

STATISTICAL REPORT 2012-2013



JUNE 2013

EUROPEAN GLASS INDUSTRIES

In order to provide a comprehensive and analytical overview of the situation in the glass industry, this report provides statistics for the whole glass industry together and statistics for each of the glass sectors. The situation varies a lot between the different sectors.



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Glass Alliance Europe

F.E.V.E.: Fédération Européenne du Verre d'Emballage (European Container Glass Federation)

Glass for Europe : Europe's Manufacturers of Building, Automotive and Solar-Energy Glass E.D.G.: European Domestic Glassware

E.S.G.A.: European Special Glass Association

GlassFibreEurope - A.P.F.E.: Association des Producteurs de Fibres de Verre Européens



I. Introduction – Commentaries

State of the Industry

In 2012, EU-27 glass **production** covered by Glass Alliance Europe reached a volume of more than 30 million tonnes, making the EU the largest glass producer in the world with a market share of around one-third of the total world market. However this production decreased by 5.7% in 2012 compared to 2011, the international economic and financial crisis has hit the EU glass market as well. Customers from the car industry, the construction sector, domestic, leisure and other industries have drastically reduced their orders in 2012. Overcapacity even led to several plant closures.

Germany remains the EU's biggest producer with about one fifth of the volume, closely followed by France, Spain, Italy and the UK.

It has to be noted that the cumulative effects of rising production costs, growing legislative burdens and uncertainties, and a strong Euro, lead to the increase in capacity investments outside the EU, rather than in Europe.

Regarding <u>foreign trade from third countries</u>, imports from Asian countries, and in particular China, remain big competitors.

In 2012, extra EU-27 <u>exports</u> dropped by **2% in volume** but remained positive in value with an increase of 1% compared with 2011. Exports vary from subsector to subsector and are of greatest importance to the special glass and tableware sectors. The EU-27's four major clients in volume are the rest of Europe including Russia (8%), Ukraine (6%) and Turkey (6%), the USA (10%), Far East Asia (10%) including China (2.5%).

As for extra-EU <u>imports</u> in EU-27, in 2012 they dropped by **8.4% in volume** and **2.1% in value** compared with 2011. Far-East Asia accounted for 51% - including 41% from China alone, the rest of Europe (35%), Turkey (10%), and the USA (5%).

Employment 2012

In order to be able to compete in a global world and with strong pressure from cheap imports, the glass industry has undergone a phenomenon of concentration with streamlining measures and an increased automation of the production. The number of employees has therefore decreased continuously over the years, even more so due to the economic crisis.

At the same time, productivity has grown, more steadily in the last years. Currently, the EU-27 glass industry employs about 183,000 people (incl. Processors), which means a decrease by 23% on 2005.

This trend is expected to continue over the following years given the difficult situation all glass producers are now facing in the European context.



Outlook

Behind these 2012 numbers aggregated at the level of the whole glass industry, it is important to realize that the <u>situations are contrasted in the different sectors</u>. Evolutions in production and employment, as well as in the origin of imports into the EU, are very different between glass sectors.

Generally speaking however, it can be said that after the slightly better conditions in 2011, recession has severely hit all sectors in 2012 and no positive trend should be expected for 2013.

Indeed, margins continue to be eroded by overall low demand, higher energy prices and raw material costs, labour costs, taxes, compliance with new (environmental) legislation, etc., and a fierce (price) competition.

Consumer confidence is also expected to remain very low, which will affect all industry sectors, including the consumer and utilities goods sectors.

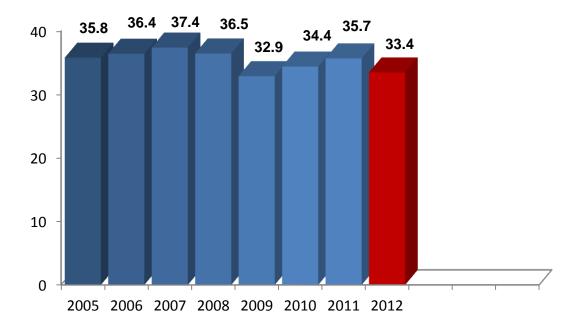


II. Review of Statistical Data

1. PRODUCTION

1.1. Evolution of Total Glass Production in EUR 27

YEAR	'000 TONNES	INDEX
2005	35,76	100.0
2006	36,43	101.8
2007	37,42	104.6
2008	36.47	102.0
2009	32.89	92.0
2010	34.40	96.2
2011	35.69	99.8
2012	33.48	93.6





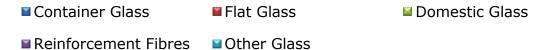
1.2. Breakdown According to Main Product Categories

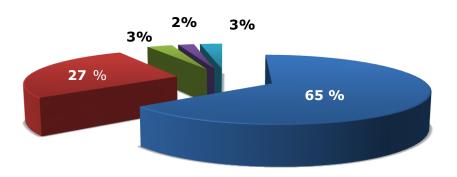
Year	Cast, Sheet & Float Glass (Basic Flat Glass)	Container	Tableware & Crystal	Insulating Fibres	Continuous Filament Glass Fibres	Other Glasses (incl. Special)
2005	9,692	20,724	1,498	2,000	727	1,121
2006	9,981	20,967	1,526	2,000	727	1,162
2007	10,119	21,621	1,547	2,100	821	1,214
2008	9,865	21,270	1,440	2,100	823	967
2009	8,965	19,366	1,041	2,100	476	946
2010	9,405	20,057	1,016	2,200	713	1,004
2011	9,514	20,920	1,090	2,300	831	1,031
2012	8,633	20,321	1,006	2,000	634	887

in 1,000 tonnes

Compared to 2005 index (100), the production rate of EUR 27 declined in 2012 compared with 2011 and reached index 89 for flat glass, 98 for container glass, 67 for tableware and crystal, 87 for continuous filament glass fibres and 79 for other glasses.

PRODUCTION 2012

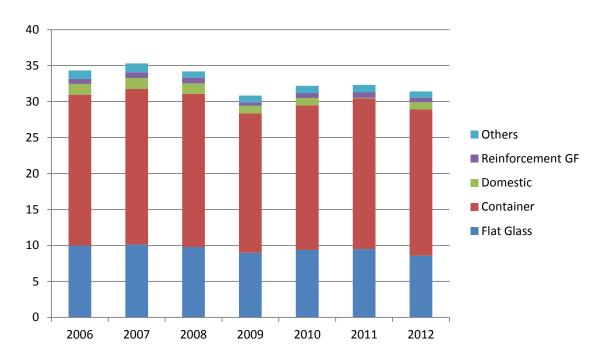




in million tonnes

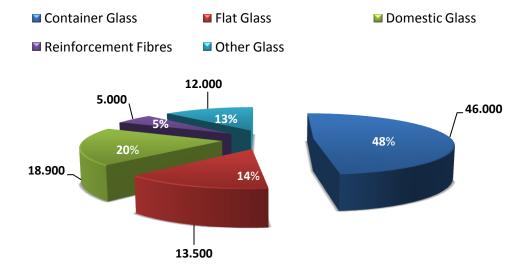


1.3. Production Evolution within Sectors (in thousand tonnes)



2. EMPLOYMENT

EMPLOYMENT 2012

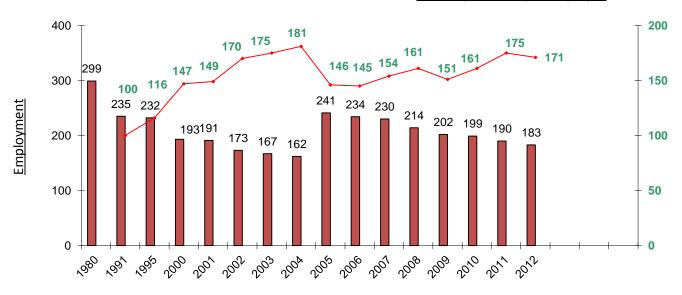


Number of persons



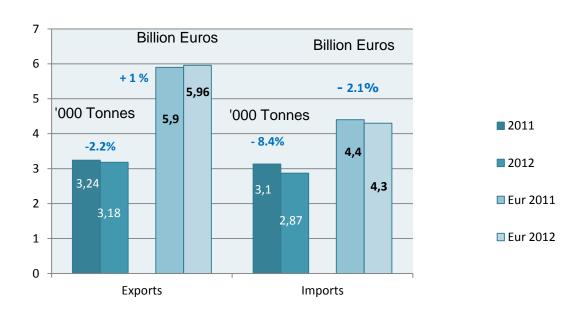
PRODUCTIVITY

Tonnes produced per employee



3. EXTERNAL TRADE IN 2012

3.1. General Imports / Exports





3.2 Imports / Exports by Glass Sectors

Products		Exports			Imports	
	2011	Evolution (%)	2012	2011	Evolution (%)	2012
Flat glass basic	1,052,134	+ 0.2	1,053,733	517,157	- 26.8	378,505
Flat glass processed	396,529	- 0.5	394,609	663,617	- 5.7	625,544
Container Glass	814,062	- 3.5	785,585	467,507	- 4.8	445,061
Domestic Glassware	346,903	- 8.6	317,033	404,923	- 8.1	372,131
Reinforcement glass						
fibres (CFGF)	189,821	- 25.8	140,844	548,178	- 17.2	453,672
Special Glass	27,377	- 26.3	20,185	15,415	+ 1.2	15,602
Others	413,688	- 3.1	400,948	509,516	- 4.2	488,313
TOTAL Chapter 70	3,242,734	- 2.2	3,173,105	3,132,242	- 8.4	2,867,815

Source : Eurostat – COMEXT Chapter 70

<u>Extra-EUR 27</u>

3.3. Detailed Imports and Exports 2012 (Extra-EUR27) per Glass Sector

- (1) Includes India, Pakistan, Bengladesh, Myanmar, Thailand, Vietnam, Indonesia, Malaysia, Brunei, Singapore, Philippines, Mongolia, China, Koreas, Japan, Taiwan and Hong-Kong.
- (2) Includes Marocco, Algeria, Tunisia, Lybia and Egypt.



YEAR													Eurostat					
COUNTRIES	Flat Basic	%	Flat	%	Container	%	Domestic	%	Fibres	%	CFGF	%	Special	%	Others	%	TOTAL	%
			Processed															
China (+ HK)	110.654	29,234	429.406	68,645	51.751	11,63	213.033	57,25	218.540	40,27	183.246	40,39	6.754	43,3	161.086	32,99	1.191.224	41,54
Taiwan	2.382	0,6293	9.854	1,5753	10.373	2,331	1.847	0,496	30.998	5,712	30.556	6,735	680	4,36	308	0,063	56.442	1,968
Korea	520	0,1374	9.979	1,5953	933	0,21	652	0,175	5.954	1,097	4.972	1,096	15	0,1	173	0,035	18.226	0,636
Japan	5.567	1,4708	8.674	1,3866	409	0,092	138	0,037	7.541	1,39	7.146	1,575	166	1,06	6.148	1,259	28.643	0,999
India	5.307	1,4021	6.655	1,0639	17.729	3,983	4.322	1,161	10.226	1,884	9.090	2,004	218	1,4	3.915	0,802	48.372	1,687
Thailand	19.322	5,1048	1.122	0,1794	5.150	1,157	2.808	0,755	4.580	0,844	4.364	0,962	971	6,22	1.219	0,25	35.172	1,226
Indonesia	3.536	0,9342	1.886	0,3015	141	0,032	6.319	1,698	4.691	0,864	4.099	0,904	725	4,65	2.140	0,438	19.438	0,678
TOTAL Far East (1)	153.076	40,442	470.964	75,289	86.648	19,47	229.932	61,79	344.880	63,55	305.492	67,34	9.630	61,7	175.960	36,03	1.471.090	51,3
Turkey	40.629	10,734	66.535	10,636	39.754	8,932	114.814	30,85	34.010	6,267	28.013	6,175	239	1,53	2.242	0,459	298.223	10,4
Croatia	66	0,0174	2.255	0,3605	72.624	16,32	192	0,052	3.390	0,625	2.435	0,537	526	3,37	3.547	0,726	82.600	2,88
Serbia	43	0,0114	96	0,0153	1.827	0,411	2.878	0,773	282	0,052	257	0,057	1	0,01	14.722	3,015	19.849	0,692
Russia	17.754	4,6906	2.421	0,387	8.977	2,017	5.085	1,366	13.951	2,571	10.148	2,237	14	0,09	13.528	2,77	61.730	2,153
Belarus	3.915	1,0343	1.873	0,2994	24.419	5,487	60	0,016	7.338	1,352	6.568	1,448	-	0	3.312	0,678	40.917	1,427
Ukraine	97	0,0256	158	0,0253	76.315	17,15	717	0,193	811	0,149	808	0,178	811	5,2	463	0,095	79.372	2,768
Switzerland	13.337	3,5236	12.925	2,0662	52.092	11,7	1.396	0,375	14.164	2,61	1.215	0,268	126	0,81	213.003	43,62	307.043	10,71
TOTAL	76.111	20,108	88.295	14,115	318.845	71,64	125.228	33,65	109.395	20,16	83.173	18,33	1.752	11,2	286.972	58,77	1.006.598	35,1
Other EUROPE																		
USA	41.298	10,911	27.977	4,4724	5.022	1,128	3.189	0,857	49.264	9,078	29.931	6,597	3.831	24,6	17.434	3,57	148.015	5,161
Mexico	748	0,1976	1.274	0,2037	1.017	0,229	2.831	0,761	24.215	4,462	23.330	5,142	208	1,33	100	0,02	30.393	1,06
Brazil	16	0,0042	2.316		74	0,017	1.074	0,289	1.393	0,257	1.287	0,284	-	0	307	0,063	5.180	
Israël	32.813	8,6691	10.031	1,6036	304	0,068	91	0,024	121	0,022	2	4E-04	10	0,06	1.576	0,323	44.946	
North Africa (2)	60.132	15,887	17.296	2,765	9.160	2,058	4.903	1,318	2.005	0,369	1.588	0,35	95	0,61	3.649	0,747	97.240	3,391
Unit. Arab. Emir.	454	0,1199	44	0,007	14.288	3,21	1.424	0,383	307	0,057	300	0,066	3	0,02	15	0,003	16.535	0,577
Saudi Arabia	1.172	0,3096	161	0,0257	3.203	0,72	806	0,217	24	0,004	24	0,005	-	0	0	0	5.366	0,187
Others	12.685	3,3513	7.186	1,1488	6.500	1,46	2.653	0,713	11.055	2,037	8.545	1,884	73	0,47	2.300	0,471	42.452	1,48
TOTAL	378.505	-26,8	625.544	-5,7	445.061	-4,8	372.131	-8,1	542.659	-2	453.672	-8,3	15.602	1,2	488.313	-4,2	2.867.815	-8,4



HISTORICAL IMPORTS Extra-EUR27

		%		%		%		%		%		%		%		%		%
	FLAT	Previous	FLAT GLASS	Previous	CONTAINER	Previous	DOMESTIC	Previous	FIBRES	Previous	CFGF	Previous	SPECIAL	Previous	OTHER	Previous	TOTAL	Previous
	GLASS	year	PROCESSED	year	GLASS	year	GLASSWARE	year		year	Reinforce-	year	GLASS	year	GLASS	year	CHAPTER	year
	BASIC										ment						70	
TONNES																		
2006	586.322	+ 7.5	427.074	+ 25.2	292.742	+ 11.7	437.907	+ 5.4	398.666	+ 12	305.942	+ 9.4	72.135	- 20.5	436.433	+ 26.3	2.651.279	+ 12.5
2007	1.113.543	+ 90	627.685	+ 47	400.463	+ 36.8	474.076	+ 8.3	508.037	+ 27.4	376.293	+ 23	31.559	- 56.2	446.112	+ 2.2	3.601.475	+ 35.8
2008	820.627	- 26.3	673.983	+ 7.4	517.566	+ 29.2	484.324	+ 2.2	561.674	+ 10.6	415.394	+ 10.4	31.769	+ 0.7	493.564	+ 10.6	3.583.507	- 0.5
2009	543.715	-33.7	541.997	-19.6	361.780	-30.1	407.211	-15.9	404.714	-27.9	294.769	- 29	18.485	-41.8	466.486	-5.5	2.744.388	- 23.4
2010	507.497	- 6.6	638.481	+ 17.8	435.325	+ 17.6	437.422	+ 7.4	548.385	+ 35.5	455.921	+ 54.7	18.032	- 2.5	511.956	+ 9.7	3.087.098	+ 12.5
2011	517.157	+ 1.9	663.617	+ 3.9	467.507	+ 9.9	404.923	- 7.4	554.107	+ 1.0	494.735	+ 8.5	15.415	- 14.5	509.516	- 0.5	3.132.242	+ 1.5
2012	378.505	- 26.8	625.544	- 5.7	445.061	- 4.8	372.131	- 8.1	542.659	- 2	453.672	- 8.3	15.602	+ 1.2	488.313	- 4.2	2.867.815	- 8.4
2013																		
EUROS																		
2006	254.235	+ 8.3	1.064.395	+ 17.5	206.052	+ 13.9	724.756	+ 4	668.910	+ 9.5	470.474	+ 6.4	213.808	- 14	401.440	+ 20.7	3,533,596	+ 10.0
2007	450.129	+ 77	1.215.012	+ 14.2	269.255	+ 30.7	765.796	+ 5.7	804.224	+ 20.2	539.204	+ 14.6	187.454	- 12.3	484.806	+ 20.8	4,176,676	+ 18.2
2008	373.420	- 17	1.263.238	+ 4	346.278	+ 28.6	777.499	+ 1.5	870.251	+ 8.2	586.242	+ 8.7	174.655	- 6.8	486.728	+ 0.4	4.292.069	+ 2.8
2009	256.012	-31.4	1.074.583	-14.9	266.360	-23.1	643.199	-17.3	610.273	-29.9	522.654	-10.8	136.732	-21.7	454.053	-6.7	3.441.212	-19.8
2010	275.094	+ 7.5	1.349.898	+ 25.6	307.217	+ 15.3	757.736	+ 17.8	846.264	+ 38.7	622.968	+19.2	187.278	+ 37.0	556.595	+ 22.6	4.280.082	+ 24.4
2011	262.194	- 4.7	1.418.520	+ 5.1	321.429	+ 4.6	694.086	- 8.4	916.770	+ 8.3	806.215	+ 29.4	193.536	+3.3	562.831	+ 1.1	4.369.366	+ 2.1
2012	205 968	-21.4	1 414 908	-0.3	330 798	+ 2.9	681 938	-1.8	906 951	-1.1	667.238	- 17.2	181.607	-11.3	555.114	- 1.4	4.277.284	- 2.1
2013																		



YEAR	2012			EXPORTS TONNES											Eurostat			
COUNTRIES	Flat Basic	%	Flat Processed	%	Container	%	Domestic	%	Fibres	%	CFGF	%	Special	%	Others	%	TOTAL	%
China (+ HK)	18.162	1,724	9.861	2,4989	6.966	0,887	15.636	4,932	9.024	4,489	7.801	5,539	2.102	10,4	20.015	4,992	81.766	2,577
Taiwan	1.359	0,129	624	0,1581	625	0,08	1.233	0,389	578	0,288	500	0,355	247	1,22	2.467	0,615	7.133	0,225
Korea	15.564	1,477	1.367	0,3464	1772	0,226	3.399	1,072	4.810	2,393	4.359	3,095	366	1,81	20.088	5,01	47.366	1,493
Japan	8.252	0,783	2.078	0,5266	1842	0,234	11.863	3,742	3.565	1,774	2.600	1,846	527	2,61	4.640	1,157	32.767	1,033
India	6.306	0,598	3.247	0,8228	4.047	0,515	3.881	1,224	6.066	3,018	5.213	3,701	1.018	5,04	38.934	9,71	63.499	2,001
Thailand	4.815	0,457	1.198	0,3036	2.698	0,343	431	0,136	1.264	0,629	1.035	0,735	402	1,99	2.112	0,527	12.920	0,407
Indonesia	486	0,046	490	0,1242	703	0,089	10.000	3,154	430	0,214	393	0,279	1.089	5,4	1.471	0,367	14.669	0,462
TOTAL Far East (1)	68.853	6,534	27.381	6,9388	22.395	2,851	56.975	17,97	28.208	14,03	23.397	16,61	6.151	30,5	96.101	23,97	306.064	9,646
Turkey	136.976	13	13.367	3,3874	17.610	2,242	11.273	3,556	16.228	8,073	12.116	8,602	371	1,84	11.192	2,791	207.017	6,524
Croatia	28.493	2,704	9.176	2,3253	19.311	2,458	3.988	1,258	6.861	3,413	3.483	2,473	42	0,21	25.000	6,235	92.871	2,927
Serbia	34.527	3,277	7.198	1,8241	37.574	4,783	2.068	0,652	4.849	2,412	2.136	1,517	37	0,18	496	0,124	86.749	2,734
Russia	87.193	8,275	42.267	10,711	42.338	5,389	43.352	13,67	21.387	10,64	17.187	12,2	520	2,58	17.739	4,424	254.796	8,03
Belarus	19.169	1,819	9.856	2,4977	3.110	0,396	1.380	0,435	770	0,383	501	0,356	2.383	11,8	14.307	3,568	50.975	1,606
Ukraine	138.937	13,19	15.368	3,8945	8.115	1,033	11.831	3,732	5.682	2,827	2.622	1,862	102	0,51	17.141	4,275	197.176	6,214
Switzerland	155.049	14,71	80.368	20,366	145.282	18,49	15.616	4,926	21.547	10,72	15.961	11,33	635	3,15	35.652	8,892	454.149	14,31
TOTAL Other EUROPE	716.888	68,03	243.186	61,627	371.975	47,35	108.690	34,28	97.100	48,31	60.048	42,63	4.443	22	156.921	39,14	1.699.203	53,55
USA	32.628	3,096	32.992	8,3607	113.500	14,45	57.648	18,18	38.752	19,28	30.680	21,78	2.747	13,6	33.668	8,397	311.935	9,831
Mexico	11.265	1,069	3.613	0,9156	7.917	1,008	7.134	2,25	1.252	0,623	1.026	0,728	657	3,25	9.817	2,448	41.655	1,313
Brazil	47.277	4,487	11.222	2,8438	6.037	0,768	8.613	2,717	3.251	1,617	2.678	1,901	589	2,92	22.076	5,506	99.065	3,122
Israël	9.902	0,94	5.792	1,4678	33.354	4,246	4.221	1,331	1.045	0,52	645	0,458	228	1,13	5.519	1,376	60.061	1,893
North Africa (2)	51.775	4,913	18.675	4,7325	72.994	9,292	21.000	6,624	6.837	3,401	5.075	3,603	3.108	15,4	22.686	5,658	197.075	6,211
Unit. Arab. Emir.	21.316	2,023	11731	2,9728	5.091	0,648	12.782	4,032	3329	1,656	2.929	2,08	98	0,49	2.949	0,736	57.296	1,806
Saudi Arabia	6.412	0,609	2485	0,6297	5.438	0,692	4192	1,322	4718	2,347	4.494	3,191	109	0,54	1.974	0,492	25.328	0,798
Others	87.417	8,296	37.532	9,5112	146.884	18,7	35.778	11,29	16.520	8,218	9.872	7,009	2.055	10,2	49.237	12,28	375.423	11,83
TOTAL	1.053.733	0,2	394.609	-0,5	785.585	-3,5	317.033	-8,6	201.012	4,7	140.844	-17,1	20.185	-26	400.948	-3,1	3.173.105	-2,2



HISTORICAL EXPORTS Extra-EUR27

2012	FLAT GLASS BASIC	% Previous year	FLAT GLASS PROCESSED	% Previous year	CONTAINER GLASS	% Previous year	DOMESTIC GLASSWARE	% Previous year	FIBRES	% Previous year	CFGF (Reinforc.)	% Previous year	SPECIAL GLASS	% Previous year	OTHER GLASS	% Previous year	TOTAL CHAPTER 70	% Previous year
TONNES																		
2006	1.007.268	- 1.7	341.192	+ 11.0	936.390	+ 0.5	377.011	- 1.5	267.333	+ 20.1	214.715		60.663	- 25.8	329.304	+ 41.2	3.319.161	+ 4.2
2007	1.074.240	+ 6.7	309.338	- 9.3	997.210	+ 6.5	389.635	+ 3.4	253.471	- 5.2	232.517	+ 8.3	57.743	- 4.8	414.110	+ 25.8	3.495.747	+ 5.3
2008	1.114.959	+ 3.8	352.695	+ 14.0	863.272	- 13.4	346.602	- 11.0	219.292	- 13.5	172.299	- 25.9	44.104	- 23.6	393.582	- 5.0	3.334.506	- 4.6
2009	828.108	- 25.7	287.567	- 18.5	706.974	- 18.1	289.421	- 16.5	191.128	- 12.8	152.621	- 11.4	25.823	- 41.5	342.167	- 13.1	2.671.188	- 19.9
2010	1.180.910	+ 42.6	358.159	+ 24.5	780.247	+ 10.4	334.124	+15.4	227.058	+ 18.8	187.901	+ 23.1	27.098	+ 4.9	410.792	+ 20	3.318.388	+ 24.2
2011	1.052.134	- 10.9	396.529	+ 10.7	814.062	+ 4.3	346.903	+3.8	192.041	- 15.0	169.896	- 9.6	27.377	+ 1.0	413.688	+ 0.7	3.242.734	1
2012	1.053.733	+ 0.2	394.609	- 0.5	785.585	- 3.5	317.033	- 8.6	201.012	+ 4.7	140.844	- 17.1	20.185	- 26	400.948	- 3.1	3.173.105	- 2.2
2013																		
VALUE ('000 €)																		
2006	580.565	+ 15.2	829.059	+ 12.7	776.260	+ 9.3	1.369.923	+ 3.9	710.042	+ 22.3	n.a.		292.839	- 5.3	1.500.972	+12.9	6.059.660	+ 10.4
2007	659.540	+13.6	862.220	+ 4.0	822.390	+ 5.9	1.370.337	0	791.234	+ 11.4	540.566		275.338	- 6.0	1.440.289	- 4.0	6.221.349	+ 2.7
2008	671.204	+ 1.8	933.628	+ 8.3	801.327	- 2.6	1.315.183	- 4,0	703.450	- 11.1	516.524	- 4.4	268.015	- 2.7	986.793	- 31.5	5.679.600	- 8.7
2009	513.978	- 23.4	800.878	- 14.2	691.193	- 13.7	975.027	- 25.9	642.032	- 8.7	420.871	-18.5	228.405	- 14.8	843.237	- 14.5	4.694.750	- 17.3
2010	681.199	+ 32.5	983.725	+ 22.8	758.675	+ 9.8	1.178.819	+ 20.9	734.563	+ 14.4	453.929	+ 7.8	273.514	+ 19.8	972.904	+ 15.4	5.583.399	+ 18.9
2011	659.756	- 3.2	1.115.984	+ 13.4	769.994	+ 1.5	1.243.831	+ 5.5	807.195	+ 9.9	536.432	+ 18.2	269.739	- 1.4	1.035.880	+ 6.5	5.902.379	+ 5.7
2012	586.963	- 11.0	1.221.424	+ 9.4	822.590	+ 6.8	1.228.895	- 1.2	781.210	- 3.2	445.500	- 16.9	252.736	- 6.3	1.069.960	+ 3.3	5.963.778	+ 1.0



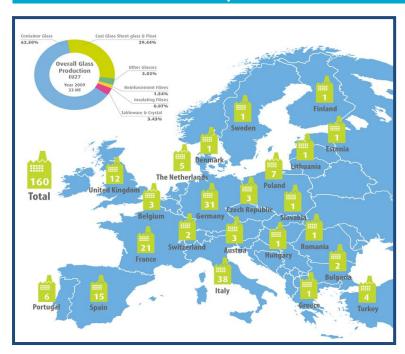
III. Economic Analysis per Glass Sector

REPORTS 2012





1. Overview of the European Container Glass Sector



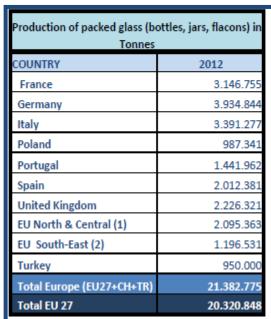
FEVE is the association of manufacturers European glass containers and machinemade glass tableware. The European container industry provides a wide range of glass packaging for food and beverages as well as flacons for perfumery, cosmetics pharmacy for global customers. It is an important contributor to Europe's real economy. Glass packed products are supplied worldwide, and glass plays a vital role in supporting European trade and commerce. industry is a sustainably sound business model from the environment, economic and social point of view.

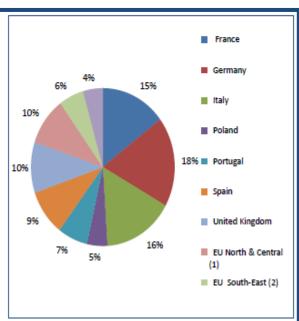
- Environment: by recycling more than 70% of glass containers into new bottles in a closed loop, the
 sector is a pioneer of the circular economy that the European Commission aims to build in the EU. By
 recycling glass, the industry reduces energy costs, emissions and use of raw materials. New bottles
 and jars are 30% lighter than some 20 years ago, without no compromise on fundamental packaging
 role is made in preserving original and untainted quality and taste of goods and they remain fully
 recyclable and recycled.
- **Economic:** the sector is a strong economic powerhouse of the EU manufacturing industry. Some 20 Million tons or about 50 Billion bottles, jars and flacons for food and drink, perfumery, pharmacy and cosmetics are produced each year. It represents 65% of the total glass production volume in the EU, and is the biggest container glass producer in the world. The glass containers contribute to the trade of many brands throughout the world, by so contributing to the EU trade balance. Major industry investments in technology innovation focus on optimizing closed loop or 'bottle to bottle' production process, reducing energy consumption, exploiting renewable energy sources.
- **Social:** It is a local industry distributed throughout Europe. With its about 160 plants in 22 countries, the container glass industry creates 50,000 direct and local jobs. For each direct job, an estimated 1.3 jobs are created along the value chain e.g. in waste collection and treatment.



2. Market Data - Year 2012

The Year 2012 was a difficult one for the industry due to general consumption decline in the EU and some major outside EU markets (US). This had an impact on the produced volume that was down by 2.2% in the EU27 in 2012 with a shrinking of 460Ktons in one year (a 20.320.Ktons produced in 2012). The situation was particularly difficult in some major markets: France (-4.9%), Germany (-3.2%), Italy (-5%), Spain (-2.6%) and UK (-3.7%). Other countries such as Portugal (+6.7%) however confirmed the positive trend of the previous years, although they registered a slight slowing down compared to the growth of the previous years. Some leading market segments particularly suffered: still wines and sparkling wines, beer and spirits. However, good records in some other segments such as food have helped to alleviate the overall negative outlook. The flaconnage sector (flacons for perfumery, cosmetics and pharmacy) remained globally stable. The EU economic downturn had an impact on imports from outside the European Union which were reduced to 445 Ktons (-4.8% compared to the previous year). A reduction in the exports to outside the EU by 3.5% compared to 2011 was equally recorded (a total of 785Ktons were exported to outside EU countries). www.feve.org





Based on FEVE geographic scope

- 1) EU North & Central Area: Austria, Belgium, Denmark, Estonia, Sweden, Switzerland, The Netherlands (7 countries)
- 2) EU South East Area: Bulgaria, Czech Republic, Greece, Hungary, Romania, Slovakia (6 countries)

2. Regulatory Affairs – Legislative Issues

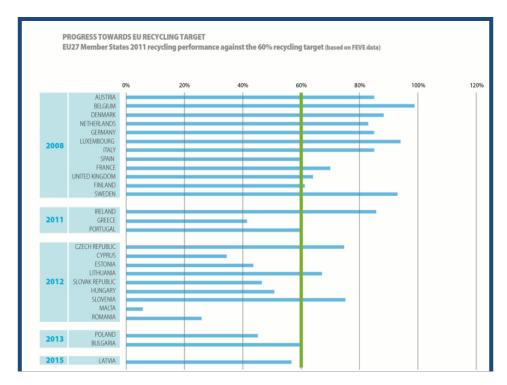
One of the most important dossiers FEVE contributed to in the last months is the EC End-of-Waste Regulation (EoW). It sets the criteria to be fulfilled in order for cullet (discarded glass) to cease to be waste and to become a product: for example, when it is destined for remelt in a furnace to make new bottles and jars. The Regulation encourages the closed loop recycling and ensures that cullet put on the market will effectively be used: this will hopefully help to increase the quantity and quality of the glass which is remelted in a glass furnace. It enters into force in June 2013.

In the next months, the review of the waste directives (WFD and PPWD) is key for the industry and can have major impacts on the future of the container glass industry. The industry advocates for a review of the recycling targets provided that equal treatment to all packaging materials is guaranteed, and that support to separate collection schemes implementation throughout Europe results in a good quality of recycled glass that can be used in to produce new bottles in a closed loop.



3. SPECIFIC ISSUES - Glass Recycling

In 2011 the average glass recycling rate in the EU has risen above the 70% threshold for the first time. This means that over 11 million tons were collected for recycling. This achievement follows major efforts made in all EU Member States over the past few years to meet the EU's 60% recycling target for glass. All participants in the glass closed loop have contributed to these good results. On the one hand, the glass industry has designed, manufactured and marketed containers to be effectively recycled in a closed loop system. They have also effectively communicated good recycling practices to consumers. On the other hand, collection and processing schemes have also been extended and progressively improved, while the public has also been made aware of the importance of collecting more glass and better. Used glass bottles are a precious resource and should be properly collected through separate streams. More needs to be done to collect the remaining 30% of used glass that currently is wasted, and to promote a circular economy that suits the ambitious vision of the European Commission to build a "zero waste" and "resource efficient" society.



4. OUTLOOK

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Lass

The increasing costs of energy and raw materials as well as a heavy regulatory burden do not help the industry to face the particularly difficult situation.

Despite the harsh competition, glass remains the reference packaging material for three quarters of consumers in Europe for health safety, taste and quality preservation, proven recycling credentials. More than 60,000 consumers sharing the common passion for glass and actively claiming the right to

choose it for their preferred food and drink have today joined the Friends of Glass platform the activities of which were initiated by the European Container Glass Industry in 2009.





Introduction to the European Flat Glass Sector

GLASS FOR EUROPE is the trade association of European manufacturers of flat glass. Flat glass is the primary material that goes into a variety of end products that surround us every day such as windows and facades for houses and buildings, windscreens, windows and backlights for automobiles and transport, mirrors, covers and connectors for solar-energy equipments. It is also used, in much smaller quantities, for many other applications including interior fittings and decoration, furniture, "street furniture" (e.g. bus stops), appliances and electronics.

Flat glass production

Flat glass is mostly manufactured by way of the float process, which allows the large scale production of high quality sheets of glass. As glass furnaces need to be heated up to 1600°C, energy accounts for a large share of production costs. For this reason, the flat glass industry is seeking all possible opportunities to improve the energy efficiency of its processes to reduce production costs.

A typical float plant produces 650 tonnes of melted glass a day for uninterrupted periods of 16 to 18 years. Flat glass manufacturing is therefore a capital intensive industry, dominated by a handful of multinational firms. Glass for Europe's five members, i.e. AGC Glass Europe, Guardian, NSG Group, Saint-Gobain Glass and Sisecam, represent over 90% of the EU production.

Beyond the production of large sheets of flat glass, Glass for Europe member companies are also active further down the supply chain. They process glass so as to enhance its properties, be it in terms of resistance, energy efficiency, transparency, acoustics, etc. This creates more added value and allows for the development and marketing of cutting-edge products to meet the demanding requirements of the building, automotive and solar markets.

An industry that contributes to the EU's low carbon and competitiveness objectives

The flat glass industry researches, manufactures and markets products, which are essential for Europe to meet its climate objectives. Highly- insulating glazing for buildings is needed to retrofit Europe's old building stock; new glass technologies help reduce effective CO₂ emissions generated by transport while

renewable sources of electricity are further improved thanks to glass

technologies.

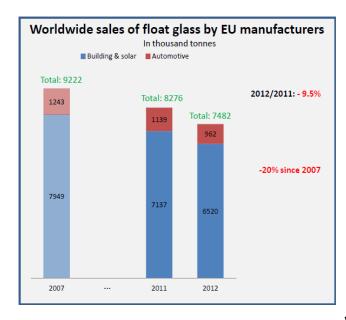
Moving towards 2050, the flat glass industry intends to deliver Performance, Sustainability and the Production Capacities needed for Europe's low carbon future. These contributions illustrate the manufacturers' will to responsibly produce in Europe the products that will shape Europe's future.

These contributions are at the core of the 'Flat glass industry pathway to 2050', released in November 2012.





2. Market Data - Year 2012



Although 2011 was marked by relative market stability, EU manufacturers' sales of float glass declined sharply in 2012, i.e. 9.5% compared to 2011.

Across the EU, sales decreased by 7.5% in the building sector with all markets shrinking with the exception of Poland, which remained stable. Countries in southern Europe like Spain and Portugal saw sales dropping by over 16%. Other major markets such as Germany, France, Italy and the UK all fell by 6 to 10%.

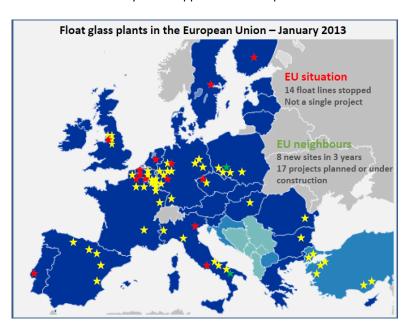
The automotive market declined by 15%.

2012 sales by EU manufacturers consequently broke the 2010 record low level. When compared to the pre-crisis year 2007, sales have decreased by 20%.

<u>Further manufacturing capacity reduction measures had to be undertaken</u>. In addition to the 9 float lines already stopped in 2011, a further 5 float lines have been mothballed (i.e. put on hold) in 2012 for unlimited periods. **Today 14 float lines, i.e. nearly 20% of capacity, have been officially taken out of production,** and temporary capacity reduction measures may have happened in other plants.

In addition <u>downstream processing</u> <u>activities are also affected</u> by reduction measures as demand for transformed building and automotive glass remains weak. For example, many auto glass factories which transform the raw flat glass into windshields, backlights, etc. for automotive are being closed as a result of the fall in automotive production.

Similarly, many rolled or patterned glass plants¹ have introduced partial unemployment, as demand for solar glass has dropped sharply due to unfair competition practices from Chinese manufacturers.



During 2012, imports of flat glass into the EU remained relatively stable, simply because of the low level of demand in the EU. However, exposure to external trade for float glass products falling under the definition of the EU ETS remains just below 30% over the last years².

¹ Rolled / patterned glass is a type of flat glass that is produced thanks to a different manufacturing process. This process is used in only a few, smaller plants to produce specific types of glass, such as extra-clear glass for the solar sector.

²This covers NACE codes 23.11.12.30 and 23.11.12.90. Other 23.11.12 codes correspond to processed products.



<u>Capacity building at the immediate borders of the EU continues to grow</u> with new sites under construction, such as in Algeria. This trend is worrying because EU neighbouring countries enjoy preferable manufacturing conditions with access to cheap raw materials and energy sources, and producers of these countries do not have to internalize the costs of EU environmental legislations. As a consequence, EU-based manufacturers no longer enjoy a level playing field to compete on exports outside the EU, nor on the EU market.

Such a situation could lead to a sharp increase in imports of cheap float glass into the EU when demand picks up.

3. Regulatory Affairs – Legislative issues

In light of the economic and industrial context described above, Glass for Europe has been engaged in all EU activities that could help support a recovery of the flat glass industry.

On the building product side, Glass for Europe is seeking <u>more robust policy interventions to boost energy efficient building renovations in Europe</u>. For instance, it contributed to debates on the energy efficiency directive and the obligation for Member States to draw up long-term building renovation road maps. Glass for Europe also contributed extensively to ensuring that the second eco-design working plan considers windows adequately for the development of an <u>EU window energy labelling scheme</u>. Although our industry has been calling for urgent actions in that field for the last four years, such a scheme may well take an additional five years before it is implemented.

Additionally, the initiatives launched by the European Commission on the review of industrial policy and the sustainable competitiveness of the construction sector are very welcome by flat glass manufacturers. It is essential that these reflections on ways to ensure competitiveness and the need to guarantee a level playing field between EU and non-EU based manufacturers become paramount in all EU policies. As part of the initiative on the construction sector, Glass for Europe hopes that the European Commission will support our industry's attempt to tackle the issue of building deconstruction and collection of end-of-life building glass. The availability of greater quantities of recycled flat glass could help strengthen the industry's competitiveness.

Glass for Europe fully adheres to Commissioner Hedegaard's view point when she stresses that the transition towards a low carbon economy must become a provider of sustainable growth and green jobs in the EU. For this reason, in light of the current position of our industry, its competitiveness challenge and the fact that its products will extensively be needed in a low carbon future, Glass for Europe calls on the European Commission to initiate as rapidly as possible a reflection on the future of the flat glass sector in the EU with a view to developing a dedicated action plan, as was recently unveiled for the steel industry.

4. SPECIFIC ISSUE: Unfair trade practices by Chinese solar glass producers

Early 2013, both <u>anti-dumping and anti-subsidy investigations on solar glass originating from China</u> were opened by the European Commission. The original complaints were not filed by Glass for Europe members however the type of solar glass that is the subject of the investigation is originally made of extraclear flat glass and is then processed to give it specific properties for solar applications. Glass for Europe member companies extensively manufacture the primary material and also process it for solar applications. They are therefore concerned by the investigations.



The EU industry has suffered and continues to suffer from the injurious trade practices by Chinese producers and has drastically reduced production. Within Glass for Europe member companies, severe restructuring programmes had to be undertaken at a number of European manufacturing facilities of solar glass. Glass for Europe supports the position set out by the complainant and is of the view that state-supported domestic Chinese solar glass producers have been rapidly and unfairly gaining market share in the EU through injurious trade practices. We believe that it is in the EU's interest to impose measures on solar glass imports originating from China.

To a certain extent, these cases are <u>a test of the coherence of the EU's own climate</u>, energy and industrial <u>policies</u>. The manufacturing of crystalline silicon photovoltaic modules and its key components in Europe was expected to become an industrial flagship for Europe, illustrating how the EU's climate & energy policies could become drivers of sustainable growth. Although Europe's glass industry has heavily invested in R&D to increase the technological properties of its solar products and to manufacture these innovative products in Europe, it is now harmed by unfair competition. Thousands of manufacturing jobs and Europe's 'know-how' in green technologies is threatened by unfair trade practices. Such an evolution would thoroughly contradict all objectives the European Union has set for itself and would seriously undermine the credibility of EU policies.

5. OUTLOOK

With sluggish economic growth rates forecasted for most EU countries in the coming years and no sign of recovery in the building and automotive sectors, <u>flat glass manufacturers do not anticipate recovery before some years</u>. Sales of EU manufacturers are expected to continue deteriorating in 2013 before a slight increase of 1.5% in 2014.

Furthermore, <u>alternative sources of growth are limited</u>. Exports outside the EU are confined to a few niche products of high added value. With the increase in production capacity in EU neighbouring countries, EU manufacturers can hardly compete on exports for most mainstream products. EU manufacturers nevertheless continue investing heavily in R&D and new product development. That being said, the take up of new innovative products on the market could be slowed down by the limited activity in construction and automotive.

In this context, Glass for Europe calls for EU action in two fields during the year to come.

First, Glass for Europe strongly believes that it is time to transform the EU energy and climate policies into business opportunities instead of today's focus on additional regulatory constraints for EU based industries. For this reason, Glass for Europe is a strong supporter of a binding energy-efficiency target as part of the 2030 energy and climate package. Our industry believes that this is essential to focusing policy interventions and directing investments in those sectors where the most cost-effective energy efficiency improvements lie, i.e. building renovation and transport.

Second, Glass for Europe calls on the European Commission to initiate as rapidly as possible a reflection on the future of the flat glass sector in the EU with a view to developing a dedicated action plan, as was recently unveiled for the steel industry. Such a reflection is needed to ensure that when demand for energy efficient glass products picks up, EU-based manufacturers are in a position to provide these products and generate economic activity in Europe, instead of those products being imported from outside the EU.





REPORT 2012-2013

1. Overview of the Domestic Glass Sector

The number of European manufacturers of domestic glassware is estimated below 50. The sector has been stable for the last 12 months even though the crisis is hitting some significantly, with employment still going down in total while the reporting year on year gives an improvement due to more companies being members of EDG.

In 2012 the production went down by 7.7% to the lowest for decades just above one million tons, even lower than in 2009; in line with the drop of the market of 7.6% at 1,061,000 tons, of the imports by 7.9% and losing ground on exports by 8.4%.

This leaves our industry 1/3 below pre crisis figures in production and on the market with even worse results: a loss of 5% of market share inside Europe, even if prices are slightly higher than during the previous years as well as costs...

Competitiveness of Europe, through currency levels, trade rules, regulations, cost and access to energy, is critical to our industry and is characterised by capital and labour intensity, making adjustment much more difficult.

The outlook of the beginning of 2013 is certainly not better with idle capacity and prices downwards.

								TOTAL		
		IMPORTS	%	Average	EXPORTS	%	Average	EU-27	Exports	Domestic
		TABLEWARE		Price (€)	TABLEWARE		Price (€)	Production	%	%
Tonnes	2006	437.907	+ 5.4		377.011	- 1.5		1.526.000	25%	75%
Tonnes	2007	474.076	+ 8.3		389.635	+ 3.4		1.547.000	25%	75%
Tonnes	2008	484.324	+ 2.2		346.602	- 11.0		1.440.000	24%	76%
Tonnes	2009	407.211	-15.9		289.421	- 16.5		1.041.000	28%	72%
Tonnes	2010	437.422	+ 7.4		334.124	+15.4		1.016.000	33%	67%
Tonnes	2011	404,903	- 7.4		346.903	+3.8		1.090.000	32%	68%
Tonnes	2012	372,131	- 8.4		317.033	- 8.6		1.006.000	31%	69%
Value	2006	724.756	4	1,66	1.369.923	+ 3.9	3,63			
Value	2007	765.796	+ 5.7	1,62	1.370.337	0	3,52			
Value	2008	777.499	+ 1.5	1,61	1.315.183	-4	3,79			
Value	2009	643.199	-17.3	1,58	975.027	- 25.9	3,37			
Value	2010	757.736	+ 17.8	1,73	1.178.819	+ 20.9	3,53			
Value	2011	694.086	-8.4	1,71	1.243.831	+ 5.5	3,58			
Value	2012	681.938	-1.8	1,83	1.228.895	- 1.2	3,88			



2. Regulatory Affairs – Legislative Issues

The IED Directive adopted last year is now coming into force, roughly in line in the various countries but starting to mean now capital expenditure for our companies.

REACH Regulation is still a major subject with challenges on the overall answer where it has been admitted that glass is a new material whose elements are transformed into a new structure of its kind. We have therefore qualified all our raw materials as intermediates. This is challenged by ECHA and the Member States Committee. The first substance put under authorisation is arsenic, which is considered by ECHA to be a processing agent (refining glass to remove bubbles) implying costly authorisation files, could even not be accepted. We are in the process of changing this position thanks to a huge work with member states and ESGA's commitment.

The pressure remains high on critical elements such as lead and boron to start with the main ones; REACH implementation disserves to be monitored at each step of the Commission's and ECHA's work.

ETS: Like all other glass sectors, EDG is concerned by the subject. Pressure from the Commission to increase the CO_2 price in the market is not tolerable. When the economy is down the related market's elements like CO_2 should also get down, as it is the case now. This is logical and perfectly in line with the ETS regulation.

A bigger issue, not yet settled, will be the confirmation of the carbon leakage activities from 2015.

FCM: Revision of the Food Contact Materials Directive for Ceramics has been launched by the Commission in June 2012. This revision will include glass, which will be impacted by new levels for lead and cadmium migration, dramatically lower than the ceramics reference of 1984.

This subject, after a first level of analysis, is not going to be a concern to the raw glass itself, at least for sodo-lime, borosilicate, barium glass and fluorosilicate, but will be a major question for lead crystal and enamel decorated ware in contact with food (plates for example).

We have explained that glass producers understood the reason for new levels of measurement after 3 decades and the need to take into account new studies on the consumers' health. However we would only accept to move forward on real impact of real food in reasonable conditions with a long term use of our ware. We have a rather positive position of DG SANCO who agreed to make a set of measures with the member states laboratories before taking a position. We will need to be extremely careful on those studies to accept only needed constraint for real impact on consumers. This being said, it should not be forgotten that the imports of ceramics and glassware are not always compliant with the current European regulation! Trying to make Europe an island of difference versus the rest of the world may be inefficient. This is why we have opened a path to work out with the ISO committee TC166 facilitating the implementation of an equivalent regulation in other parts of the world.



3. SPECIFIC ISSUES

Lead is also an important issue besides REACH and the food contact.

EDG had to issue specific comments on the consultation for restriction of lead and its compounds in consumer articles, mainly concerning lead crystal. The specific nature of glass creating a new matrix where all elements are bonded to each other had to be re-explained as it inhibits the mobility of lead This concerns a very specialized activity with significant hand-made work and only possible with certain types of glass. The granted exemption to jewellery confirms that similar products like giftware and tableware should be included as well.

4. OUTLOOK

Our industry remains on its basics to serve a market where people certainly drink and eat every day but do not need to change their vessels every quarter. We, as always, give design, trends and fun to this activity to stimulate pleasure but in this difficult economical period this is not sufficient to maintain our market. As providers of tens of thousands of jobs in direct and indirect employment, it implies the highest care and any improvement from the authorities would be appreciated.





REPORT 2012-2013

1. Overview of the Special Glass Sector

The Special Glass industry is comprised of numerous companies and plants. Some of them are rather small, oriented towards high value/high technology products than high tonnage. As a consequence, gathering precise and reliable data is difficult. We herewith tentatively provide general inputs, keeping the sector segmentation used since 2005.

What is special glass?

Special glass includes glasses with a special composition for higher technical requirements and advanced applications. It excludes normal container glass, flat glass, tableware and crystal glass, as well as insulating or reinforcement glass fibres.

The particular properties of special glass are discrete melting processes (temperatures, materials, design, capacity) and wide differences from one product to another (properties, capacities, specific commercial value).

The European Special Glass Industry is a small sector (less than 5% of the glass industry) but however very diversified. Its numerous companies, ranging from SMEs to multinationals, are oriented towards high value and high technology products.

Technology Hermetic Packaging: Special Glass Materials For Electronics Glass/Ceramicand Life Science: Material science to-metal sealing for the long-term and processing know-how for protection of sensitive variety of material formats, electronics from (sintered) glass powders to tubes and substrates **Thermal Sensing Components: Protecting** electrical appliances from catching fire



Results in 2012 showed a rather negative trend compared to the previous year. In comparison with 2011, the annual production of special glass declined by 6.7% to 685,000 tonnes. Total apparent consumption also decreased by 5.8%.

Extra-EU exports dropped by 26% in volume (total volume: 20,185 tonnes) and in value by 6.3% in value (€ 252.7 million).

Imports increased by 1.2% in volume (total: 15,602 tonnes) but slightly decreased by 6% in value (€181.6 million). The main suppliers of the EU remain China with 43% (total Far East: 62%) and the USA (25%).

Market Trends

Tubing

Tubing activity is mainly driven by pharmaceutical and medical applications (laboratory glassware). While long term polymers may threaten the business, the market keeps growing a few percent per year, and European manufacturing sites were working at good capacity even if under increasing competitive pressure from the Far East.

Glass ceramics

Glass ceramics, with a major market in cook-top and fireplace windows, has grown at a pace of about 5-10 % a year in the past, but it had to face slower growth from 2010 on after a two-digit decrease in 2009.

Two companies melt the corresponding green glass in Europe, generally at high temperature and with high melting technology compositions. For articles sold outside Europe, they are shipped as a green glass while finishing, i.e. ceraming and decoration, is done close to the appliance maker (USA – China).

The market for glass ceramics is growing in China as well. They melt and finish glass. Designs and qualities have come closer to the western countries' standards, although with little progress in the past year. The levels of commercial exchange have not significantly progressed since 2010.

Borosilicate

Borosilicate is now a very mature business. For years, borosilicate glass has been used in consumer products (coffee pots, heat-resistant cookware, microwave trays...), laboratory vessels, pharmaceutical packaging material, high strength lenses, LCD television and computer screens, components for chemical plants. A part of the market is fed by low wage countries. The laboratory vessel market is more and more jeopardized by polymers and other disposables. Borosilicate tubing now finds applications in solar energy applications, either directly or after concentration by reflecting panels in solar power plants, fire protecting glass windows and very resistant windscreens for trains and planes.

Optical and ophthalmic

Optical and ophthalmic are two mature businesses which are under increasing threats from polycarbonates except in certain very specific applications. Glass is still used for high refractive index applications, especially for strong visual impairment, photochromic and solar lenses and moulds for the casting process.



In the optical field, numerous demanding applications can still only be covered by glass products. It is a business that is very much segmented. There are numerous compositions and formulations, with high added value, small individual tonnages and requiring special raw materials, often unique for providing a given property to the glass. New glass types have been introduced to the direct press process in order to achieve low priced lenses for the consumer market. Classical glass types endangered by the EU-Directive RoHS could be preserved by proving their non-substitutability for essential applications in high end industrial optics.

Radiation protection glasses

Radiation protection glasses is an increasing business driven by the implementation of X-ray protection equipment for hospitals (upgraded or new installations) and by some government nuclear programs for updating or implementing nuclear reactors (trend expected to be confirmed after the latest event in Japan).

Lighting

Lighting glass remains a large volume. It includes fluorescent lighting (both for domestic and public applications), halogen sources, LED and automotive headlights. This last one is decreasing, being replaced by polymer solutions. Lighting is globally a mature business and increasingly eroded by importations from the Far East.

Small in volume but high in added value are reflectors and heat/UV protection filters for video projectors.

Display glass

- CRT- glass production disappeared from Europe.

Telecommunication fibres

This kind of production is no longer made in the EU.

2. Regulatory Affairs – Legislative Issues

Particularly with regard to the last comment on optical glass but applicable to most parts of the special glass activity, minor (in weight %) components play a major role in providing the required properties of the products. As a consequence, some aspects of the evolution of European regulations is more critical to the special glass sector than to activities of the flat and container glass sectors, which are based on very large tonnages/few formulations. This underlines the need to provide sustained and well documented participation from ESGA members to all working groups aimed at improving the content of rules such as REACH, RoHS, WEEE, etc.

The treatment of special glasses under the **REACH** Regulation, with the phasing out of certain substances, which are necessary and not substitutable, like borates, arsenic, would deprive consumers and laboratories of essential products.

Also of high concern, the restrictions of use of certain substances in electric and electronic articles (ROHS/WEEE), the revised BREF/ IED Directive, the classification of borates as reprotoxic, etc., constitute serious threats to this innovative subsector of the glass industry.



The **EU-ETS** regulation and the reduced availability of CO₂ allowances after 2012 only add to this overall burden. The Industry needs a fair treatment given its strong international exposure.

Eco-Design for Furnaces

Refractory Ceramic Fibres (RCF)

3. SPECIFIC ISSUES

While some sectors are growing, clearly the employment balance today is not favourable to Europe. Job losses have been driven by the decline in CRT glass, but also to some extent by the decline in borosilicate glass and lighting.

On the other hand, in the growing sectors, the activities are kept in Europe due to the complexity and technology barrier, which is an efficient value generator. Some future opportunities may arise from present research programmes in the EU: new lighting technologies, photovoltaics, CO₂, etc. This emphasizes the role that R&D has to play and in general the technological innovation in our special glass activity.

4. OUTLOOK

The special glass industry is paying a high tribute to remain competitive vis-à-vis the rising competition from the Far-East and China in particular.

Its strong R&D efforts on chemicals currently under scrutiny by ECHA are indispensable but certain exemptions will however still be needed to maintain the production of indispensable products. The intermediate status of the raw materials used to produce glass is key to our sector.

Special glass products contribute to sustainable, efficient and innovative living standards in Europe. It is a day-to-day fight to innovate and contribute to the European rebirth out of the current crisis.

The special glass industry hopes that all these efforts will find support from the EU Commission.





REPORT 2012-2013

1. Overview of the Reinforcement Glass Fibre Sector

GlassFibreEurope represents the European Glass Fibre Producers in Brussels. Its member companies are responsible for 95% of the production of Continuous Filament Glass Fibre in Europe.

By reinforcing polymer resins, glass fibre products reduce energy consumption through substantial weight reduction. By strengthening and reducing weight glass fibres are making a significant contribution to energy and resource efficiency and are one of the enabling industries actively contributing towards an efficient, low carbon economy.

Production, employment, competition and market share development

Between the 80ies and 90ies, glass fibre production in Europe used to be a fast growing sector and with a steady 4% annual increase in production over a period of the 5 years between 2003 and 2008.

Production fell sharply by 40 % in 2009. This devastating drop led to massive job losses in the CFGF industry of 30% that counted 8,300 in 2008 vs. 5,800 in 2010 and 5.300 in 2011 and 2012 respectively.

Glass fibre production with 634.000 tons did not pick up in 2012 to meet 2008 levels and the loss of one third of the European employment base has remained unchanged.

Predominantly driven by imports from Asia, mainly China, European glass fibre import market penetration has risen dramatically.

2. Regulatory Affairs – Legislative Issues

In the Emission Trading context glass fibre can just hope that its status as an energy intensive industry will not be jeopardized in the upcoming review to further negatively affect their ability to compete globally.

Competition in the European market place remains distorted due to high levels of dumped glass fibres from China and Malaysia.

Other costs due to the amount and cumulative effect of regulation add to the distortion of global competition and negatively affect the competitiveness of the glass fibre industry.



3. SPECIFIC ISSUES

GlassFibreEurope had submitted an anti-dumping complaint to the European Commission's DG Trade regarding certain glass fibre products originating in the People's Republic of China. In 2011 the Union decided for definitive anti-dumping duties by 13.8% (Council Implementing Regulation (EU) No 248/2011 of 9 March 2011).

However, the European Union's imposed dumping duty did not reinstall competition in the European glass fibre market. For a number of years GlassFibreEurope has now been suffering from dumping and subsequent loss of market share. Members of GlassFibreEurope continue to go out of business. Beginning of 2012 Ahlstrom closed their glass fibre business and European Owens Corning closed two facilities in Italy and Spain.

4. OUTLOOK

The outlook for the European glass fibre production is negative as dumping is ongoing. Production remained steady and did not meet 2008 levels. The forecast remains difficult.