



European Plastics Industry (EU 27)

PlasticsEurope Market Research Group

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PlasticsEurope
Association of Plastics Manufacturers

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This presentation based on official statistics by Eurostat and the European Commission.

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Please note the definitions on slide 17.

Last Update: February 20, 2012



European Union (EU27) Plastics Industry - Economic Summary

Overview

The positive development of the EU27 Plastics Industry after the bounce back from the great recession continued until the beginning of 2011. Since the 2nd quarter 2011 especially Primary Plastics showed decreasing tendencies, while Plastics Products remained more or less stable during the 2nd half year. The Plastics Machinery sector grew further on until August, but showed more constant tendencies in the last two months of 2011. Compared to 2010, production figures for the year 2011 had been higher within all of the three segments, but especially for Plastics Machinery with +11,2%.

Sectors

Across sectors, the pace of recovery was somewhat uneven since the second half 2010. **Production quantities** of Primary Plastics grew until the beginning of 2011, but show decreasing tendencies since the 2nd quarter of 2011. The Plastics Products sector remains more or less stable during the last months and also the Plastics Machinery sector shows a constant development since November 2011 after a two months decline.

Plastics Industry **producer prices** clearly increased in the second half of 2010 and first half of 2011. In the second half year of 2011 prices for Primary Plastics decreased steadily, while prices for Plastics Products more or less remained on the same level. Plastics Machinery prices also showed a stable development, but increased again in December 2011. Compared to 2010, prices in 2011 had been higher within all of the three segments.

End use Industries

The upward trend in the Electrical Machinery Industry continued until August 2011, while the following months showed slightly decreasing production tendencies. Recovery of the Automotive sector is still going on. Production figures for the construction industry grew slightly at the beginning of 2011, but show slightly decreasing tendencies since August 2011. Production in the more crisis-resistant Food and Beverages sector still remains on a constant level.

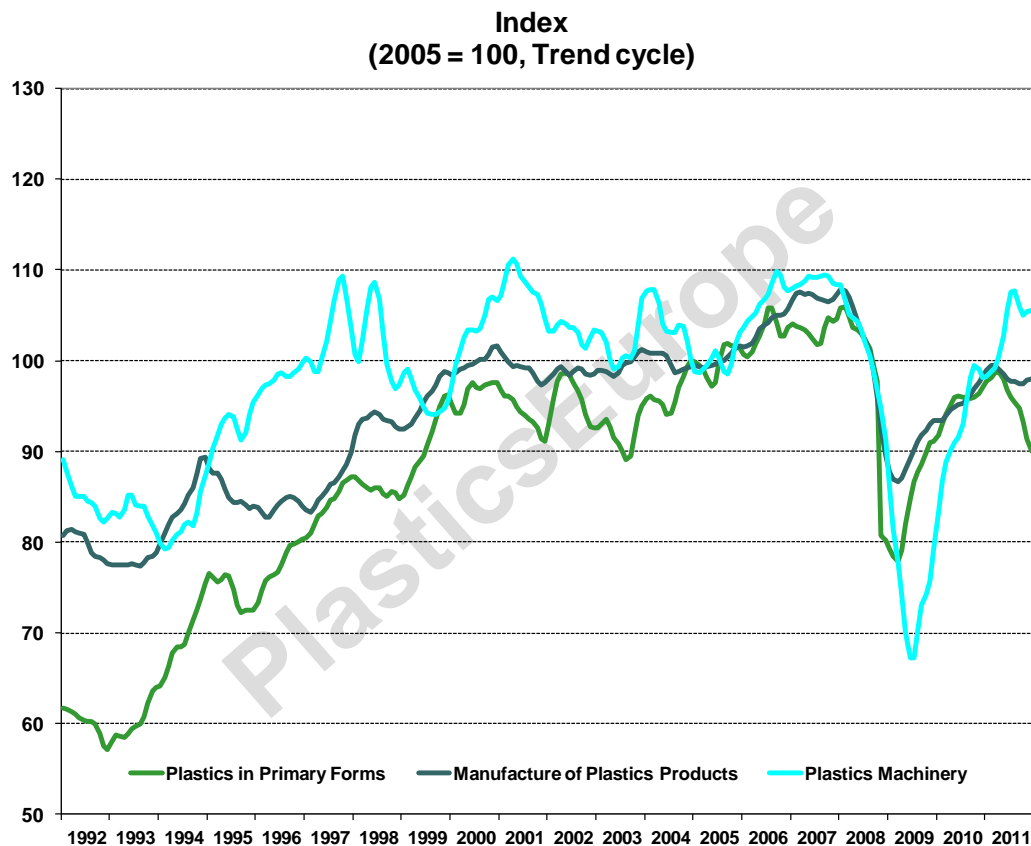
External Trade

Export growth of Primary Plastics was strengthening in the second half of 2010 and has reached its peak at the end of 2010. Also export quantities of Plastics Products grew until the end of 2010, but showed primarily decreasing tendencies in 2011. Last months showed more constant exports for Primary Plastics and slightly growing exports of Plastics Products.

Outlook

The end of the year 2011 showed diverging tendencies in the key-sectors of the EU27 Plastics Industry. The same applies to Plastics Industry producer prices. Therefore, trends and developments for the following months in the EU27 Plastics Industry seem to vary in the different segments.

European Union (EU27) Plastics Industry Production

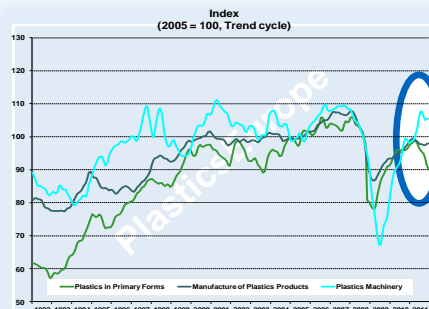


Actual data status of Production: 12/2011

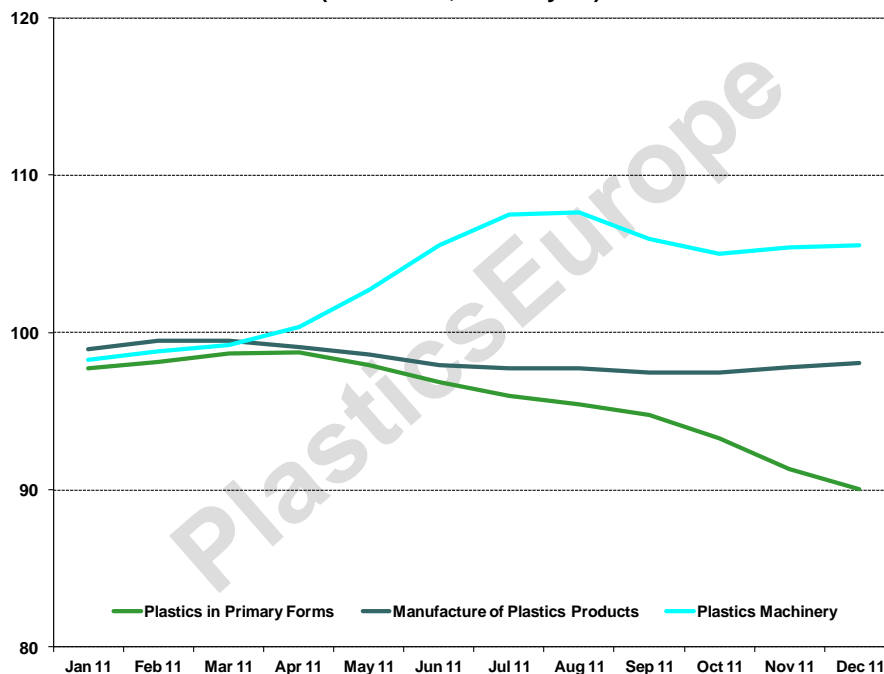
Plastics Industry Production by long term view (1992-2011):

- Long time series shows strong growth for production of Primary Plastics and Plastics Products during the 1990's and a more sideways development from 2000 to 2005. Plastics Machinery shows a more fluctuating development in long-term view.
- After strong growth in all the three segments in 2006 and more constant development in 2007, the effects of the economical crisis are clearly recognizable in 2008 and first half of 2009.
- Economic recovery since mid 2009 in all the three segments: Plastics in Primary Forms, Plastics Products and Plastics Machinery.

European Union (EU27) Plastics Industry Production



Index - Last 12 months
(2005 = 100, Trend cycle)



Plastics Industry Production by short-term view (last 12 months):

- Strong growth of Plastics Machinery sector has stopped in August 2011. November and December 2011 showed more sideways tendencies.
- The development of Plastics Products production shows a sideways movement during the last months.
- The decline in production figures for Plastics in Primary Forms continues. The negative trend now holds for the eighth consecutive month.

European Union (EU27) Plastics Industry Production

Production Index (working day adjusted)

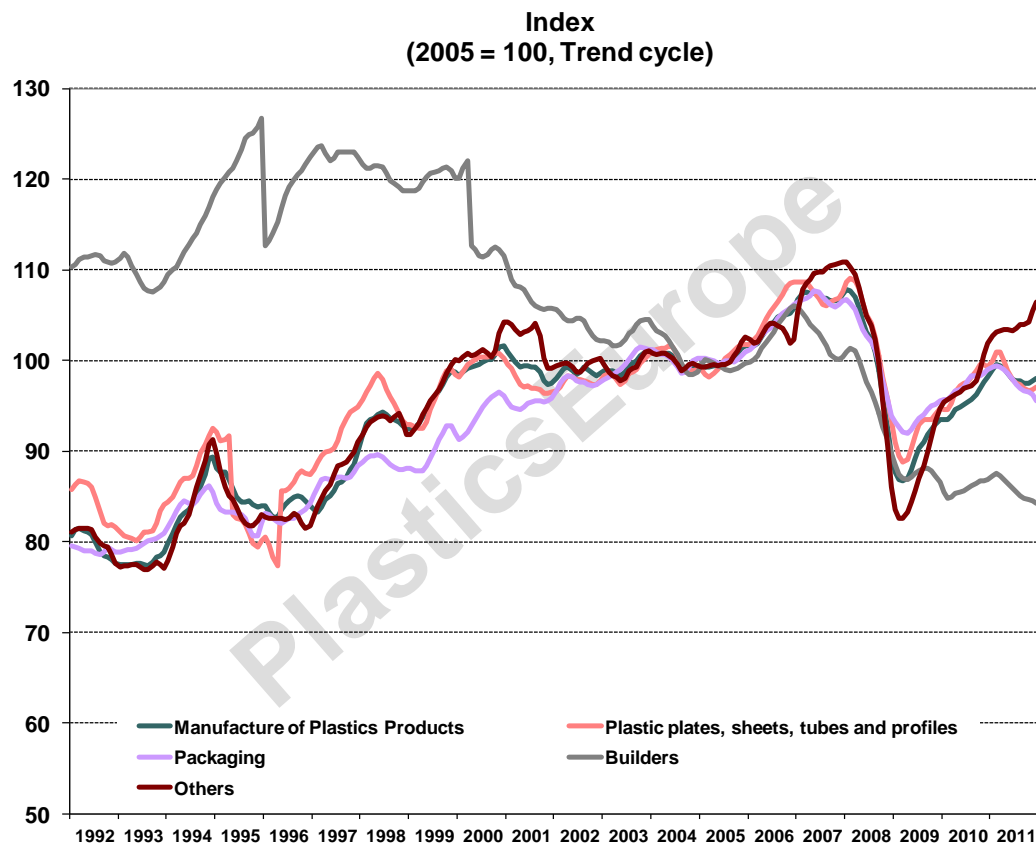
Sectors	Dec 11	Jan - Dec 11	Dec 11	Jan - Dec 11
	Index 2005 = 100		y-o-y (%)	
Primary Plastics	74,6	95,8	-8,8	0,6
Plastics Products	76,6	98,3	0,5	3,2
Plastics Machinery	126,6	103,7	10,6	11,2

Production Index (Trend cycle)

Sectors	Sep 11	Okt 11	Nov 11	Dec 11
	Change in % against previous month			
Primary Plastics	-0,7	-1,6	-2,1	-1,5
Plastics Products	-0,2	0,0	0,3	0,2
Plastics Machinery	-1,6	-0,9	0,4	0,1

- The year 2011 showed increasing production figures compared to 2010. The strongest increase by far was recorded for the Plastics Machinery sector with +11,2%. Production of Plastics Products increased by 3,2%, while Primary Plastics recorded a slight growth of 0,6%.
- Compared to previous month, Primary Plastics Production in December decreased again by 1,5%. Thus, the recent downward trend continues.
- Production of Plastics Products and Plastics Machinery showed a more or less constant development in December 2011.

European Union (EU27) Manufacturing of Plastics Products



- From mid 2009 to end of 2010 main segments of Plastics Products, except "Builders", have recovered strongly after the deep recession.
- 2011 showed slightly decreasing trends for all of the Plastics Products sub-categories until October, except for "Others".
- Latest figures for November and December 2011 showed slightly positive trends for "Plates, Sheets, Tubes and Profiles" and "Other Plastics Products", but further on decreasing tendencies for "Packaging" and the "Builders" segment.

For the classification of the segments, see under "Definitions" on last page

Actual data status of Production: 12/2011

European Union (EU27) Manufacturing of Plastics Products

Production Index (working day adjusted)

Sectors	Dec 11	Jan - Dec 11	Dec 11	Jan - Dec 11
	Index 2005 = 100		y-o-y (%)	
Plastics Products	76,6	98,3	0,5	3,2
Plates, Sheets, Tubes and Profiles	70,2	98,5	1,0	1,4
Packaging	77,3	97,8	-5,0	0,5
Builders	68,2	86,3	-2,0	0,4
Others	84,3	103,6	4,8	6,6

Production Index (Trend cycle)

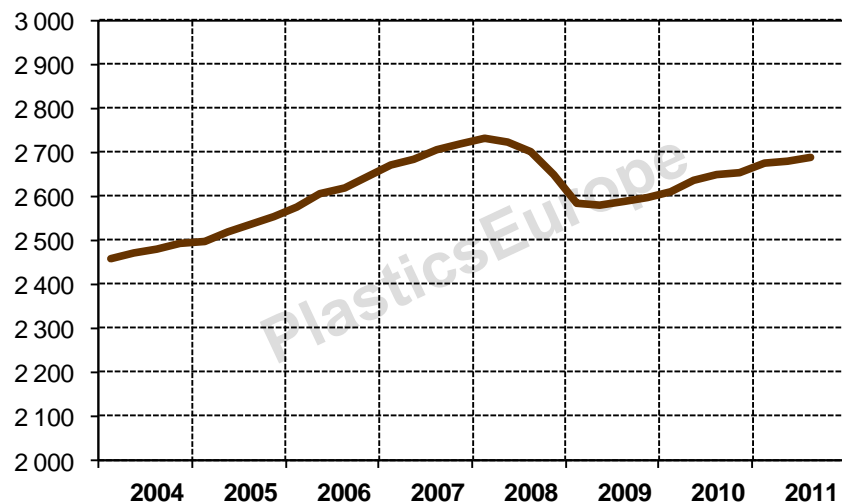
Sectors	Sep 11	Okt 11	Nov 11	Dec 11
	Change in % against previous month			
Plastics Products	-0,2	0,0	0,3	0,2
Plates, Sheets, Tubes and Profiles	-0,4	-0,4	0,2	0,4
Packaging	-0,3	-0,1	-0,3	-0,7
Builders	-0,4	-0,2	-0,1	-0,3
Others	0,0	0,4	1,1	1,0

- Compared to 2010 production figures in 2011 increased within all of the Plastics Products sub-categories. The total growth was 3,2% in 2011.
- The strongest growth rate was recorded for “Other Plastics Products” with 6,6%. “Plates, Sheets, Tubes and Profiles”, “Packaging” and “Builders” also increased by rates between 0,4 and 1,4%.
- Latest figures for November and December 2011 showed slightly positive trends for “Plates, Sheets, Tubes and Profiles” and “Other Plastics Products”, but further on slightly decreasing tendencies for “Packaging” and the “Builders” segment.

European Union (EU27) GDP, Chemical and Plastics Industry

GDP real

bn Euro - seasonally adjusted, at 2000 prices, quarterly -

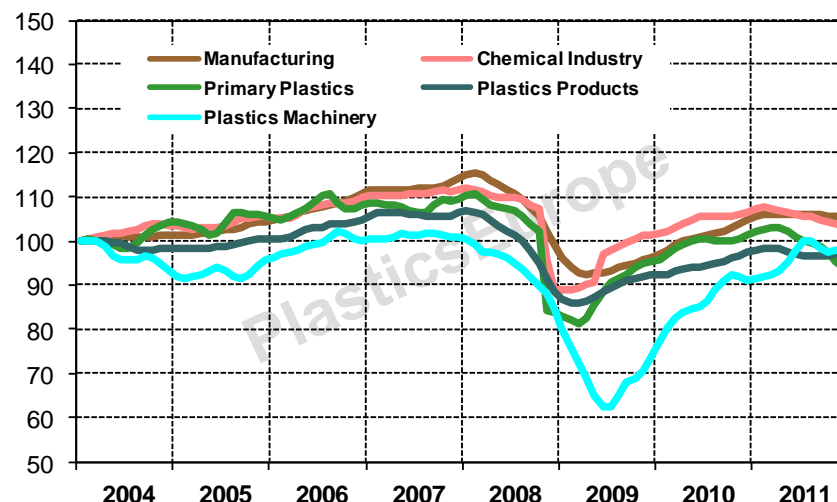


Actual data status: Q3/2011

- EU27 GDP increased by 1,8% in 2010, compared to 2009.
- In the third quarter of 2011 the GDP increased by another 0,2% compared to second quarter.
- Actual estimations of Eurostat for EU27 GDP growth rates (year on year):
2011: +1,6%, 2012: +0,6%

Manufacturing, Chemical and Plastics Industry

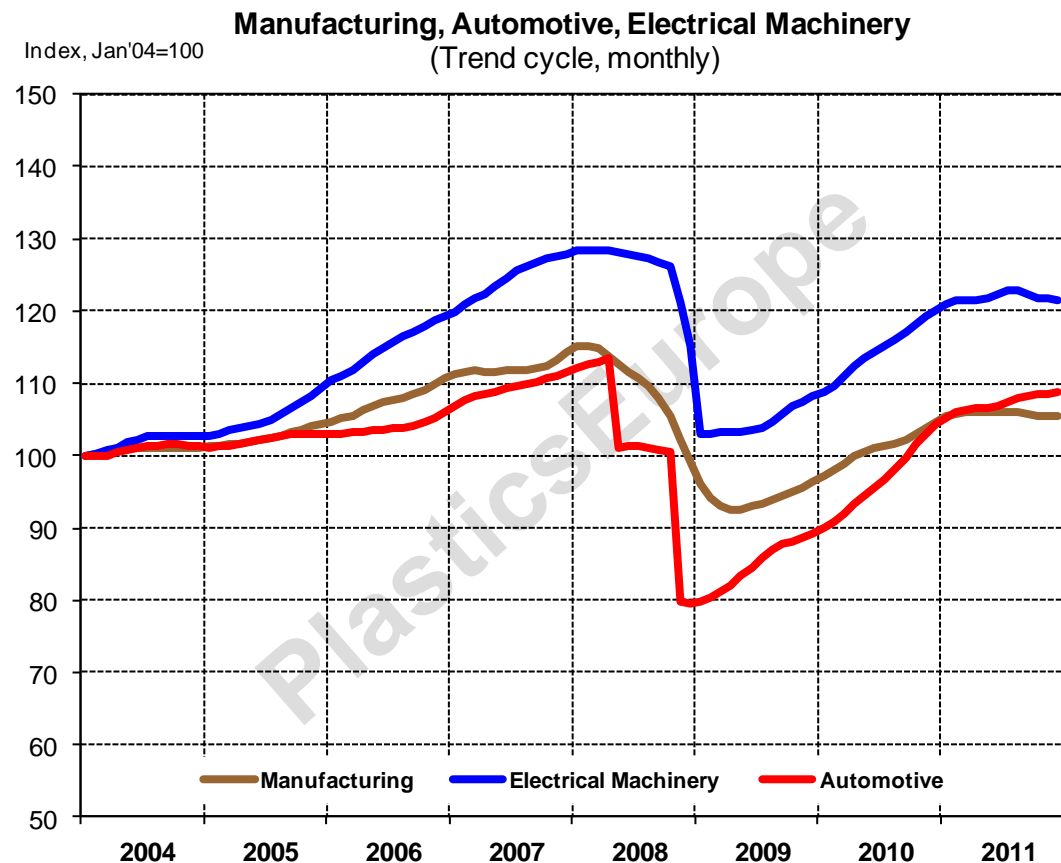
Index, Jan'04=100 - Trend cycle, monthly -



Actual data status of Production: 12/2011

- Uptrend in the Chemical Industry as well as in Total Manufacturing has lasted until the first quarter of 2011. Since then, slightly decreasing tendencies can be observed.
- Also, slight downward trend in the second half of 2011 for production of Primary Plastics and Plastics Machinery, while Plastics Products showed a more or less constant development.

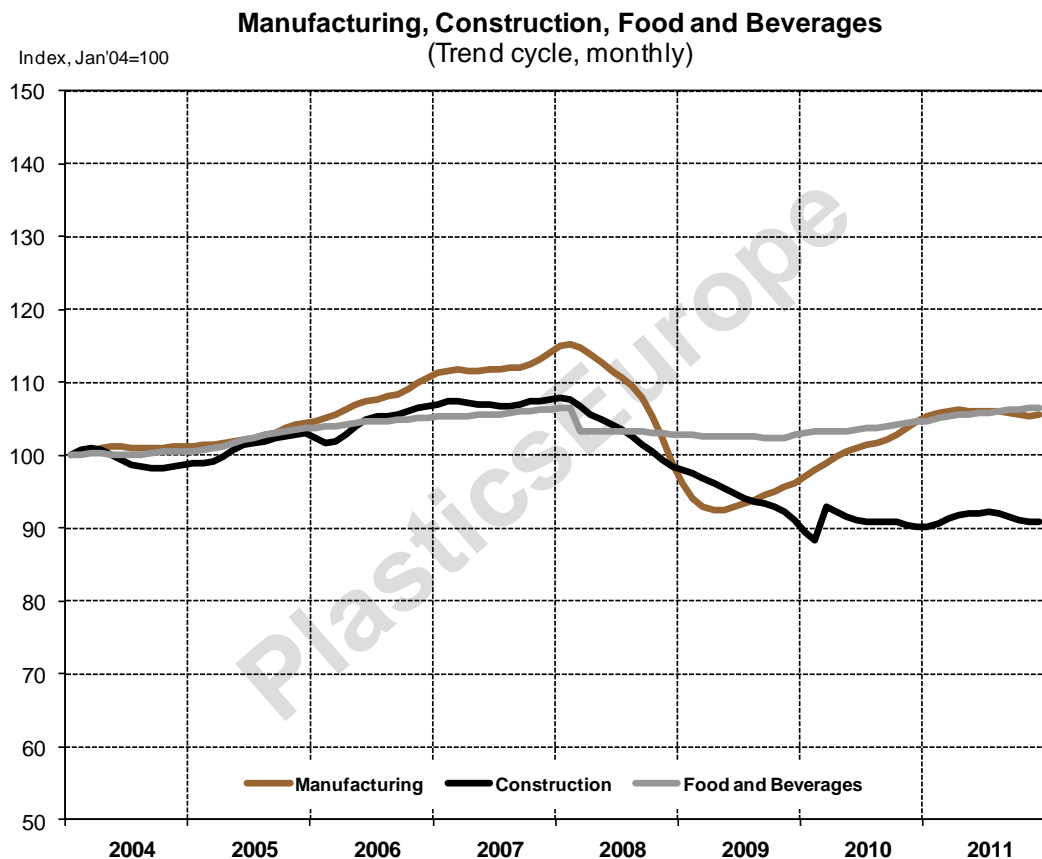
European Union (EU27) Plastics Customer Industries - Part I



- Continuing recovery in the EU27's Manufacturing Industry since 2009, but with more sideway tendency since the second quarter of 2011.
- Recovery in the Automotive Industry is going on in 2011.
- Upward trend in the Electrical Machinery Industry continued until August 2011, but shows a slightly decreasing tendency since September.
- Industrial production activity in the EU27 is still below the pre-crisis level.

Actual data status of Production: 12/2011

European Union (EU27) Plastics Customer Industries - Part II

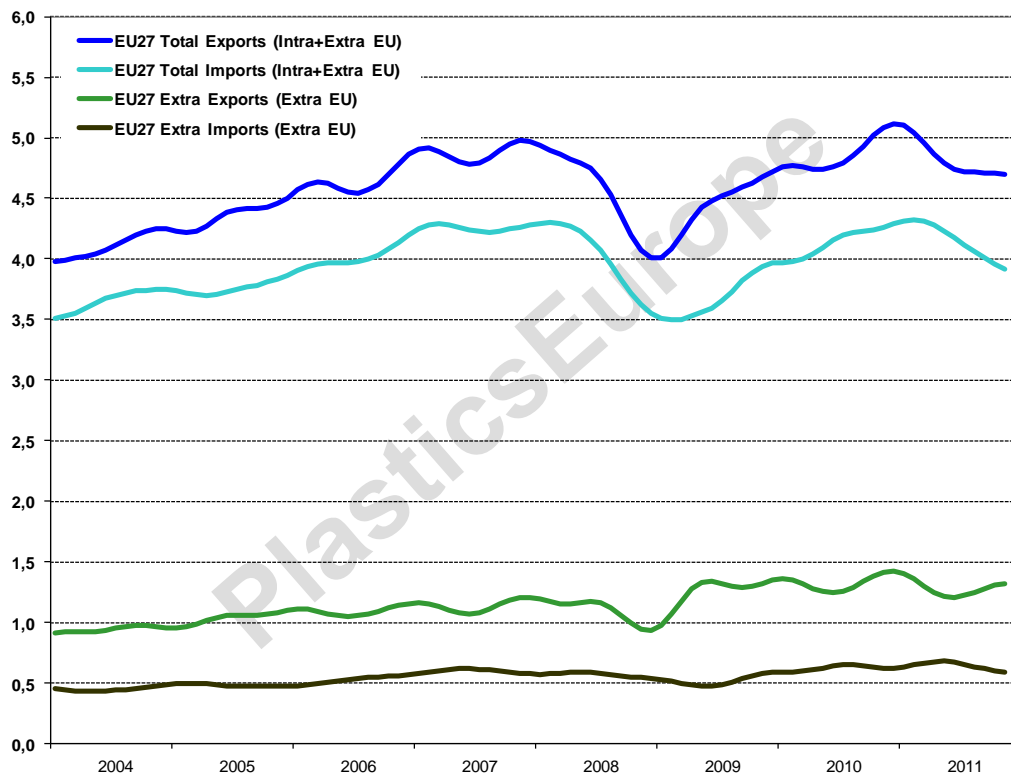


- After increasing development in the construction industry in the first half of 2011, production figures show slightly decreasing tendencies again since August.
- The food and beverages industry was less hit by the recession than other industries.

Actual data status of Production: 12/2011

European Union (EU27) Trade Primary Plastics

Trends in EU27 Trade with Primary Plastics
(Mio tons, Trend cycle, monthly)



- Total EU27 Export quantity of Primary Plastics has reached its peak at the end of 2010. The same applies to EU27 Extra Exports.
- Import quantities from Extra EU27 show a constant development, while Total Imports show a decreasing trend.
- During the last years the Extra EU Import share grew to 15,1% in 2010. With 15,4%, January to November shows a slightly higher rate for 2011. The Extra EU Export share is actually slightly lower than in 2010 (26,4% from January to November 2011 compared to 27,3% in 2010).

Extra EU Trade - Primary Plastics
Share in Total (%)

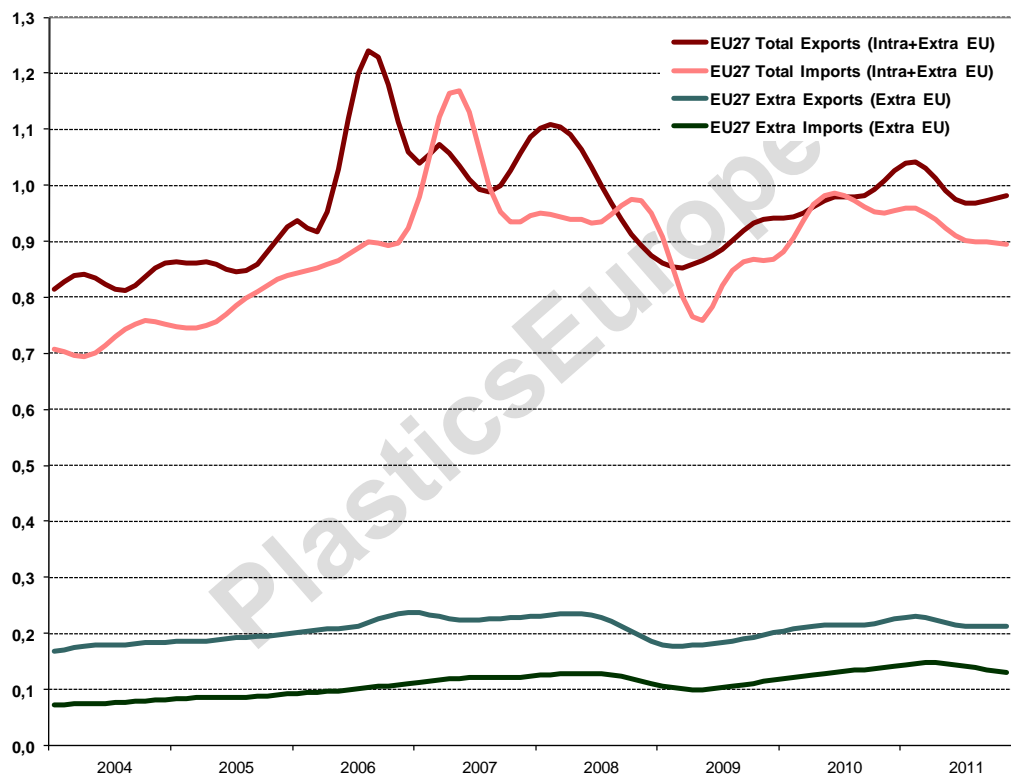
Year	Exports	Imports
2004	23,0	12,2
2005	23,8	13,0
2006	23,5	13,2
2007	23,2	14,2
2008	24,1	14,2
2009	28,4	14,1
2010	27,3	15,1
2011YTD 11	26,4	15,4

Actual data status of EU27 Trade: 11/2011

Intra EU Trade: Trade between the Member States of the European Union

Extra EU Trade: Trade of the European Union with Non-Member Countries

Trends in EU27 Trade with Plastics Products
(Mio tons, Trend cycle, monthly)



- After two years of Total Exports growth, quantities in 2011 showed primarily decreasing tendencies. Since September 2011 Total Exports grow again. Total Imports show a stable development since mid 2011.
- Extra EU Imports and Extra EU Exports increased in 2009 and 2010, but now show more or less constant tendencies.
- The share of Extra EU Imports increased over the last years. Corresponding Extra EU Export share has also increased in 2010.

Extra EU Trade - Plastics Products
Share in Total (%)

<u>Year</u>	<u>Exports</u>	<u>Imports</u>
2004	21,5	10,6
2005	22,1	11,1
2006	20,0	11,4
2007	21,9	11,5
2008	22,0	12,9
2009	20,8	12,9
2010	22,0	13,7
2011YTD 11	21,8	15,5

Actual data status of EU27 Trade: 11/2011

Intra EU Trade: Trade between the Member States of the European Union

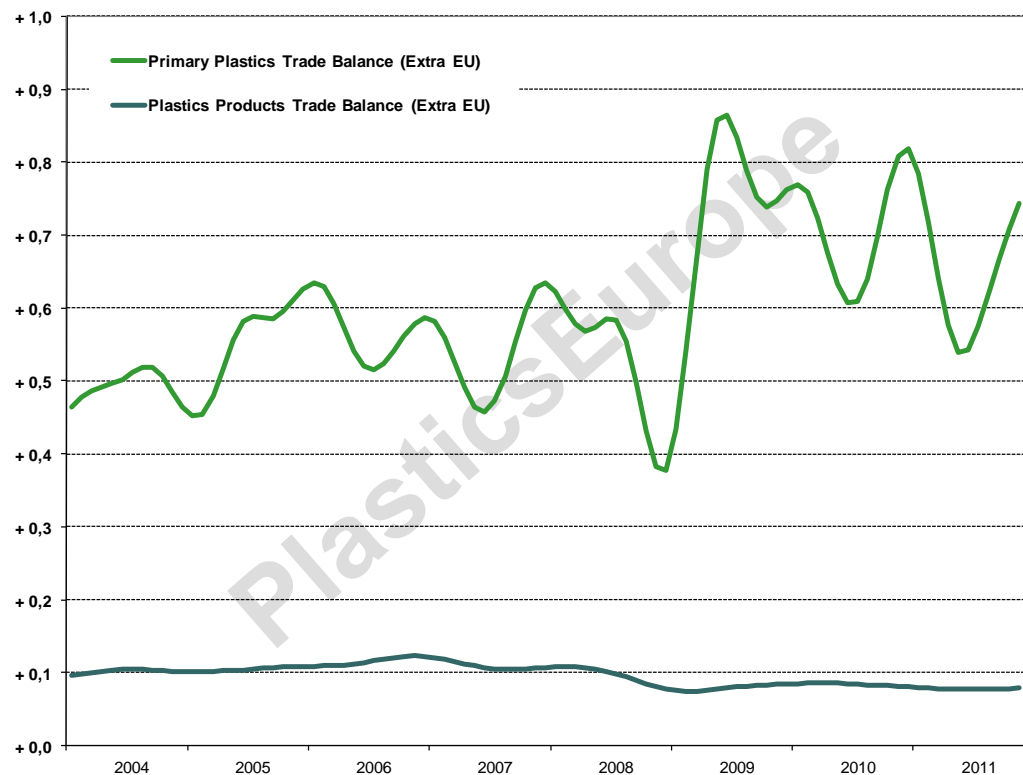
Extra EU Trade: Trade of the European Union with Non-Member Countries

European Union (EU27) Trade Balance with Non-Member Countries

EU27 Plastics Industry: Trade Balance with Non-Member Countries

(+ Surplus, - Deficit)

(Mio tons, Trend cycle, monthly)



Actual data status of EU27 Trade: 11/2011

- Record trade surplus of EU27 Primary Plastics Industry with Non-Member Countries in 2009, 2010 with a slightly lower trade surplus.
- Decreasing trend of Extra EU trade surplus for Primary Plastics has stopped in June 2011. Since then, trade surplus grows again.
- Since 2004 Plastics Products have registered a stable surplus in Extra EU trade of about 1 Mio tons per year, which was also reached in 2010.

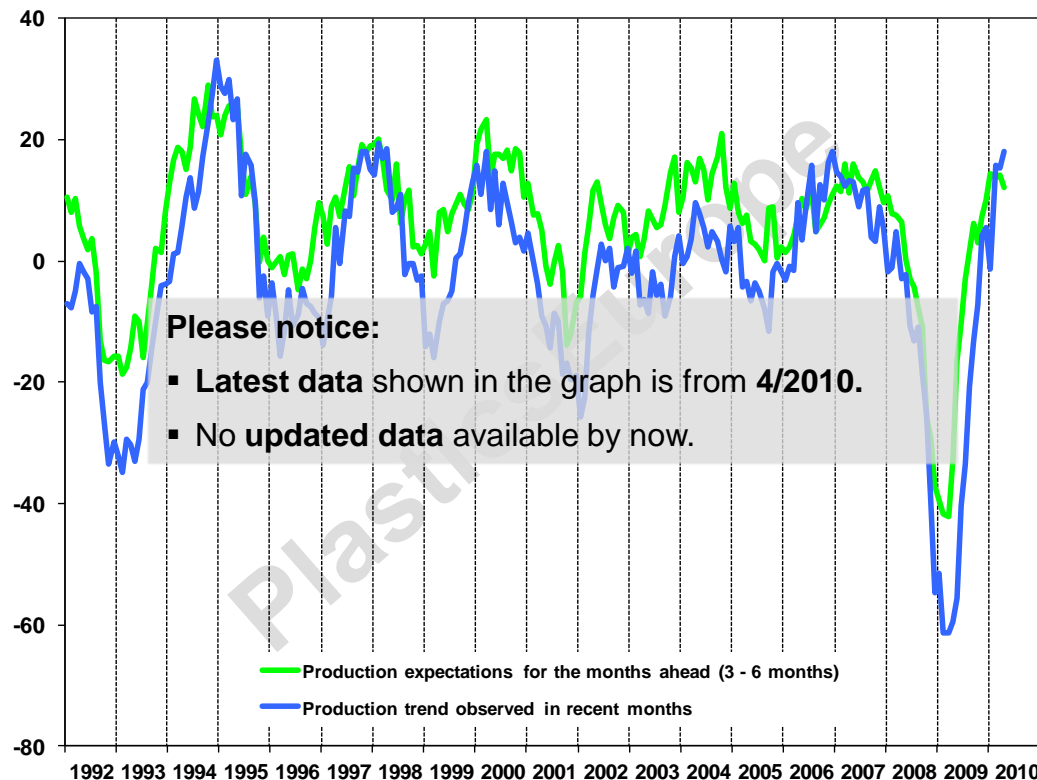
Extra EU27 Trade Balance (Mio tons) (+ Surplus, - Deficit)

Year	Primary Plastics	Plastics Products
2004	+ 6,02	+ 1,24
2005	+ 6,55	+ 1,25
2006	+ 6,74	+ 1,39
2007	+ 6,36	+ 1,29
2008	+ 6,41	+ 1,17
2009	+ 8,93	+ 0,96
2010	+ 8,37	+ 1,00
2011YTD 11	+ 7,07	+ 0,87

European Union (EU27) Outlook Manufacturing of Plastics Products

Balance of positive and negative answers, seasonally adjusted

balance in % (+ increasing production, 0 remain unchanged, - decreasing production)



- Managers' assessments of the production trend, observed in April 2010 has further improved, compared to the previous months.
- With regard to the business outlook for the months ahead, a stable majority of companies reports positive production expectations.
- Positive Managers' assessments in the EU27 Plastics Products Industry correspond to the positive year on year growth in production in the first months of 2010.

Production Expectations

balance in %

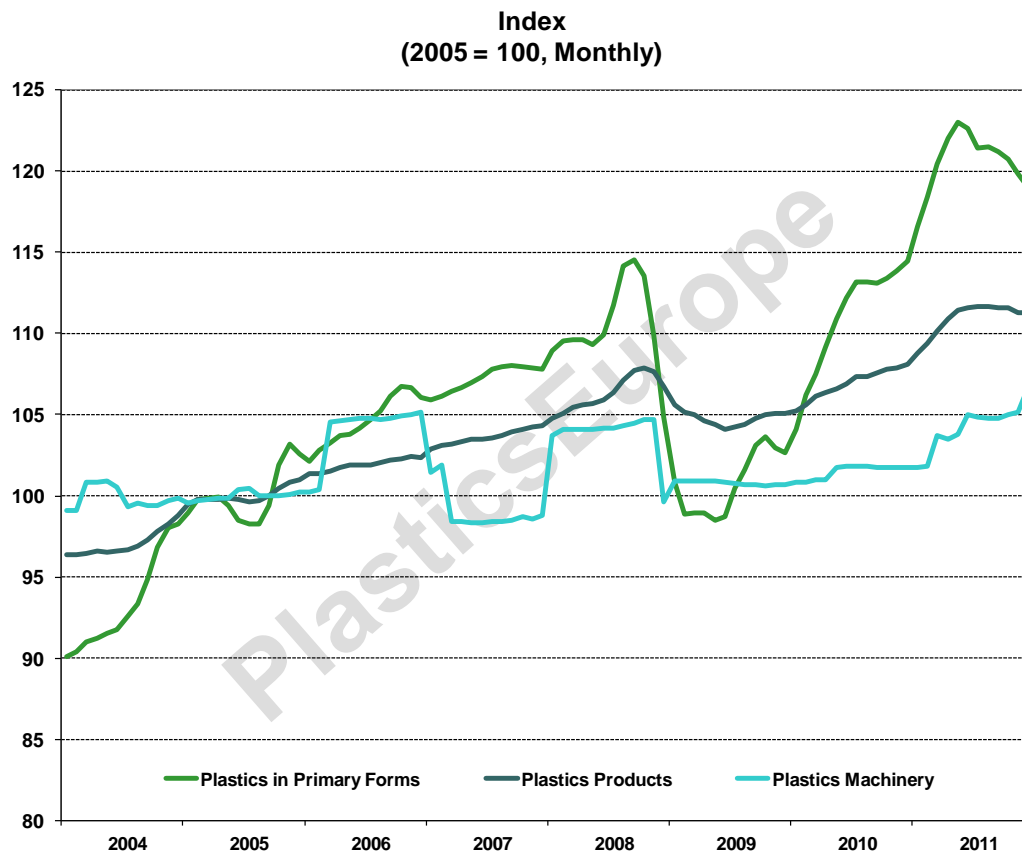
Mai 09	-16
Jun 09	-10
Jul 09	-3
Aug 09	2
Sep 09	6
Okt 09	3
Nov 09	7
Dez 09	10
Jan 10	14
Feb 10	14
Mrz 10	14
Apr 10	12

Actual data status: 04/2010

The business surveys includes the EU27 Plastics Products Industry (incl. Rubber).

Important notice: With effect from May 2010, the new Nomenclature of Economic Activities (NACE Rev.2) is used for the classification of business survey results, while data up to April 2010 are based on NACE Rev.1. Historic survey data and aggregates based on the NACE2 nomenclature will be made available by the European Commission probably in Autumn 2011.

European Union (EU27) Plastics Industry Producer Prices



- Fluctuating trend of Primary Plastics, Plastics Products and Plastics Machinery output prices during the last years.
- Primary Plastics prices have grown noticeably from Q4 2010 to a new peak in May 2011. The second half 2011 showed a decreasing price index.
- Prices for Plastics Products increased until the beginning of 2011, but now remain on almost the same level since Q2 2011.
- After some months of stable price development in the Plastics Machinery segment in 2011, prices increased again at the end of the year.

Producer Prices: Total Output Prices (Domestic Market + Foreign Market)

Remark:

After consulting VDMA and Eurostat, the jump in the price series with Plastics Machinery from 2009 to 2010 comes from a country that has supplied confidential data (UK, Sweden or Spain)

Actual data status of Production: 12/2011

European Union (EU27) Plastics Industry Producer Prices

Producer price index (cumulative)

Sectors	Dec 11	Jan - Dec 11	Dec 11	Jan - Dec 11
	Index 2005 = 100		y-o-y (%)	
Primary Plastics	119,0	120,6	4,0	8,7
Plastics Products	111,3	110,9	2,9	3,8
Plastics Machinery	106,8	104,2	4,9	2,7

Producer Prices: Total Output Prices (Domestic Market + Foreign Market)

Producer price index (monthly)

Sectors	Sep 11	Okt 11	Nov 11	Dec 11
	Change in % against previous month			
Primary Plastics	-0,2	-0,4	-0,8	-0,7
Plastics Products	-0,1	0,0	-0,2	0,0
Plastics Machinery	0,0	0,2	0,2	1,5

- **Primary Plastics**

Compared to 2010 prices clearly increased in 2011 (+8,7%), but last months showed decreasing price tendencies for Primary Plastics.

- **Plastics Products**

With +3,8% the Plastics Products segment showed an increasing price trend in 2011 compared to 2010. Since June 2011 prices remain on a more or less stable level.

- **Plastics Machinery**

Compared to 2010, prices for Plastics Machinery in 2011 had been 2,7% higher. After constant development during the second half of 2011, prices increased again at the end of the year.

Data Source: Eurostat, European Commission Economic and Financial Affairs (Business Surveys)

Classification of Economic Activities: New Nace Rev.2 Classification of Eurostat since 2009

Sectors of the plastics industry are classified by the following NACE codes: C2016 (Plastics in Primary Forms), C222 (Manufacture of Plastics Products), C2221 (Plates, Sheets, Tubes and Profiles), C2222 (Packaging), C2223 (Builders), C2224 (Others), C2896 (Plastics Machinery incl. Rubber)

Main plastics related industries NACE codes: C10_12 (Food and Beverages), C20 (Chemical Industry excl. Pharmaceuticals), C26_27 (Electrical Machinery), C291 (Automotive), F (Construction)

Production index (base year 2005 = 100) is presented as "working-day-adjusted" and as "Trend-cycle". The Trend-cycle is calculated by smoothing averages from working-day and seasonally adjusted data. Eurostat uses statistically and internationally accepted methods (Census X-12) for the seasonal adjustment of time series

The producer price index for the plastics industry (base year 2005 = 100) measures the average price development of all goods resulting from that activity that are sold on the domestic market and foreign markets. The producer price index for the plastics industry is divided by Nace C2016 (Plastics in Primary Forms), C222 (Manufacture of Plastics Products) and C296 (Plastics Machinery incl. Rubber)

GDP real: Gross Domestic Product at 2000 prices and exchange rates, seasonally adjusted

Business Surveys: The results of the business surveys are based on representative samples of companies in the EU27 Plastics Products Industry (incl. Rubber Industry). Managers' answers obtained from the surveys are aggregated in the form of "Balances". Balances are constructed as the difference between the percentages of respondents giving positive and negative replies. The EU Commission seasonally adjusts the balance series.



Plastics

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