



European Plastics Industry (EU 27)

PlasticsEurope Market Research Group

Statistical Monitoring April 2012

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 18.

Last Update: April 24, 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 Primary Plastics showed decreasing tendencies, but now remains stable since November 2011. Also Plastics Products remains more or less stable since mid 2011. The Plastics Machinery sector grows further on at the beginning of 2012.

Sectors

Across sectors, developments in 2011 were somewhat uneven. **Production quantities** of Primary Plastics showed primarily decreasing tendencies in 2011, but now remain stable since November 2011. The Plastics Products sector further on remains more or less stable during the last months and the Plastics Machinery sector continues its growth.

Plastics Industry **producer prices** develop quite differently at the end of 2011 and beginning of 2012. Prices for Primary Plastics show signs of a new increase in January and February 2012 after primarily decreasing tendencies at the end of 2011. Plastics Products prices remain on a stable level and Plastics Machinery prices continue to grow.

End use Industries

The Electrical Machinery Industry's production shows a sideway movement since mid 2011. The upward trend in the Automotive sector came to an end in mid 2011. Production figures for the construction industry grew slightly since the beginning of 2011 but show decreasing tendencies since third quarter of 2011 again. Production in the more crisis-resistant Food and Beverages sector further on with a more or less sideway movement.

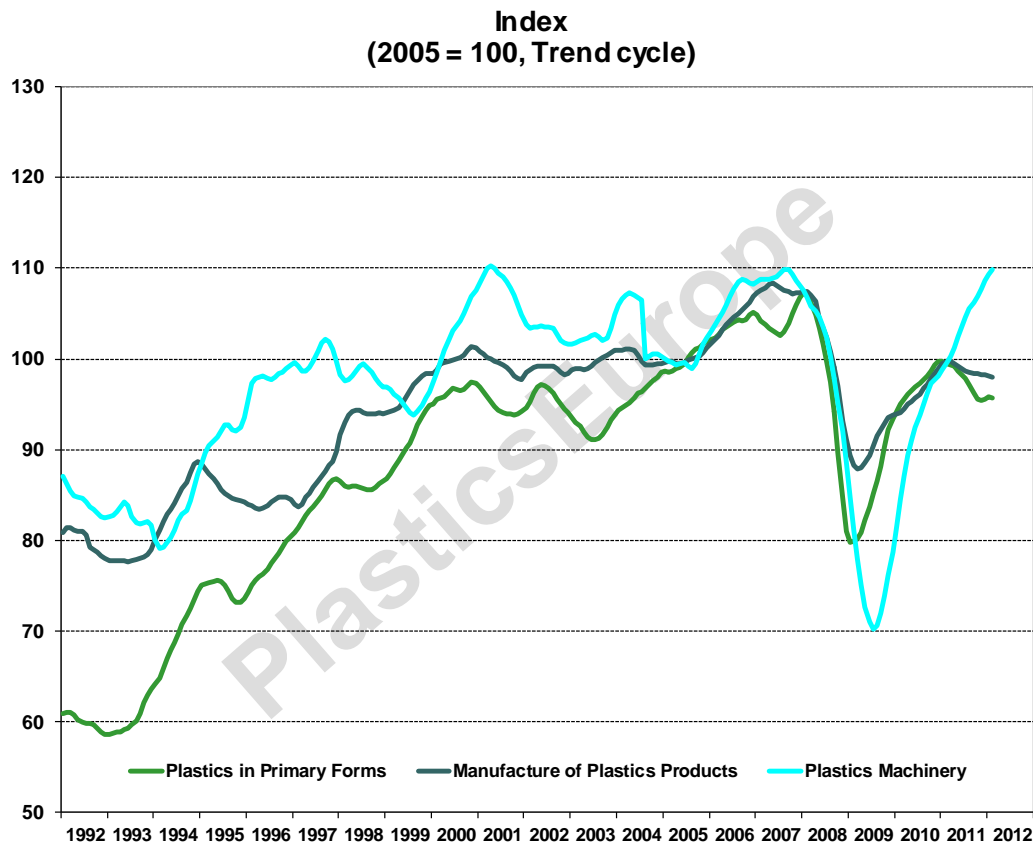
External Trade

Total export quantities of Primary Plastics have reached its peak at the end of 2010. The first half of 2011 showed decreasing export tendencies, but since the second half year export quantities are increasing again. Exports of Plastics Products develop in a quite similar way: Decreasing tendencies in the first half of 2011 and constant to slightly increasing tendency since mid 2011. Total import quantities show a sideway movement for Primary Plastics and a primarily decreasing trend for Plastics Products.

Outlook

Plastics Machinery sector was a major driver in EU27 Plastics' Industry during recent months. The more or less stable development in production figures for both Primary Plastics and Plastics Products at the end of 2011 and beginning of 2012 as well as increasing producer prices after a longer period of stagnation for both sectors give slightly positive signals for the future.

European Union (EU27) Plastics Industry Production

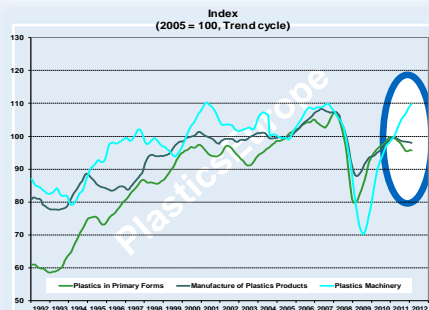


Actual data status of Production: 02/2012

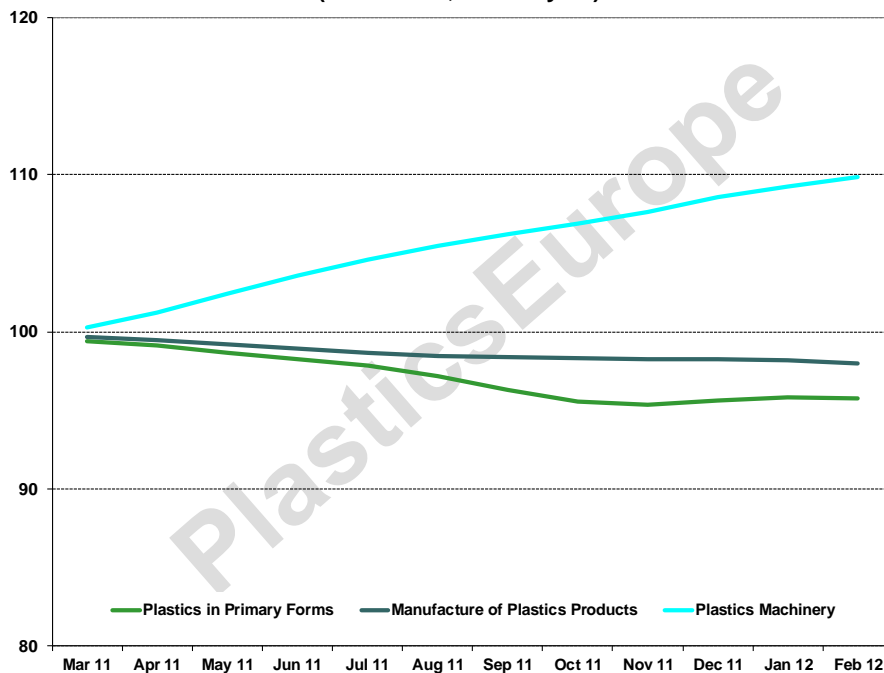
Plastics Industry Production by long term view (1992-2012):

- 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 still continues.
- The development of Plastics Products production shows a sideways movement during the last months.
- The decline in production figures for Plastics in Primary Forms seems to have stopped at the end of 2011.

European Union (EU27) Plastics Industry Production

Production Index (working day adjusted)

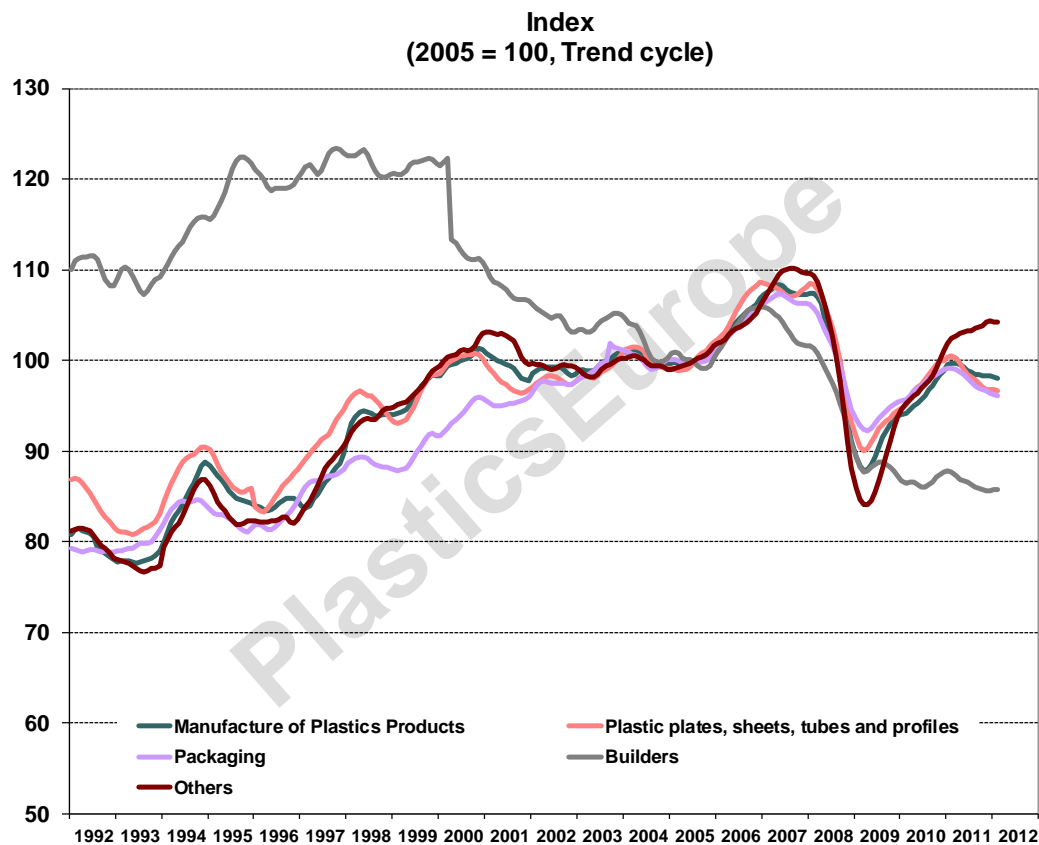
Sectors	Feb 12	Jan - Feb 12	Feb 12	Jan - Feb 12
	Index 2005 = 100		y-o-y (%)	
Primary Plastics	93.7	95.3	-2.6	-2.9
Plastics Products	94.6	94.9	-2.8	-1.7
Plastics Machinery	105.7	99.5	15.1	12.6

Production Index (Trend cycle)

Sectors	Nov 11	Dec 11	Jan 12	Feb 12
	Change in % against previous month			
Primary Plastics	-0.2	0.3	0.2	-0.1
Plastics Products	-0.1	0.0	-0.1	-0.2
Plastics Machinery	0.7	0.9	0.6	0.5

- The first to months of 2012 show increasing production figures compared to the same period in 2011 for the Plastics Machinery sector, which grew by 12.6%. Production of Primary Plastics (-2.9%) and Plastics Products (-1.7%) show a slight decrease.
- Plastics Machinery production with continuing upward trend in recent months.
- Production of Primary Plastics and Plastics Products with a more or less constant development in recent months.

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 and the beginning of 2012 showed slightly decreasing trends for most of the Plastics Products sub-categories except for "Others".

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

Actual data status of Production: 02/2012

European Union (EU27) Manufacturing of Plastics Products

Production Index (working day adjusted)

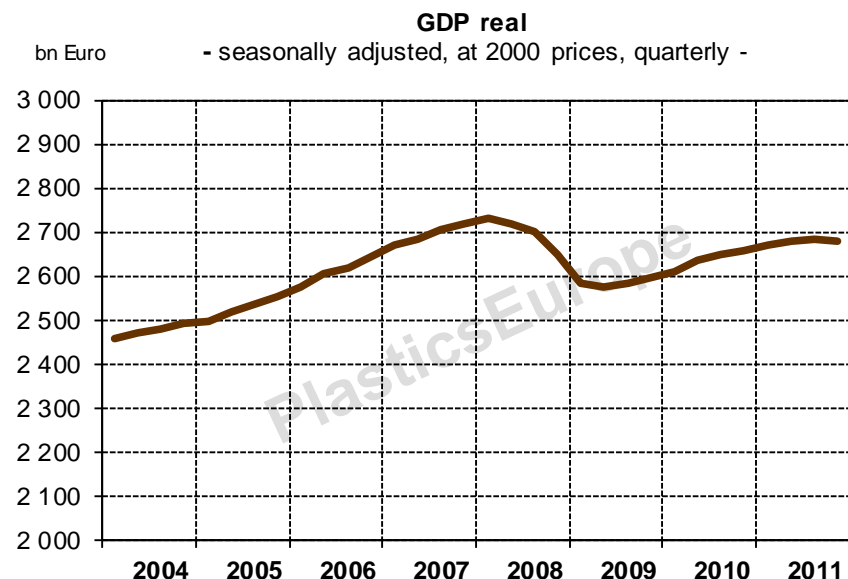
Sectors	Feb 12	Jan - Feb 12	Feb 12	Jan - Feb 12
	Index 2005 = 100		y-o-y (%)	
Plastics Products	94.6	94.9	-2.8	-1.7
Plates, Sheets, Tubes and Profiles	94.6	93.9	-5.1	-4.1
Packaging	93.8	94.3	-3.9	-2.8
Builders	77.1	77.0	-2.7	-1.5
Others	102.4	102.7	0.2	1.0

Production Index (Trend cycle)

Sectors	Nov 11	Dec 11	Jan 12	Feb 12
	Change in % against previous month			
Plastics Products	-0.1	0.0	-0.1	-0.2
Plates, Sheets, Tubes and Profiles	-0.3	0.0	0.0	-0.2
Packaging	-0.2	-0.2	-0.1	-0.2
Builders	-0.2	0.0	0.2	-0.1
Others	0.3	0.1	0.0	-0.1

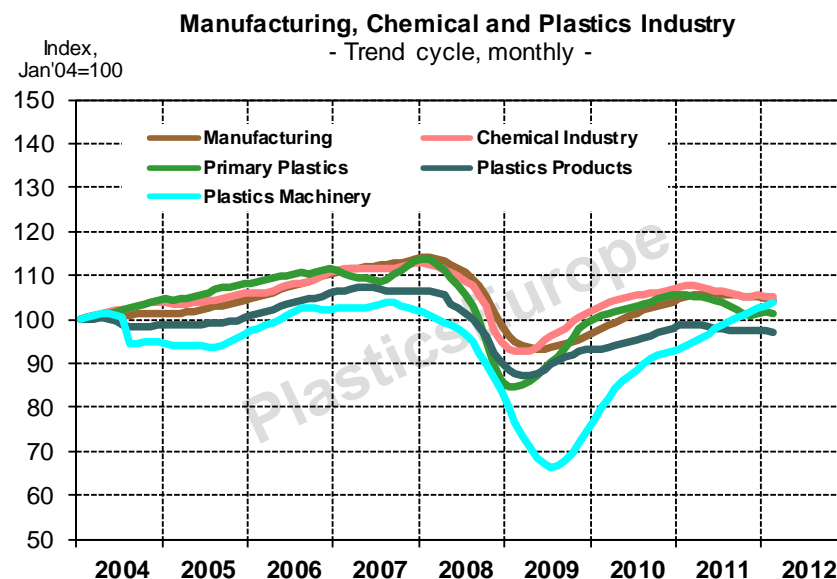
- Compared to the first two months of 2011, production figures in the same period 2012 decreased within all of the Plastics Products sub-categories except for “Others”.
- The strongest decline was recorded for “Plates, Sheets, Tubes and Profiles” with -4.1%. “Other Plastics Products” showed a slight growth compared to the same period in 2011.
- “Packaging” and “Plates, Sheets, Tubes and Profiles” with negative trend in recent months. “Builders” and “Others” with sideways movement.

European Union (EU27) GDP, Chemical and Plastics Industry



Actual data status: Q4/2011

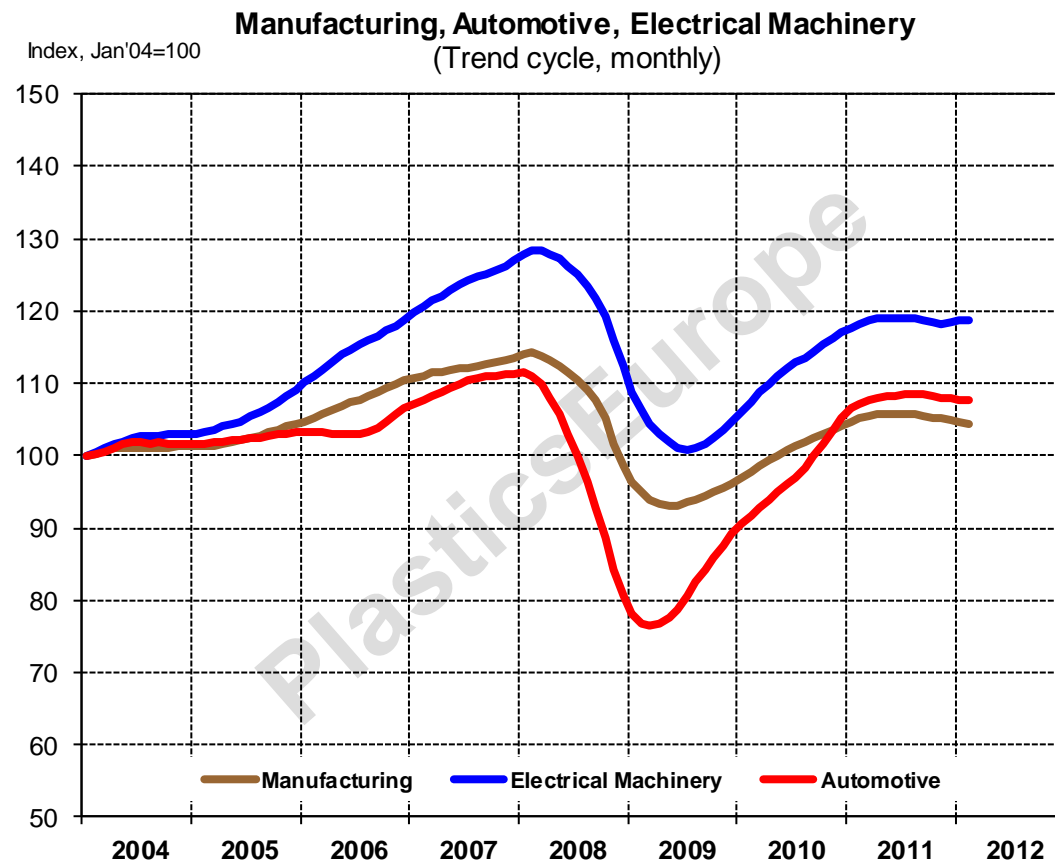
- EU27 GDP increased by 1.5% in 2011, compared to 2010.
- In the fourth quarter of 2011 the GDP decreased by 0.3% compared to third quarter.
- Actual estimations of Eurostat for EU27 GDP growth rates (year on year):
2012: +/-0%, 2013: +1.5%



Actual data status of Production: 02/2012

- Uptrend in the Chemical Industry as well as in Total Manufacturing has lasted until the first quarter of 2011. Since then, both with slightly decreasing tendencies and now constant tendencies since a couple of month.
- Also, slight downward trend since the beginning of 2011 for production of Primary Plastics and Plastics Products. Plastics Machinery still with continuing growth.

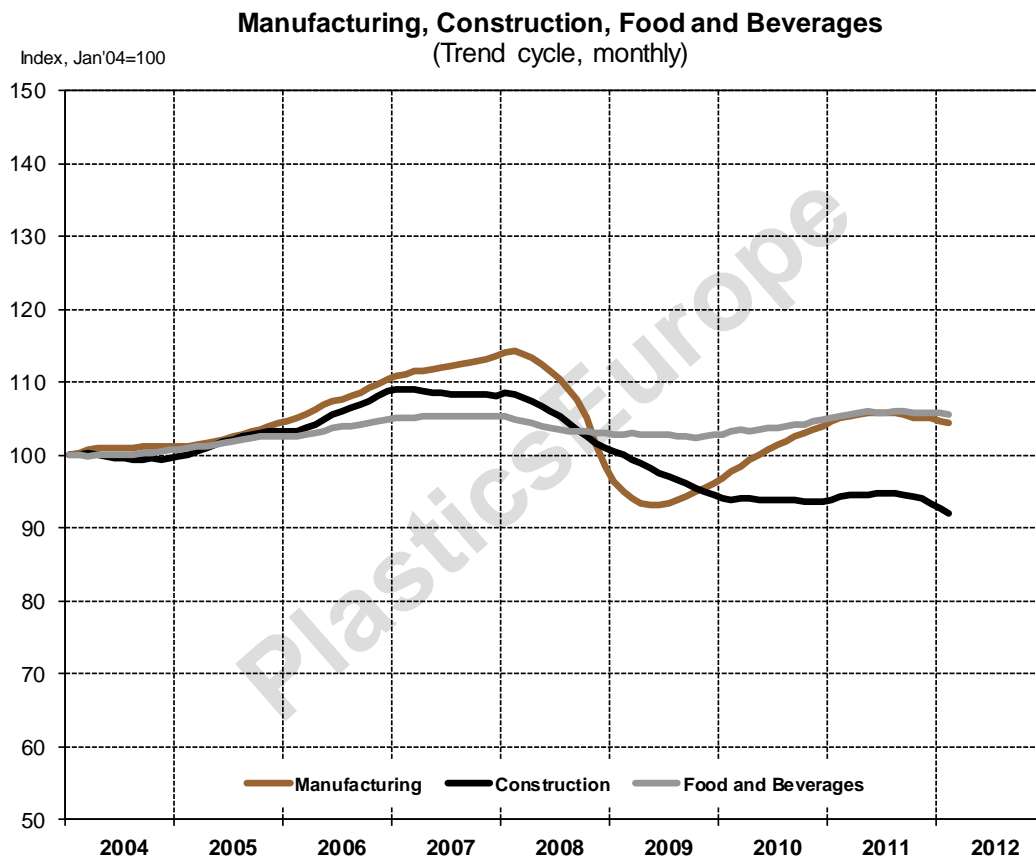
European Union (EU27) Plastics Customer Industries - Part I



- Recovery in the EU27's Manufacturing Industry since 2009, but with slightly decreasing tendency since the second quarter of 2011 again.
- After strong growth especially in 2009 and 2010, the second half year 2011 showed first slightly decreasing tendencies in the Automotive industry.
- Sideway movement in the Electrical Machinery Industry since mid 2011.
- Industrial production activity in the EU27 is still below the pre-crisis level.

Actual data status of Production: 02/2012

European Union (EU27) Plastics Customer Industries - Part II

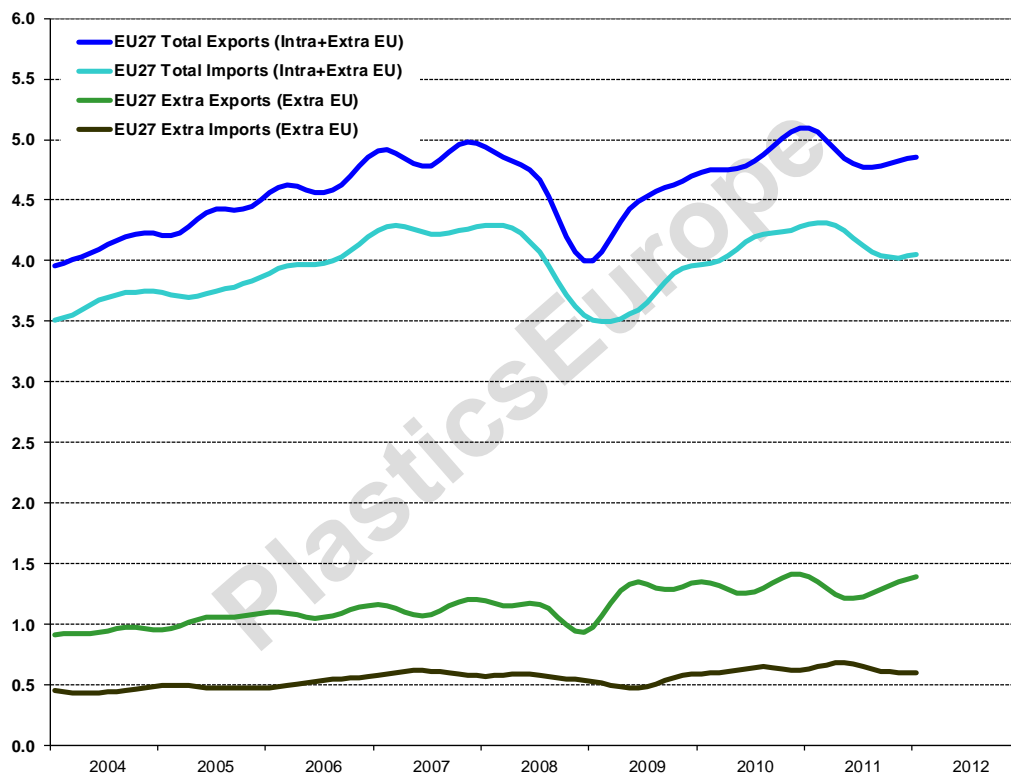


- Decreasing production trend in the Construction Industry since the third quarter of 2011.
- The Food and Beverages Industry was less hit by the recession than other industries.
- Slightly decreasing trend in production figures of the Manufacturing Industry since mid 2011.

Actual data status of Production: 02/2012

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 showed a slightly decreasing trend in the 2nd half of 2011 as well as Total Imports.
- During the last years the Extra EU Import share grew to 15.3% in 2011. The Extra EU Export share in 2011 was slightly lower than in 2010 (26,5% in 2011 compared to 27.3% in 2010).

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

Year	Exports	Imports
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
2011	26.5	15.3
2012YTD 01	26.1	16.4

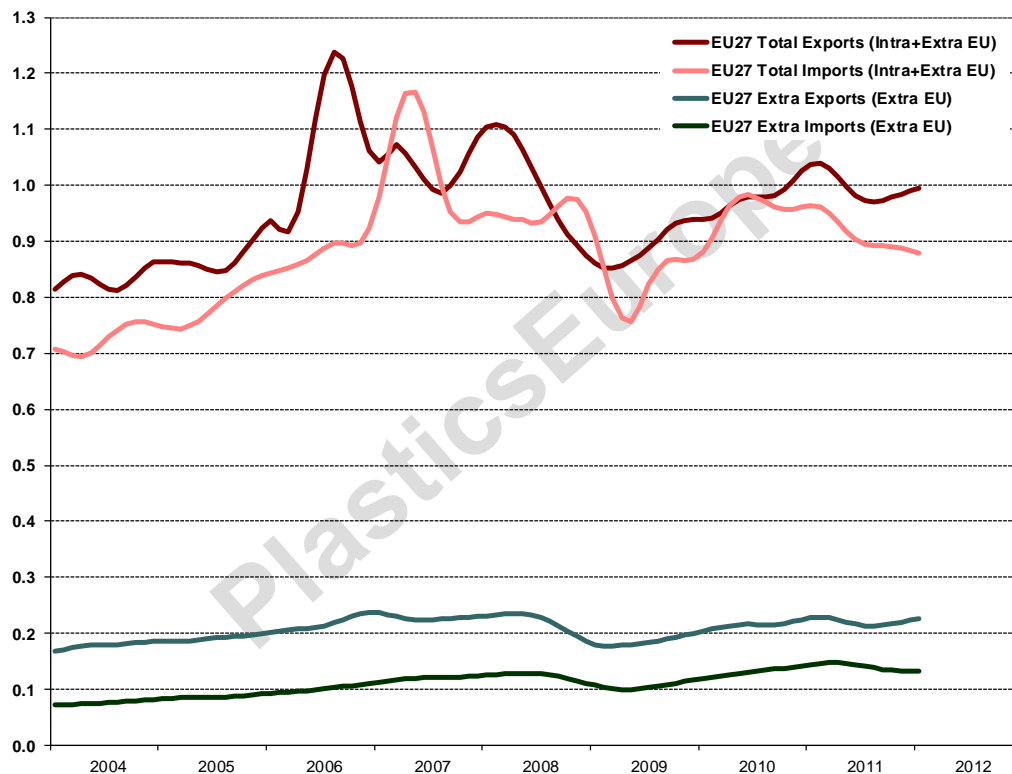
Actual data status of EU27 Trade: 01/2012

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 Plastics Products

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 primarily decreasing trend since 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 and Extra EU Exports increased in recent years.

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

<u>Year</u>	<u>Exports</u>	<u>Imports</u>
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
2011	22.1	15.4
2012YTD 01	19.5	17.2

Actual data status of EU27 Trade: 01/2012

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

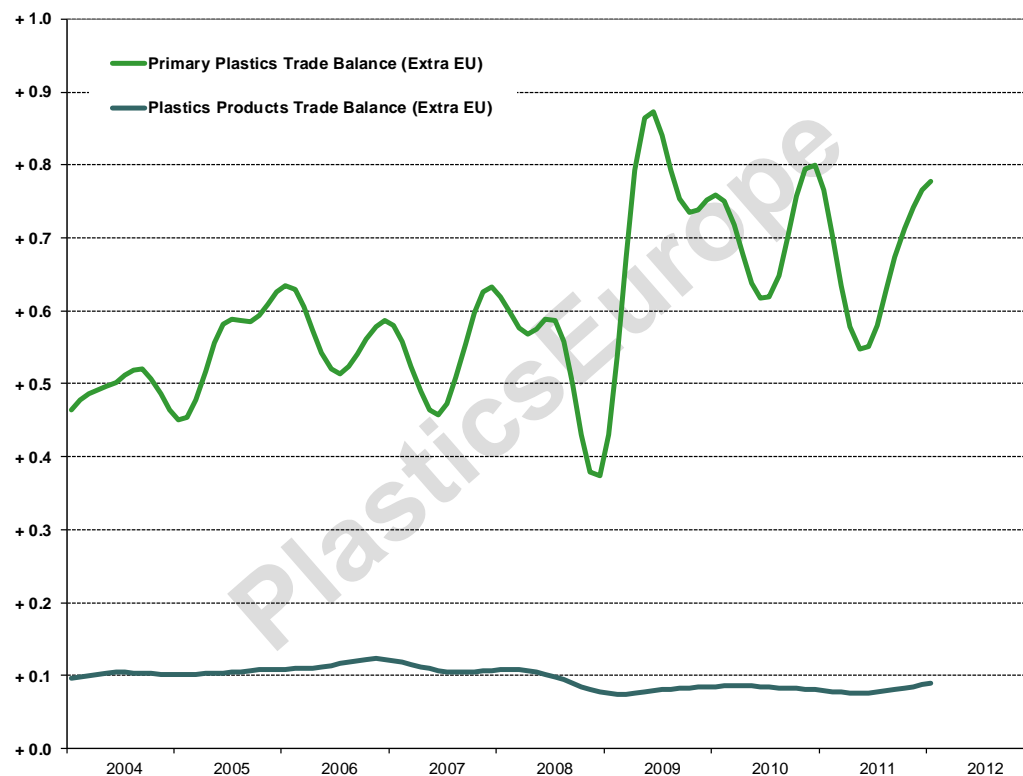
Extra EU Trade: Trade of the European Union with Non-Member Countries

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: 01/2012

- Record trade surplus of EU27 Primary Plastics Industry with Non-Member Countries in 2009, 2010 and 2011 with a slightly lower trade surplus.
- Decreasing trend of Extra EU trade surplus for Primary Plastics has stopped in mid 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.

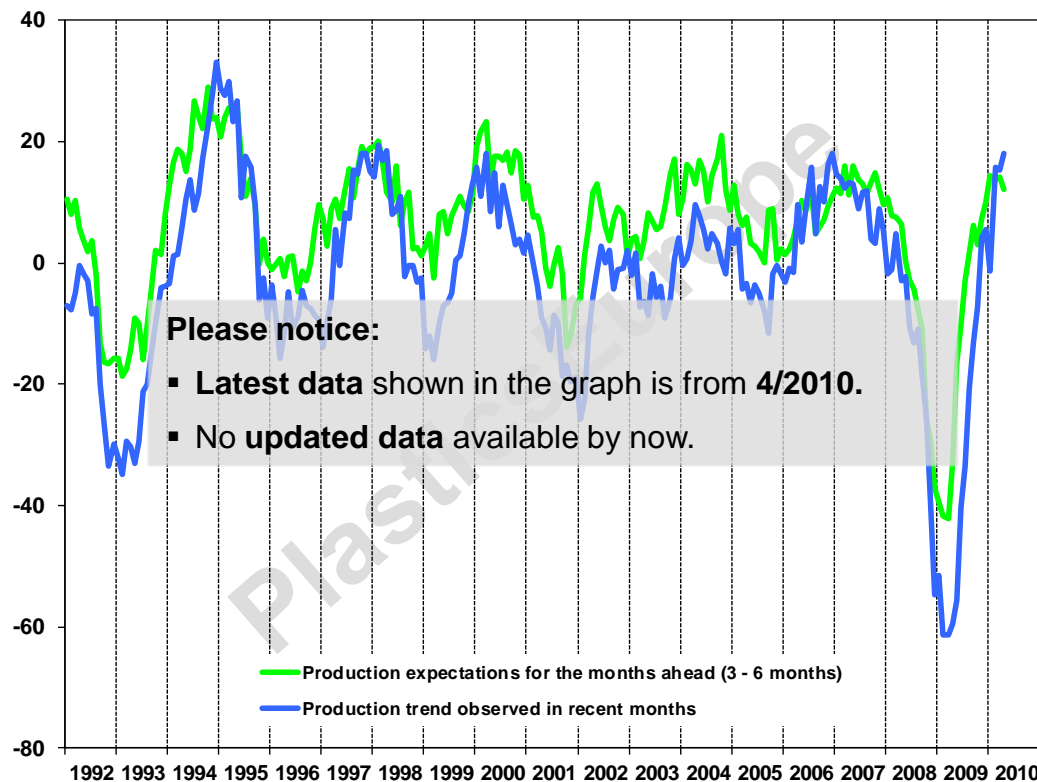
Extra EU27 Trade Balance (Mio tons) (+ Surplus, - Deficit)

Year	Primary Plastics	Plastics Products
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
2011	+ 7.78	+ 0.95
2012YTD 01	+ 0.61	+ 0.04

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 %

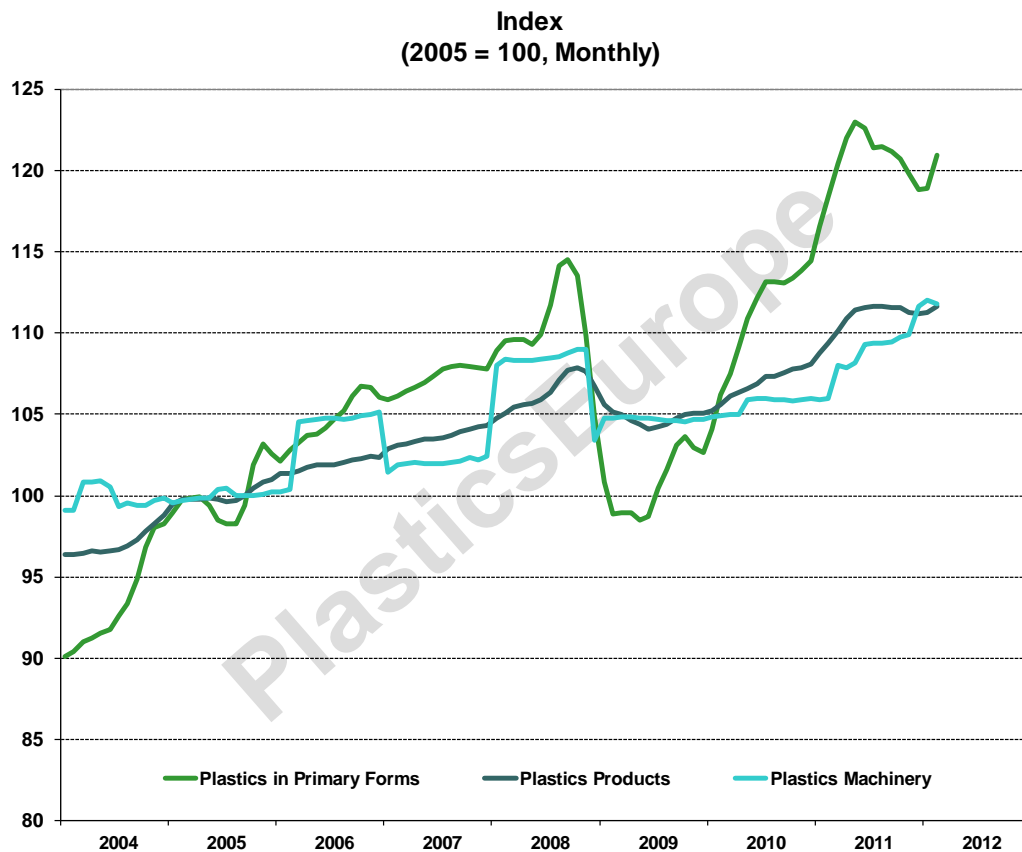
May-09	-16
Jun-09	-10
Jul-09	-3
Aug-09	2
Sep-09	6
Oct-09	3
Nov-09	7
Dec-09	10
Jan-10	14
Feb-10	14
Mar-10	14
Apr-10	12

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. Signs of new increase in the first two months of 2012.
- Prices for Plastics Products increased during 2009 and 2010, but now remain on almost the same level since the 2nd quarter 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: 02/2012

European Union (EU27) Plastics Industry Producer Prices

Producer price index (cumulative)

Sectors	Feb 12	Jan - Feb 12	Feb 12	Jan - Feb 12
	Index 2005 = 100		y-o-y (%)	
Primary Plastics	121.0	119.9	2.1	2.1
Plastics Products	111.6	111.5	2.0	2.2
Plastics Machinery	111.8	111.9	5.5	5.6

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

Producer price index (monthly)

Sectors	Nov 11	Dec 11	Jan 12	Feb 12
	Change in % against previous month			
Primary Plastics	-0.8	-0.8	0.0	1.7
Plastics Products	-0.2	-0.1	0.1	0.3
Plastics Machinery	0.2	1.6	0.3	-0.2

- **Primary Plastics**

Compared to the first two months of 2011, prices increased by 2.1% in 2012. A notable increase was recorded in February after some months of decline.

- **Plastics Products**

With +2.2% the Plastics Products segment showed an increasing price trend at the beginning of 2012 compared to the same period in 2011. Since June 2011 prices remain on a more or less stable level.

- **Plastics Machinery**

Compared to 2011, prices for Plastics Machinery in the first two months 2012 had been 5.6% higher. After constant development during the second half of 2011, prices increased again during the last months.

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. With first publication of production indices for 2012, Eurostat changed from a direct to an indirect method of seasonal adjustment. The new method is applied to the complete time-series of production indices. This also affects data before 2012.

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

The Material for the 21st Century