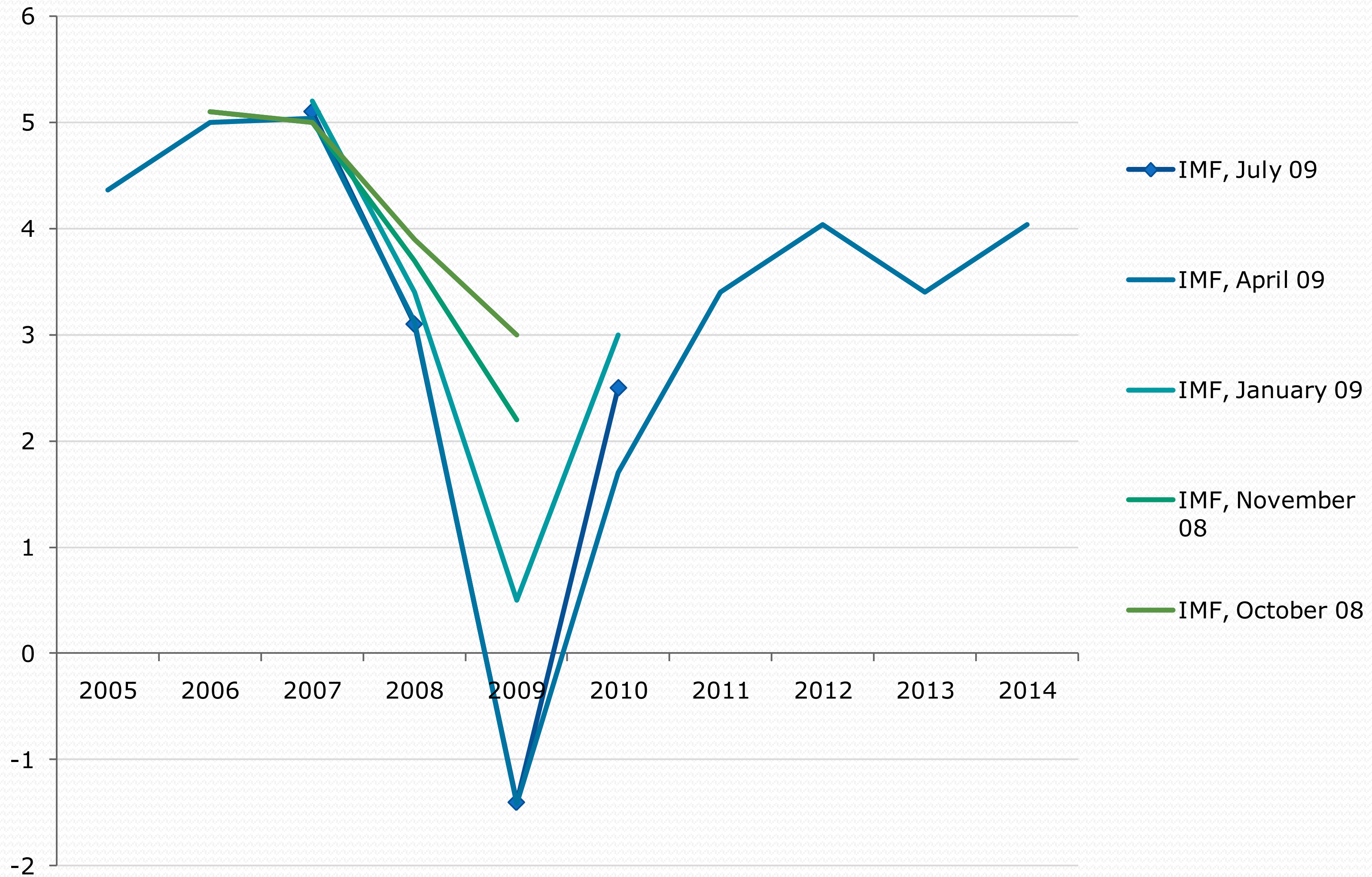
Jenny Braat
Danish Maritime

CESA Basic Forecasting Methodology



World Economic Projections

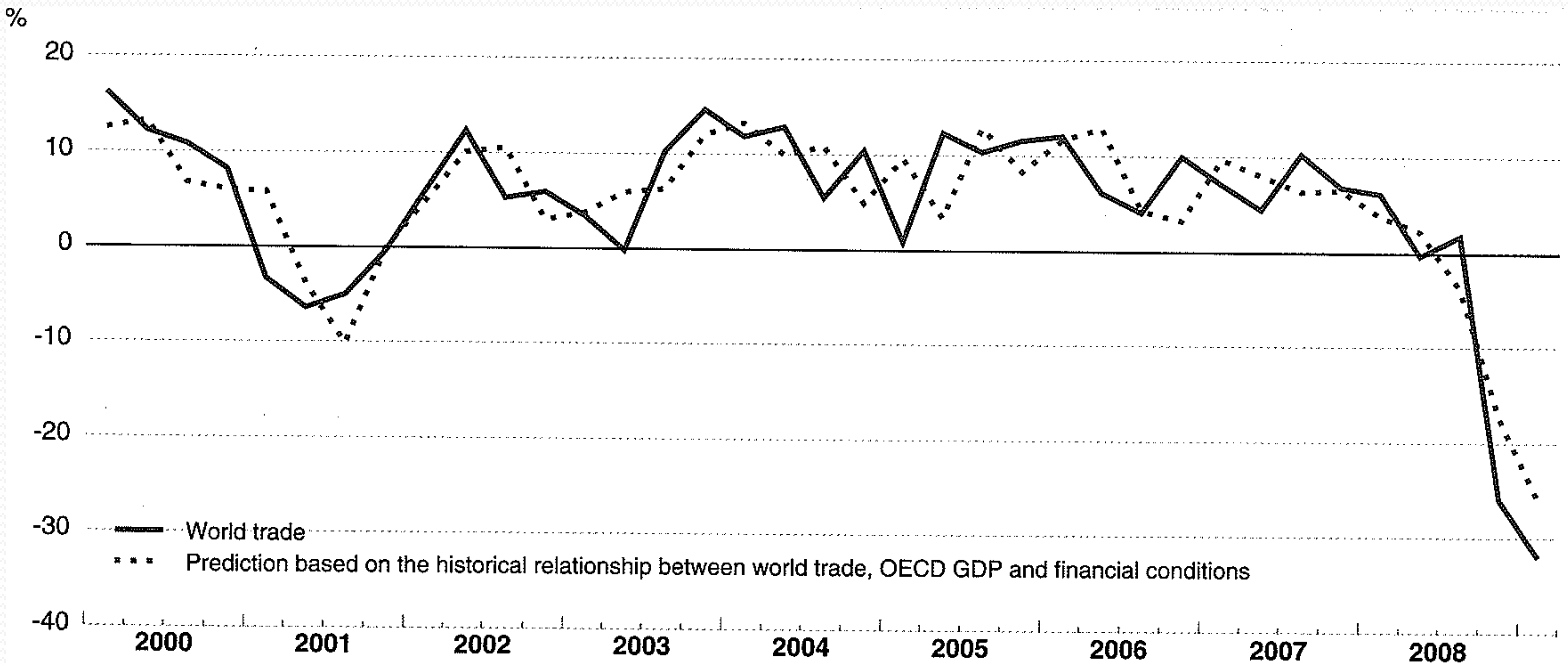
Annual percent change of Gross Domestic Product
in term of PPP with 2005 constant US prices



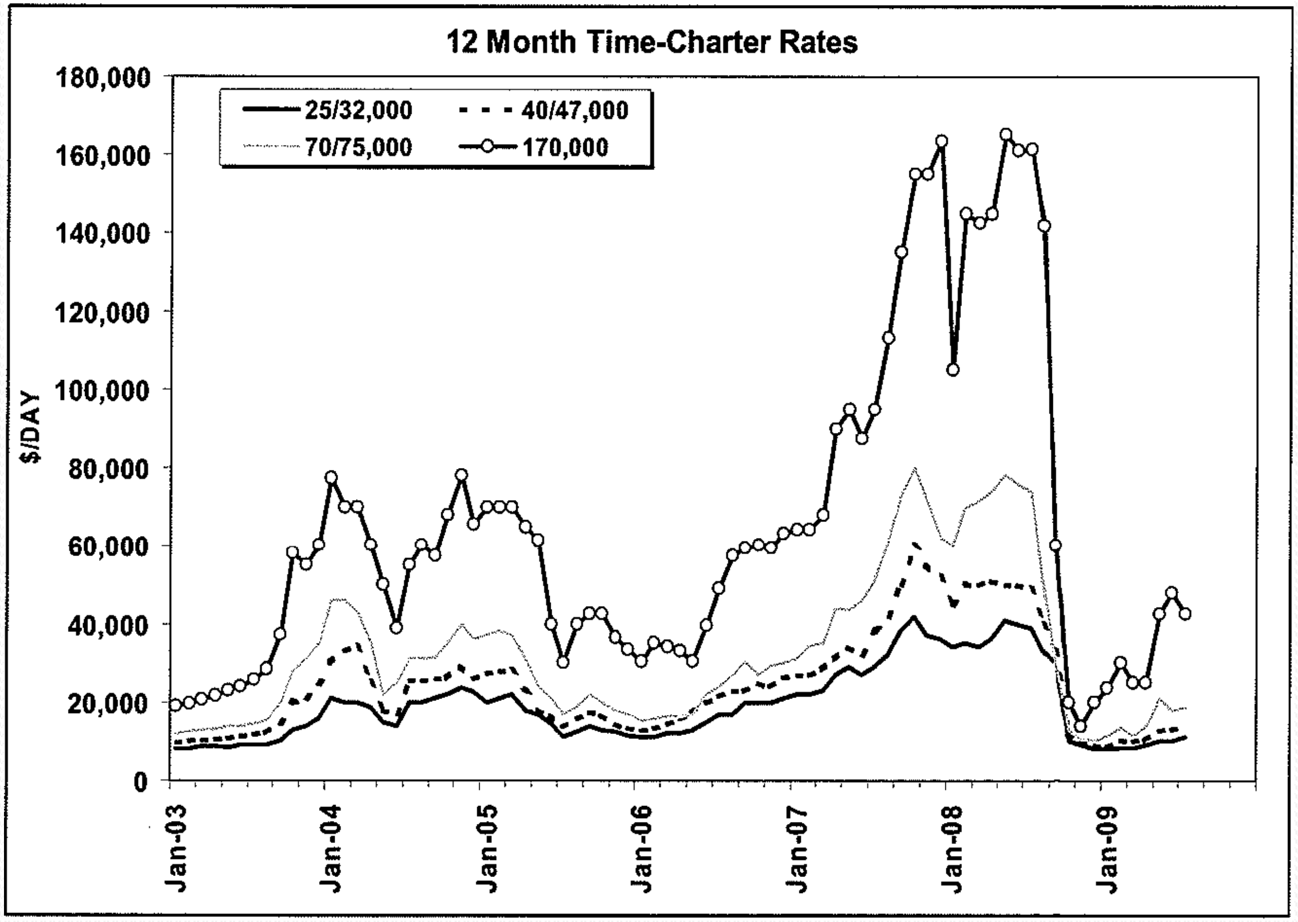
The world output is projected to decline by 1,4 % in 2009
- the most severe recession since World War II

World Economic Growth 1981-2020 (pct. p.a.) based on constant prices (2005-level)												**Projection**		
	80-89	90-99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	jul-14
World	2,93	3,13	4,26	1,68	2,03	2,67	3,99	2,45	5,1	5,2				
CESA forecast										4,19	4,19	4,19	4,19	4,19
World IMF (oct 08)									5,1	5	3,9	3		
World IMF (jan 09)										5,2	3,4	0,5	3	
World IMF (april 09)										5,2	3,2	-1,3	**1,9**	
World IMF (July 09)										5,1	3,1	-1,4	**2,5**	

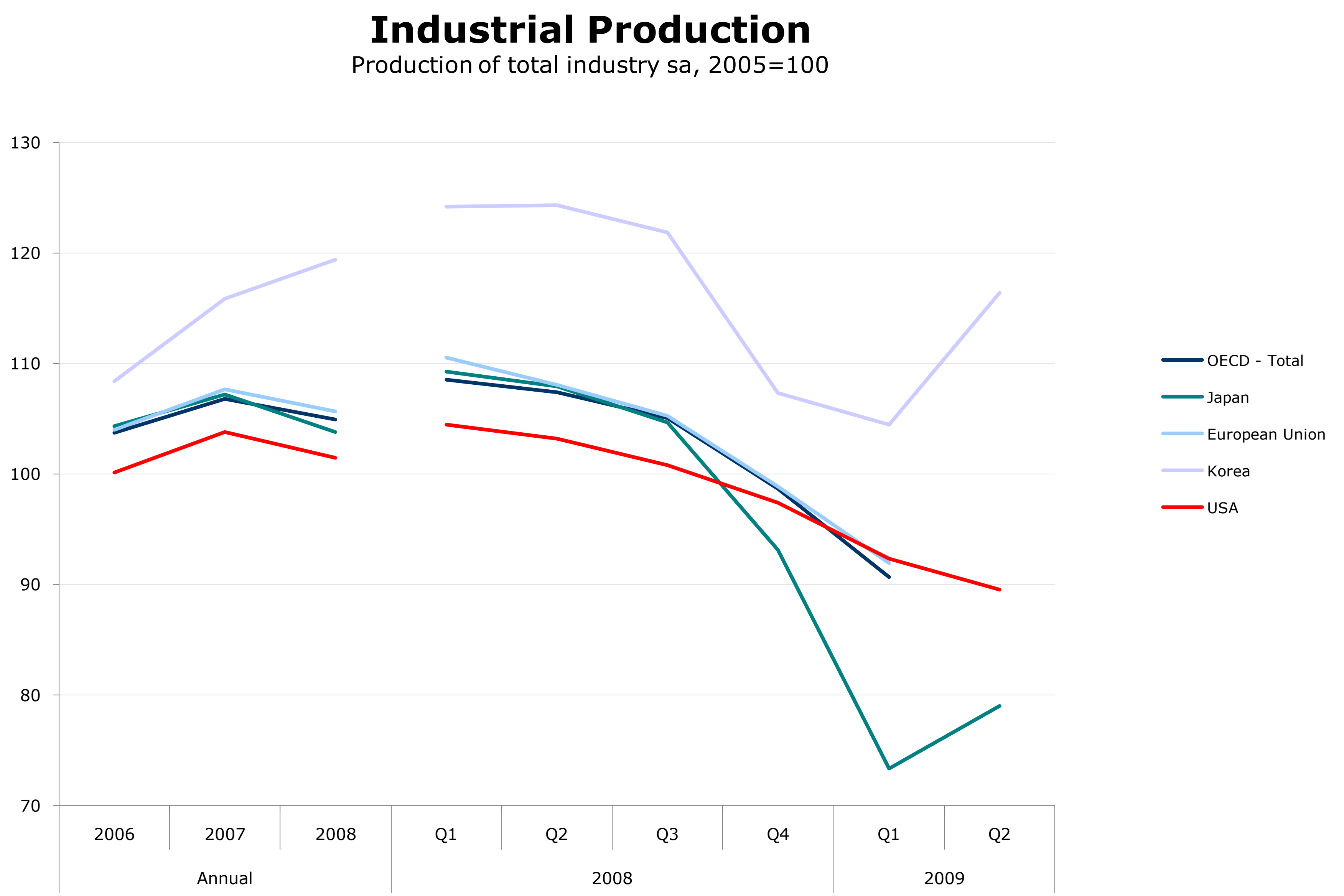
World trade growth has collapsed
Quarterly growth rates annualized



Source: OECD

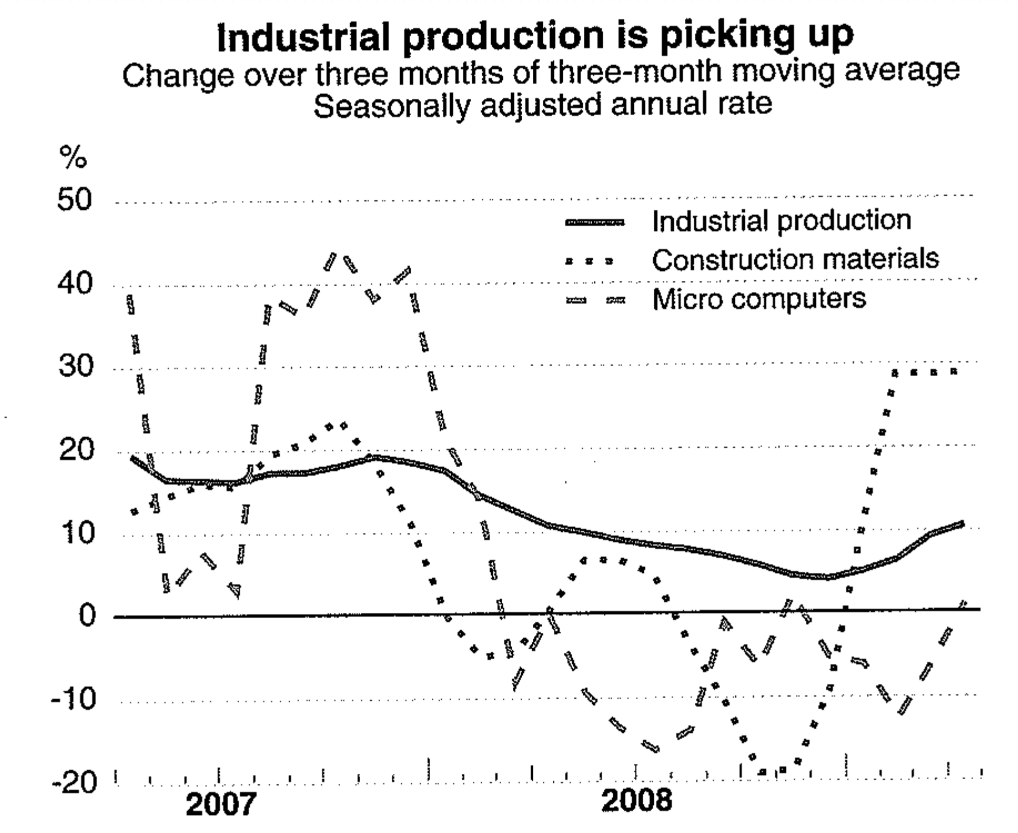


SSY monthly shipping review



Industrial Production
Production of total industry sa, 2005=100
130
120
110
100
90
80
70
2006
2007
2008
Q1
Q2
Q3
Q4
Q1
Q2
Annual
2008
2009
OECD - Total
Japan
European Union
Korea
USA

- China

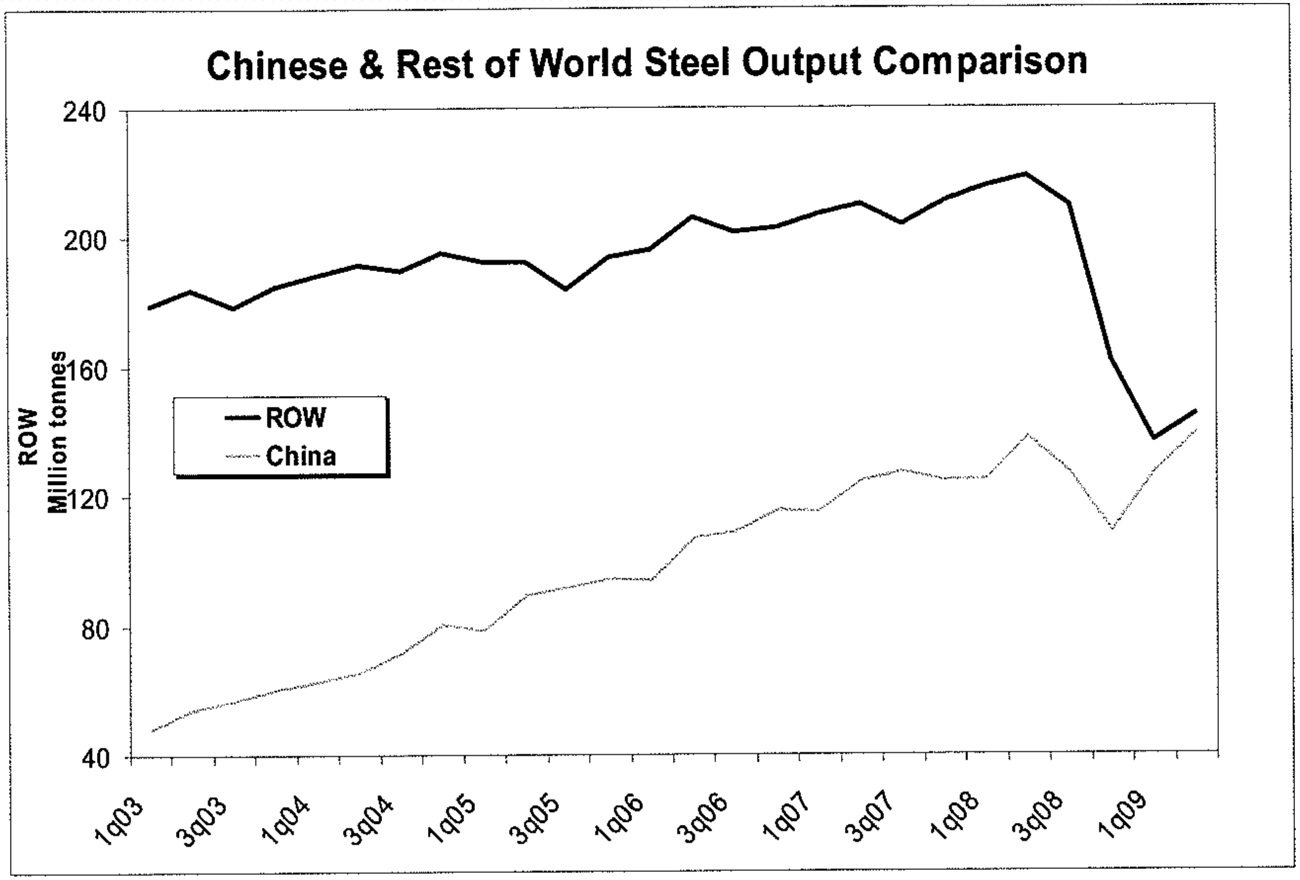


Source: CEIC

Total Seaborne Trade 1970-2020 in mill. Tons – preliminary **Guestimate**

Cargo	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008 (est.)	2011	2014
Chemical cargo				**58**	**79**	**100**	**121**	**125**	**129**	**133**	**138**	**142**	**146**	**163**	**176**	**191**	**209**
Crude oil	995	1.263	1.320	871	1.190	1.415	1.608	1.592	1.588	1.673	1.754	1.720	1.756	1.775	1.800	1.948	2.056
Products	245	233	276	288	336	381	419	425	414	440	461	495	525	553	575	592	634
Total oil cargo	**1.240**	**1.496**	**1.596**	**1.159**	**1.526**	**1.796**	**2.027**	**2.017**	**2.002**	**2.113**	**2.215**	**2.215**	**2.281**	**2.328**	**2.375**	2.540	2.690
Major bulk																	
Iron ore	247	292	314	321	347	402	454	452	484	524	589	652	734	787	845	863	1.081
Coal	101	127	188	272	342	423	523	565	570	619	664	710	754	806	834	836	900
Grain	89	137	198	181	192	196	230	234	245	240	236	310	325	341	344	325	377
Bauxite/alumina	34	41	48	40	52	50	53	51	54	63	68	73	78	83	81	78	86
Phosphate rock	33	38	48	43	53	30	28	29	30	29	31	30	30	31	31	30	32
Total five major bulk	**504**	**635**	**796**	**857**	**986**	**1.101**	**1.288**	**1.331**	**1.383**	**1.475**	**1.588**	**1.775**	**1.921**	**2.048**	**2.135**	**2.132**	**2.476**
Minor bulk	**298**	**358**	**519**	**562**	**625**	**723**	**793**	**811**	**818**	**864**	**928**	**945**	**990**	**1.030**	**1.067**	**1.088**	**1.240**
General cargo				**709**	**871**	**1.083**	**1.502**	**1.507**	**1.624**	**1.690**	**1.773**	**1.861**	**1.935**	**2.129**	**2.388**	**2.552**	**2.746**
LPG	5	11	22	32	48	57	65	63	68	63	72	74	77	53	56	68	75
LNG	2	10	24	38	56	70	105	110	116	130	130	138	158	168	168	198	246
Total LPG/LNG	**7**	**21**	**45**	**70**	**104**	**127**	**170**	**173**	**184**	**193**	**202**	**212**	**235**	**221**	**224**	**266**	**321**
Total dry	**809**	**1.014**	**1.360**	**2.198**	**2.586**	**3.034**	**3.753**	**3.822**	**4.009**	**4.222**	**4.491**	**4.793**	**5.081**	**5.428**	**5.814**	**6.038**	**6.783**
Oil & chemical cargo	**1.240**	**1.496**	**1.596**	**1.217**	**1.605**	**1.896**	**2.148**	**2.142**	**2.131**	**2.246**	**2.353**	**2.357**	**2.427**	**2.491**	**2.551**	**2.731**	**2.899**
Total seaborne cargo	**2.049**	**2.510**	**2.956**	**3.415**	**4.191**	**4.930**	**5.901**	**5.964**	**6.140**	**6.468**	**6.844**	**7.150**	**7.508**	**7.919**	**8.365**	**8.770**	**9.683**

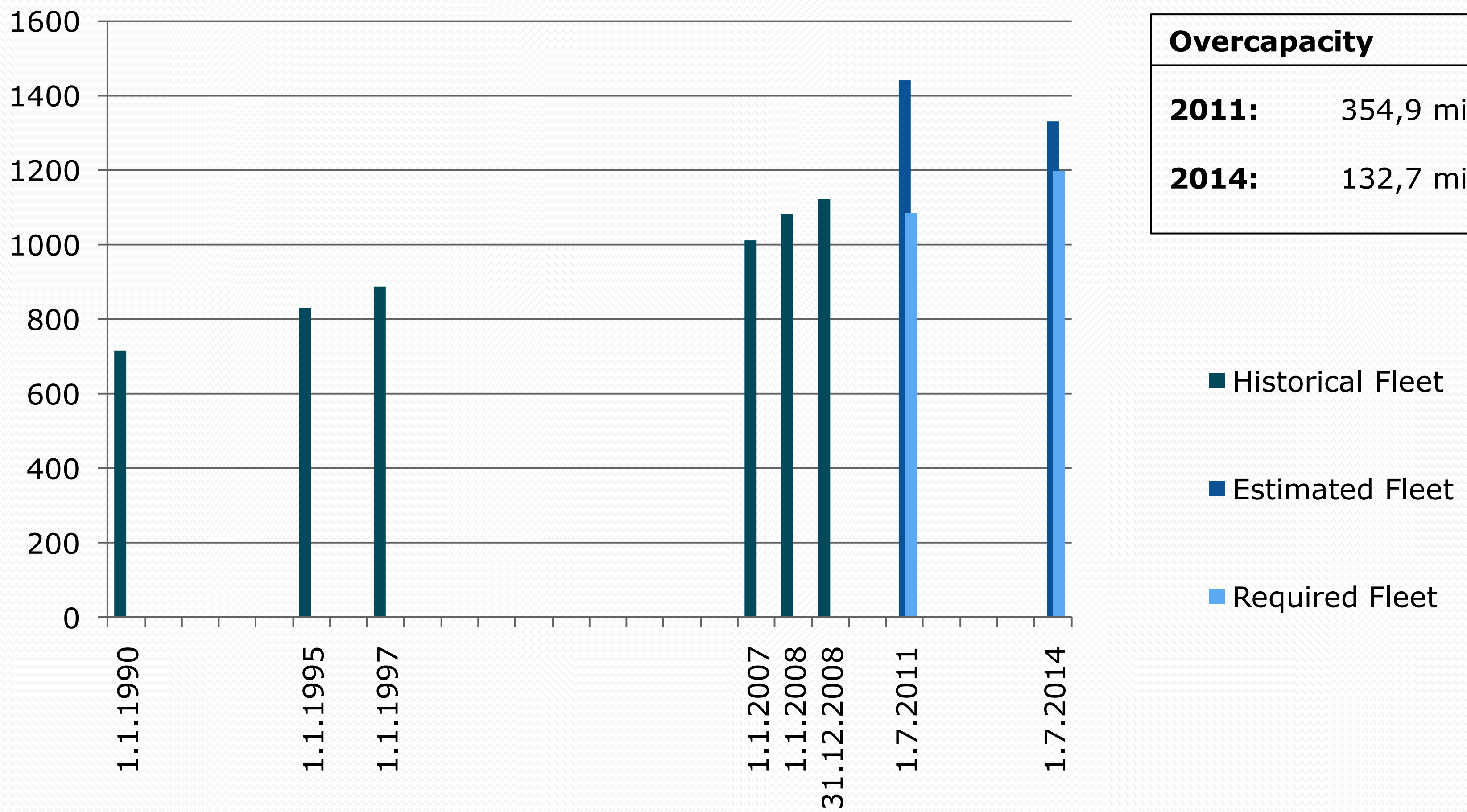
Source: CESA



SSY Monthly shipping Review

Seaborne trade in mill. tons, base case and guestimate

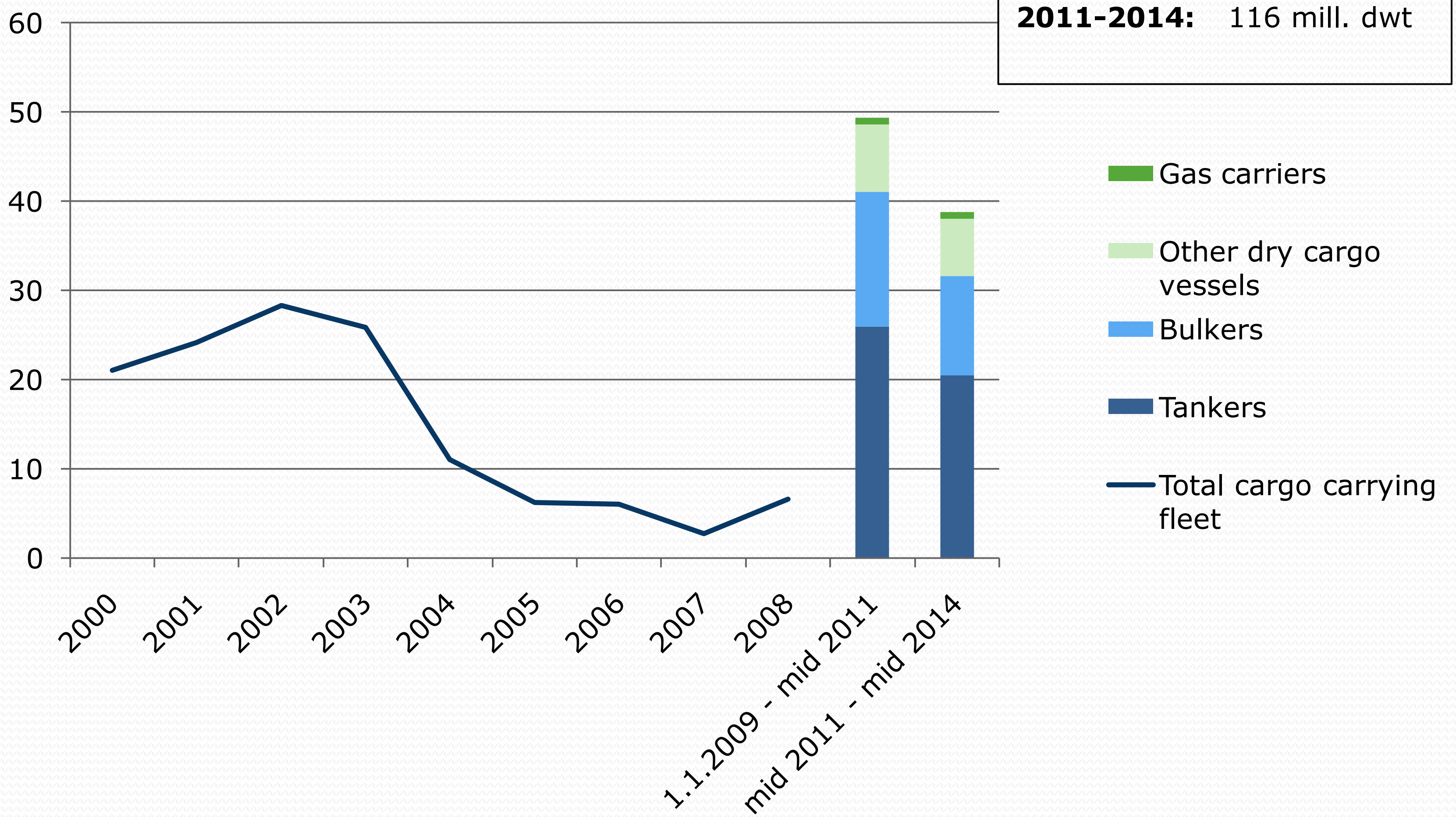
Fleet Requirement
Total Cargo Carrying Fleet in mill. dwt
1990 - 2014



Overcapacity	
2011:	354,9 mill. dwt
2014:	132,7 mill. dwt

Source: CESA

Deletions per year in mill. dwt 2000 - 2014



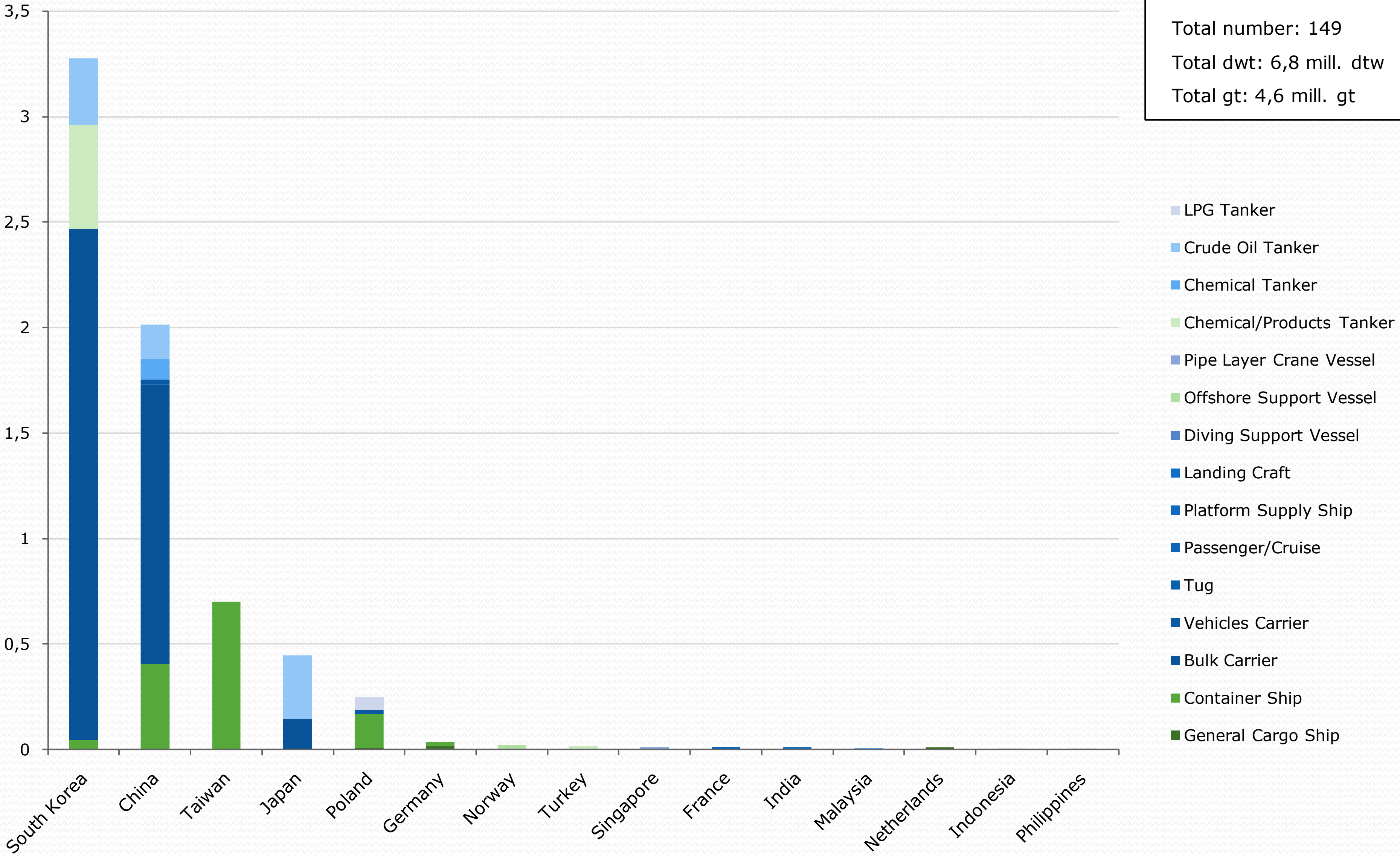
Total deletion

2009-2011: 123 mill. dwt

2011-2014: 116 mill. dwt

Cancellations January 2009 to date

in mill. dwt

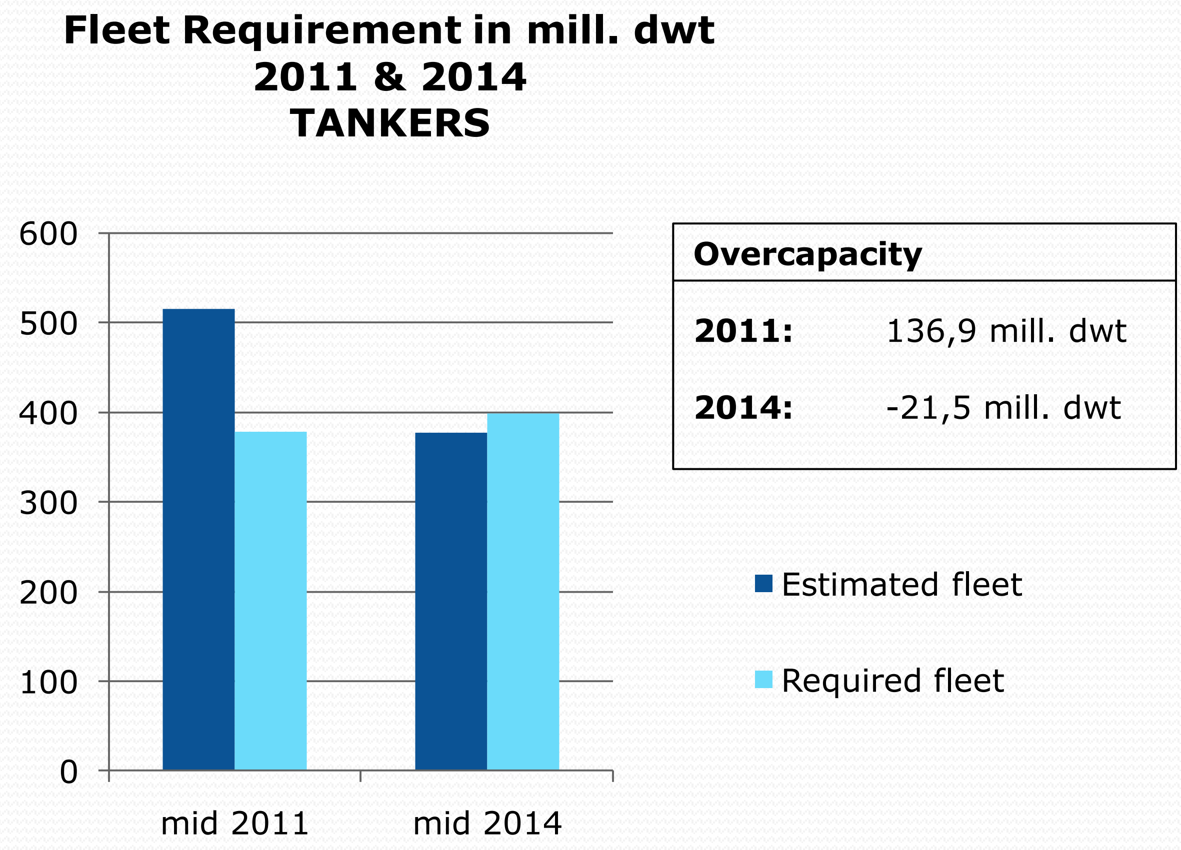


Total Cancellations

Total number: 149

Total dwt: 6,8 mill. dtw

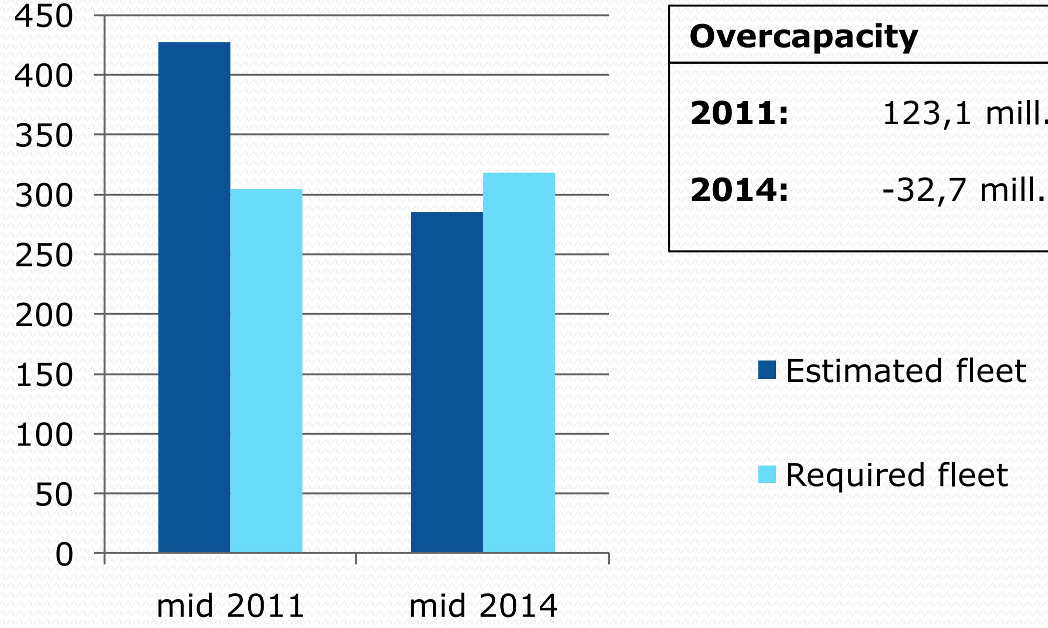
Total gt: 4,6 mill. gt



Fleet Requirement in mill. dwt
2011 & 2014
TANKERS
600
500
400
300
200
100
0
mid 2011
mid 2014
Overcapacity
2011: 136,9 mill. dwt
2014: -21,5 mill. dwt
Estimated fleet
Required fleet

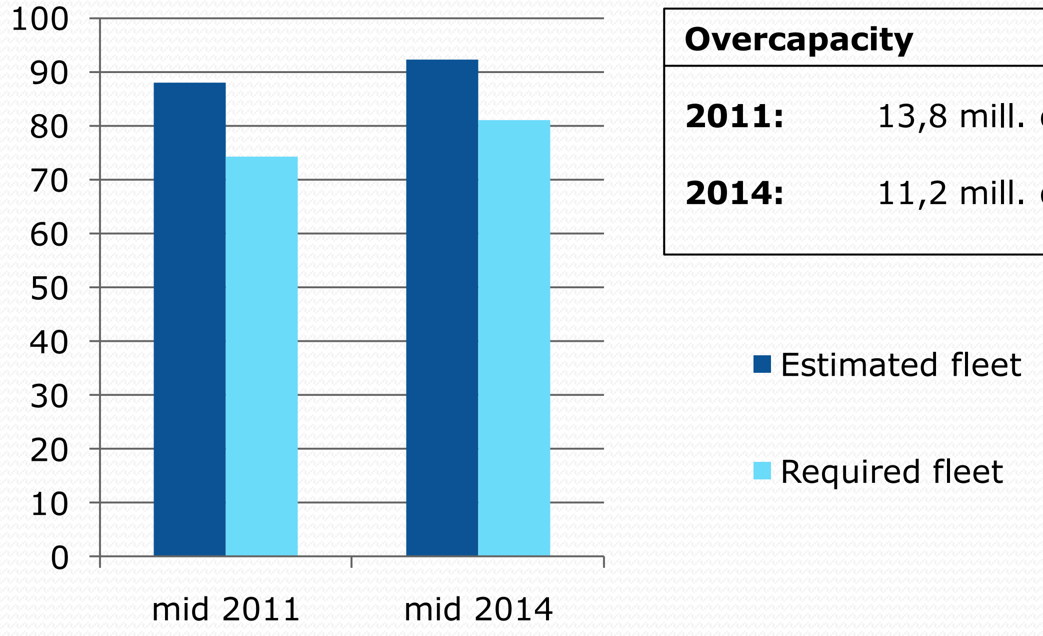
Source: CESA

Fleet Requirement in mill. dwt
2011 & 2014
OIL TANKERS



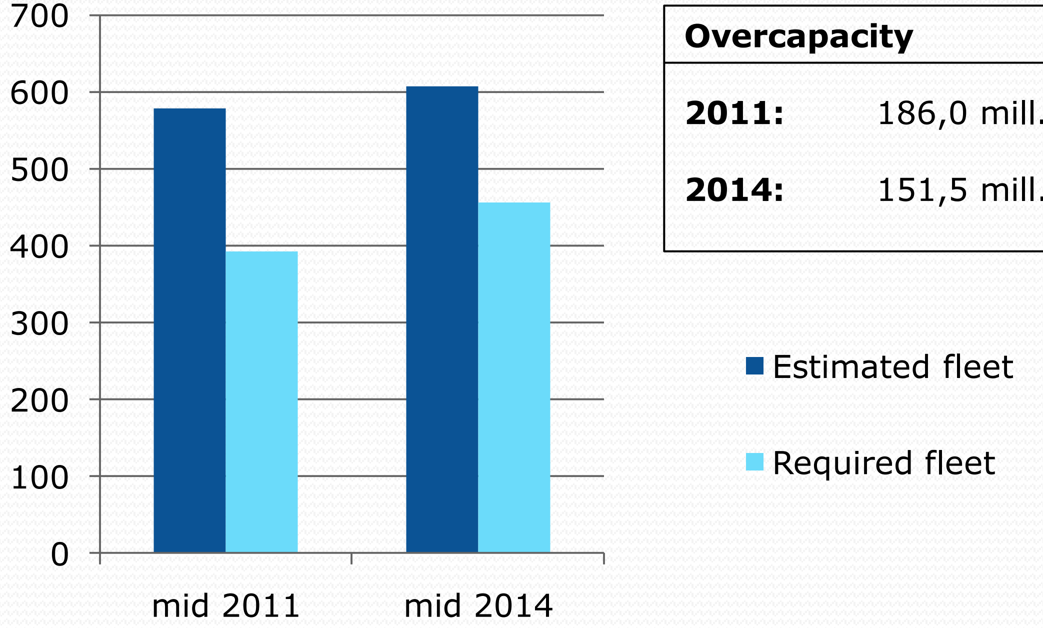
Overcapacity	
2011:	123,1 mill. dwt
2014:	-32,7 mill. dwt

Fleet Requirement in mill. dwt
2011 & 2014
CHEMICAL TANKERS



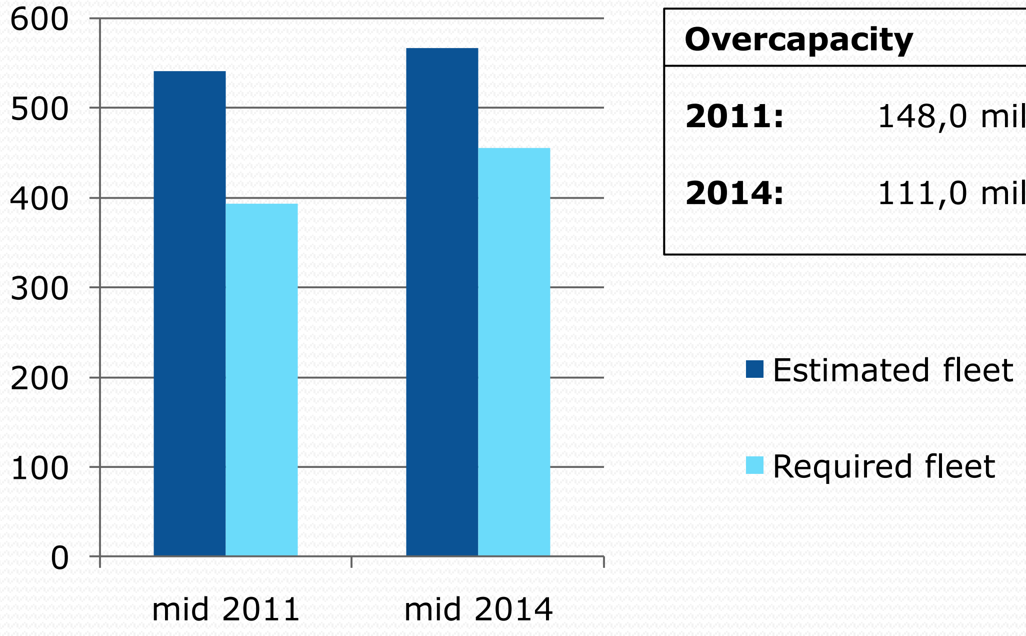
Overcapacity	
2011:	13,8 mill. dwt
2014:	11,2 mill. dwt

Fleet Requirement in mill. dwt
2011 & 2014
BULK CARRIERS



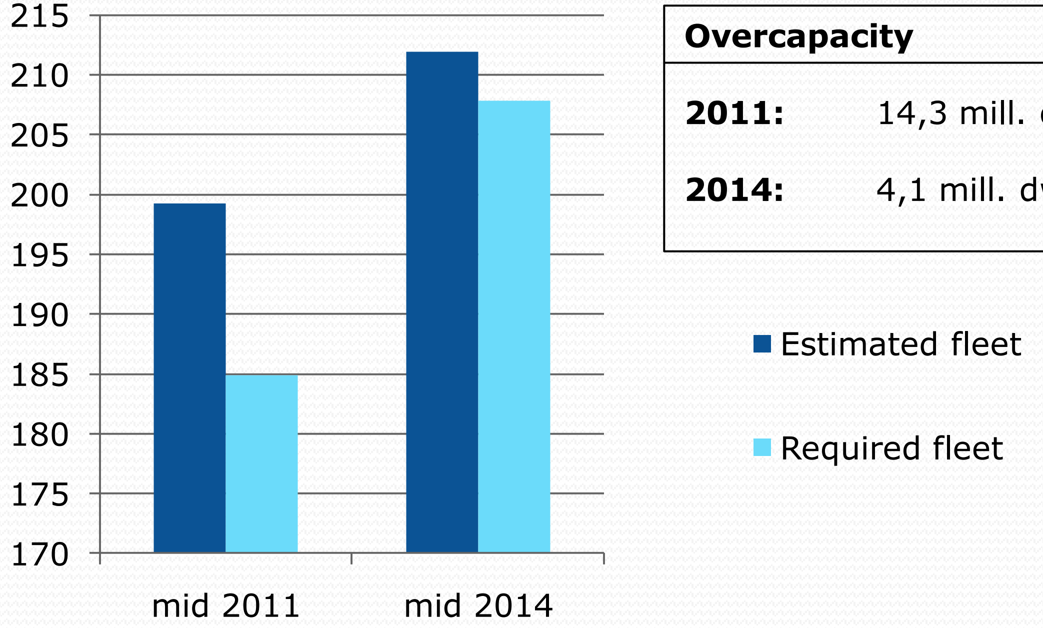
Overcapacity	
2011:	186,0 mill. dwt
2014:	151,5 mill. dwt

Fleet Requirement in mill. dwt 2011 & 2014 BULKERS alt.



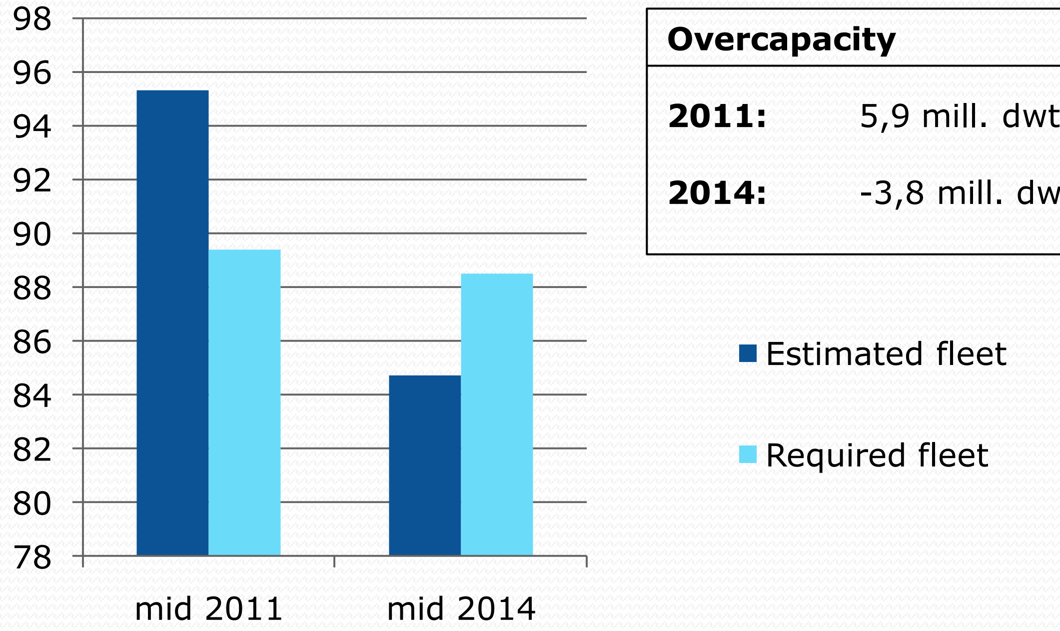
Overcapacity	
2011:	148,0 mill. dwt
2014:	111,0 mill. dwt

Fleet Requirement in mill. dwt 2011 & 2014 CONTAINER CARRYING VESSELS



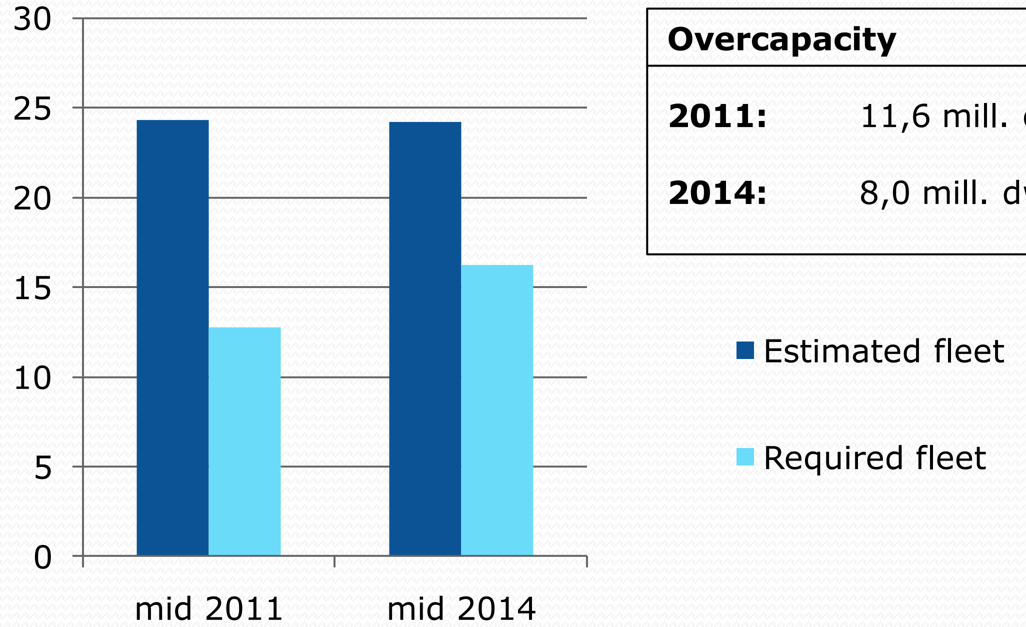
Overcapacity	
2011:	14,3 mill. dwt
2014:	4,1 mill. dwt

Fleet Requirement in mill. dwt
2011 & 2014
GENERAL CARGO



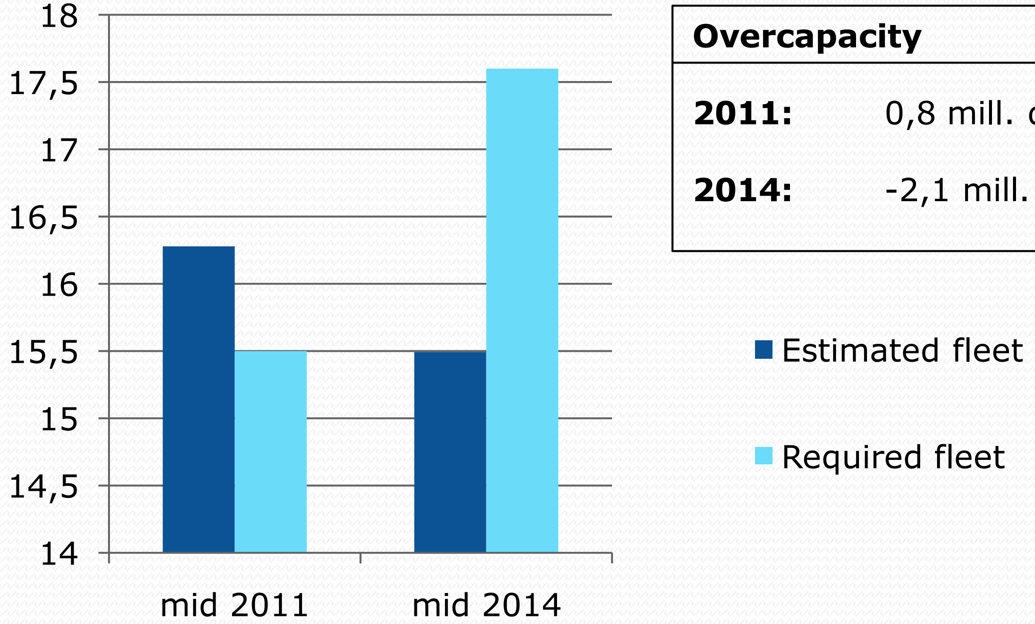
Overcapacity	
2011:	5,9 mill. dwt
2014:	-3,8 mill. dwt

Fleet Requirement in mill. dwt
2011 & 2014
LNG



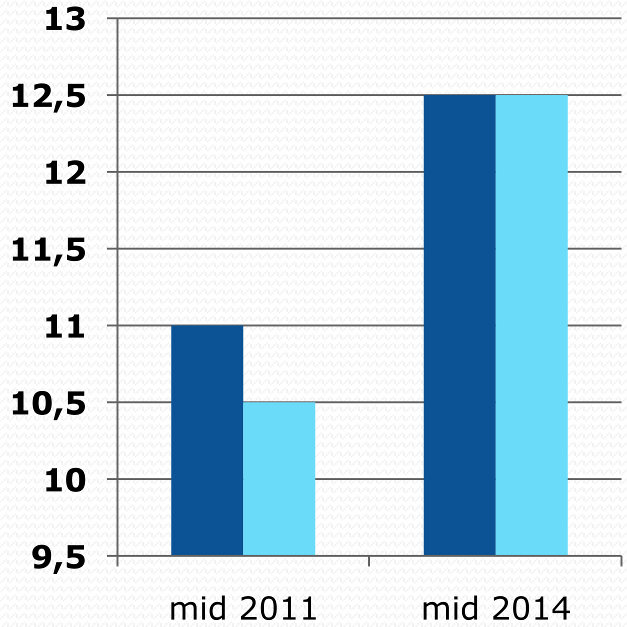
Overcapacity	
2011:	11,6 mill. dwt
2014:	8,0 mill. dwt

Fleet Requirement in mill. dwt
2011 & 2014
LPG



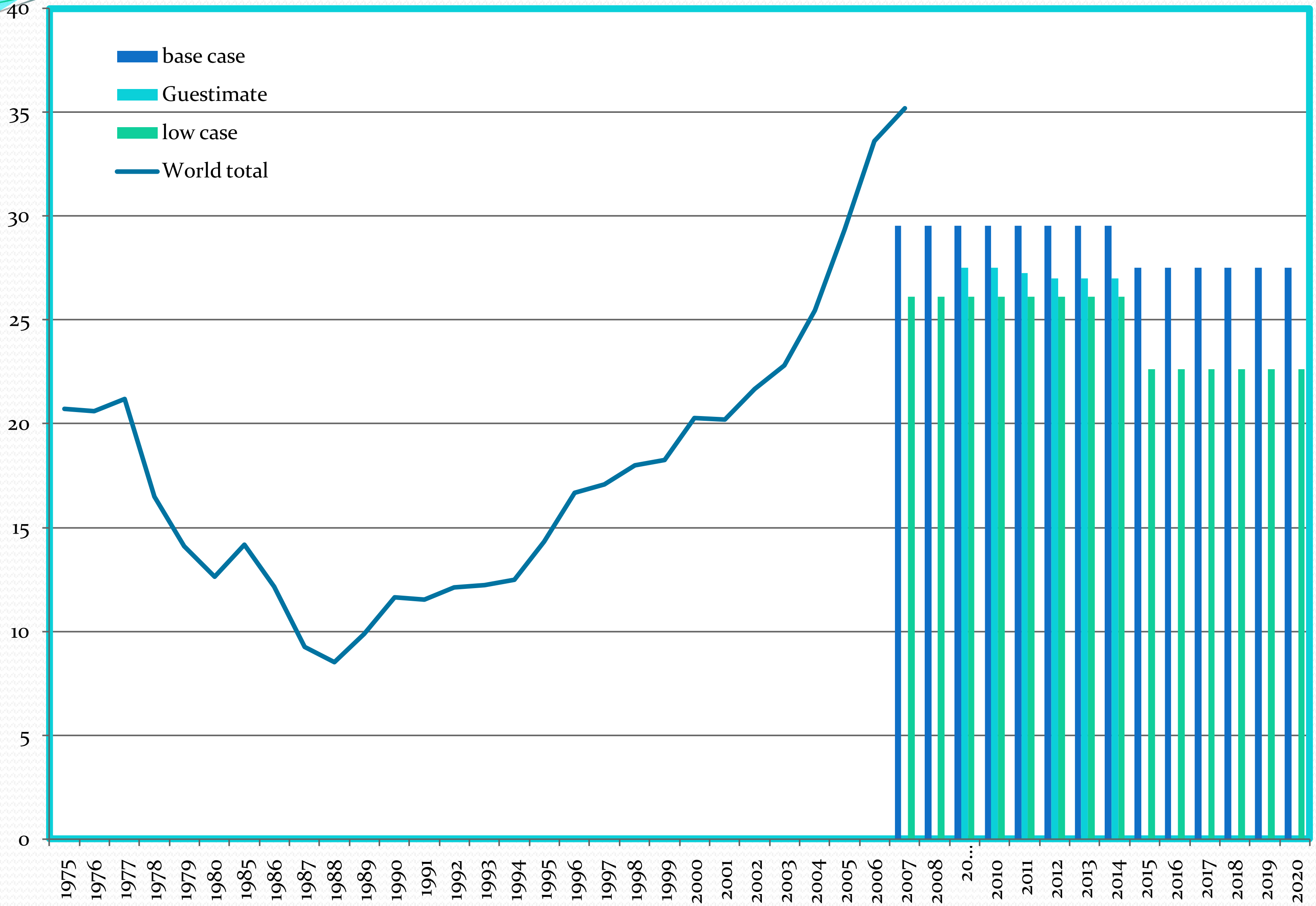
Overcapacity	
2011:	0,8 mill. dwt
2014:	-2,1 mill. dwt

Fleet Requirement in mill. gt
2011 & 2014
ONCCV



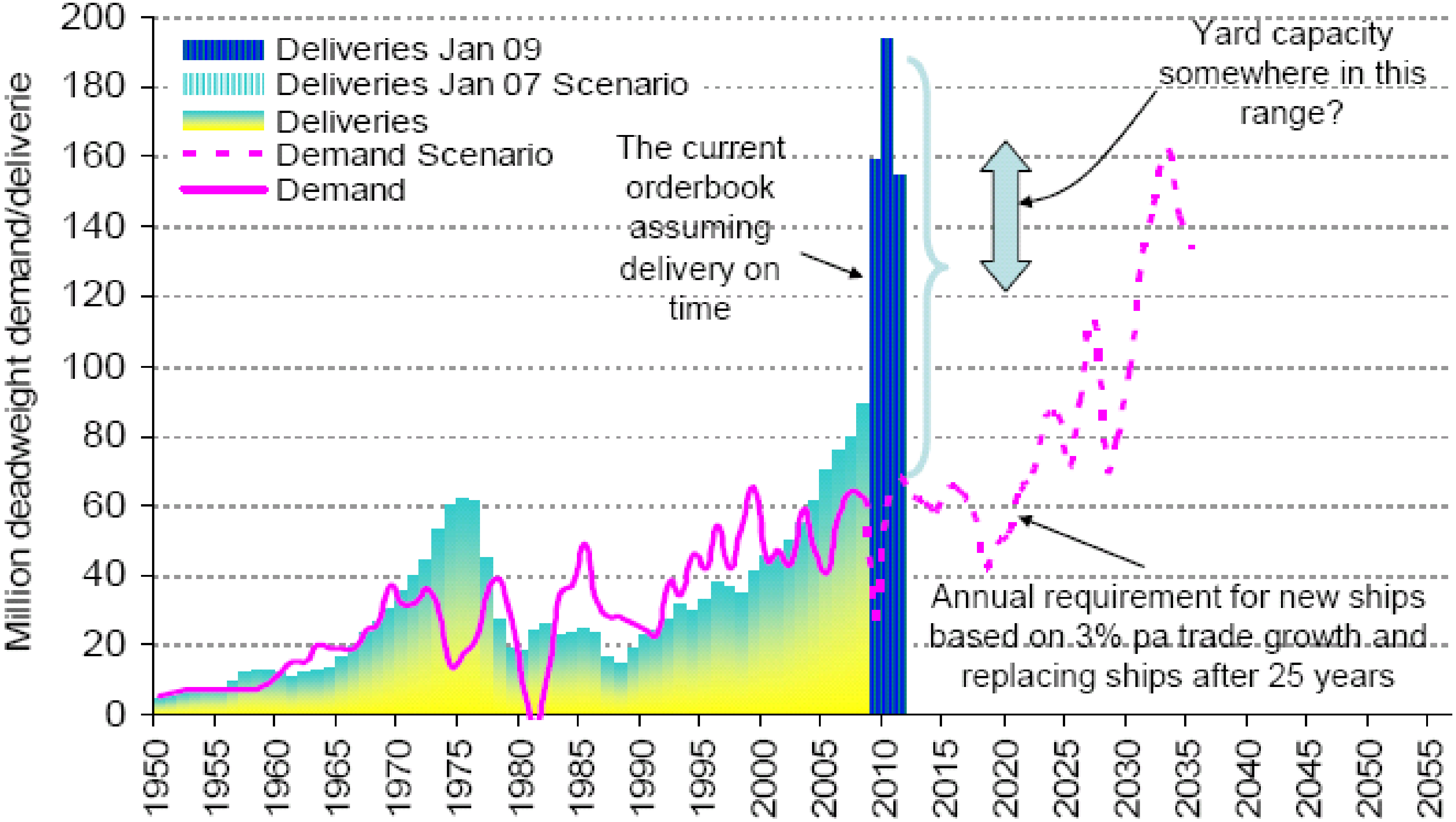
Overcapacity	
2011:	0,5 mill. gt
2014:	0 mill. gt

Global newbuilding requirement in mill. cgt.



Source: CESA

Figure 8: Shipbuilding Investment demand and actual deliveries scenario



Clarkson forecast 2009