1989
PAGEV®
Türk Plastik Sanayicileri Araştırma, Geliştirme ve Eğitim Vakfı

TURKISH

PLASTICS INDUSTRY

FOLLOW UP REPORT

2015 - 6 Months

PAGEV
Turkish Plastics Industry Foundation

PREAMBLE:

Turkish plastics industry, amongst the EU member states, ranks 2nd following Germany and 7th throughout the world with a share of 2.6%. On the other hand, the 20.3 billion dollar foreign trade volume share of the Turkish plastics industry within the world plastic foreign trade volume is at a level of 1.7%. While the Turkish plastics industry received a share of 1.6% within global plastic product export and 1% within import, it received a share of 4.3% within raw material import and 0.4% within export.

As against Turkey ranking 2nd, following Germany, amongst EU member states in 2014 with an 8 million 234 thousand tonnes of plastic product manufacture, she is far below the countries with a lesser manufacture capacity than herself, in export. The main reason for the aforementioned is due to the fact that Turkey's 3 $ / Kg unit export price of plastic product export is 32% lower than world average of 4.4 $ / Kg and that Turkey cannot sufficient added value in export. This situation demonstrates that the Turkish plastics export is concentrated on the manufacture and export of products which cannot provide sufficient added value.

According to PAGEV records, approximately 6,500 manufacturing companies, with most of which being small and medium scale companies, are active in the Turkish plastics industry. While, within the recent years, the manufacture and export shares of large scale companies, which fell within the first 1000 companies in ISO ranking, regressed, the shares of SME companies exhibited an increase.

The number of companies, which are exporting and competing at global markets, is gradually increasing in parallel with the increase in technology use within the plastics industry. While the plastics industry, which received a share of 32% within the Chemical Industry total export in 2014, exported 6.1 billion dollars of direct product and raw material with its more than 150 export markets, conducted indirect export over 6 billion dollars with its exporter industries channel and provided a foreign exchange earnings of 12 billion dollars to the national economy.

In spite of industry's such level of contribution to the economy and exporter economies, the plastics industry investments cannot sufficiently benefit from incentives. The plastics industry, which cannot sufficiently benefit from incentives, is losing its chance to create positive contribution to the foreign trade deficit through the contributions of the new incentive system and is forced towards becoming an industry creating chronic foreign trade deficit.

The 2023 export vision of the industry is to accrue at least 17 billion dollars of the 50 Billion dollar export target of the chemical industry. For such degree of export to be performed, in parallel with its growth, the industry must concentrate on manufacture and export of products with high added values, to increase its unit export prices to 4.5 $ / Kg, average of developed countries and make the best of the investment incentives apart from resolving the increasing number of problems.

ECONOMIC SITUATION:

WORLD ECONOMY:

Economic recovery has been the key matter of debate throughout the world in 2014. However, the issues regarding Syria and Ukraine has shaken the confidence in establishing the world economic balances. Notwithstanding the certain level of economic recovery in the USA and England in 2014, the risks concerning economic growth in the EU has increased and Japan, on the other hand, has entered recession within the last quarter of the year. Negativities has been experienced in economic outlook of many developed countries such as China, Russia and Brazil. The economies of developing countries, due to the slowdown, have lost their driving force characteristic within the world economy.

The global growth forecasts for 2014 were announced mostly at the large downward revision UN World Economic Situation and Prospects 2015 is the latest report says the world economy will close 2014 with a growth rate of 2.6 percent . 3.1 percent for 2015 and 3.3 percent in 2016. The report identified the most remarkable predicted economic growth this year is pointing to the disproportionate growth between regions.

According to the report, Brazil, Indonesia, South Africa and Turkey, in the next year are faced with the risk of high current account deficit. Besides Ukraine, Syria, Libya and crises in countries such as Iraq will continue to be a risk factor for their regions.

The decline in oil prices to will be beneficial in terms of reducing the current account deficit for the energy dependent countries such as Turkey.

However, despite the reduction in energy import costs, Since Turkey's export markets are mostly oil-exporting countries, will make the economy to put a vicious circle.

The most obvious example is Russia. Falling oil prices (need to add the embargo share) there has been a decline in Turkey's exports to this country in October and November.

In the autumn report published by the European Commission, euro zone growth forecast to 0.4 percent from 1 percent in 2014, while 2015 growth forecast was lowered to 0.9 percent from 1.5 percent. The EU is dominated by fear of deflation. It continues to fall in price in the euro zone and there is also a definite predictions about how far it would fall. This has the danger of decline in investments and increase in unemployment throughout Europe.

In summary, it is expected that, unbalanced economic performance will continue and oil will be the decisive commodity in the global growth in 2015. Contraction of global demand realized in 2014, despite a decline in oil prices, will decrease slightly in 2015, will not cause an improvement in the situation of inter-regional growth disparities. This situation means more unemployment, high inflation and current account deficit in many countries.

TURKISH ECONOMY:

While the Turkish economy downsized in 2009 by 4.9 %, it reached to high growth rates such as 9.2% and 8.8 % in 2010 and 2011, however the growth rate decreased to 2.2% in 2012, while it increased to 4.0% in 2013, once again it regressed to 2.9 % in 2014 and 2,3 % in the first quarter of 2015. The growth rate of manufacturing industry was % (-) 0,5 during the first quarter of 2015.

The manufacturing capacity utilization rate which was on average 73,9 % in 2013, rose to 74.4 % in 2014 . Manufacturing industry capacity utilization in the first six months of 2015 has amounted to 74%.

Main Economic Indicators

	Unit	2013	2014	2015 / 6
GDP	USD Billion	817,8	756	-
Per Capita Income	USD	11.148	10,404	-
GDP Growth Rate	%	4,2	2,9	2,3 (1st Q)
Manufacturing Industry Growth Rate	%	2,8	3,5	(-) 0,5 (Ist Q)
Unemployment Rate	%	9,7	10,4	9,6 (4 M)
WPI	%	7,51	6,36	6,81 (7 M)
PPI	%	6,97	8,85	5,62 (7 M)
Manufacturing Industry CPR	%	73,9	74,4	74
Exports	USD Billion	151,9	157,7	73,5
Imports	USD Billion	251,7	242,2	106,8
Foreign Trade Balance	USD Billion	- 99,8	- 84,5	-33,2
Foreign Trade Volume	USD Billion	403,6	398,0	180,3
Export / Import	%	60,3	65,1	69
Year End US Dollar Sales Price	TL	2,1343	2,3411	2,6898
Year End Euro Sales Price	TL	2,9357	2,8300	3,0903

Source: TSI, Ministry of Economy, Undersecretariat of Treasury, Central Bank

In 2014, exports of $ 157.7 billion versus 242.2 billion dollars of imports caused the export - import ratio rose to 65.1 %, and 84.5 billion dollars of foreign trade deficit. In the first six months of 2015, exports of 73.5 billion dollars imports of 106.8 billion dollars, resulted 33.2 billion dollars of foreign trade deficit.

While the share of high and medium high technology products within total export did not change in 2014 and 2015, the share of medium high technology products in export regressed and share of low technology products exhibited an increase. This situation demonstrates that the export of products with low added value displayed an increase in 2014 and in 2015

As for manufacture, it can be observed that the agricultural sector had a negative effect on the GDP, the share of industry sector within growth regressed and that the highest contribution towards growth, also in the year of 2014, was provided by the tertiary sector. The industry manufacture regressed due to the effects of the decline in manufacture of intermediate goods, durable consumer goods and capital goods.

The unemployment rate from 2012 to this date is displaying a tendency to increase. The 10 month unemployment rate of 2014 once again reached to 2 digit figures and occurred as 10.4%. The unemployment rate realised as % 9,6 in the first 4 months of 2015. The low rate economic growth could not create sufficient employment opportunities. While, on one hand the population which would contribute to manufacture increased, the regression in manufacture growth caused the increase of unemployment rate.

The rate of disciplined public finance approach and public debt stock to national income declined to 35% and dropped below the average of developing economies. The increase in risk premium indicators of Turkey caused the depreciation of Turkish lira.

The consumer prices, occurred as 6,8 % and manufacturer prices % 5,6 in the first 7 months of 2015. Due to the increase of geopolitical risk throughout the world and weakening of growth expectation within the European Union, the growth contribution of export in 2014 was limited. With the regression in import and decline in oil prices, a significant downfall in current deficit and increase in export-import coverage ratio was observed. An evident difference did not occur for direct investments in 2014 and 2015

WORLD AND TURKISH ECONOMY EXPECTATIONS :

Due to the amount of interest rate hike in the USA, recovery efforts of China, the expected recession in the EU, the ongoing risks in Russia, Ukraine and Syria and decline in oil and commodity prices, it is hard to expect any positive developments regarding world economy in 2015. The expected regression in global money supply in 2015 will mostly force the developing countries towards structural reforms for growth. While significant increases in Indian economy is expected in 2015, regression will occur due to the sanctions in Russian economy caused by the crisis in Ukraine, depreciation of rouble with the effect of decreasing oil prices and capital outflows. The decrease of oil prices will revive the domestic demand in developed and developing nonoil countries and have a positive effect on the decrease of current deficit, inflation and interest regression.

The most significant factors, which will affect the development of Turkish economy in 2015 are forecasted to be originated from the increase in domestic demand rather than foreign demand and the increase in domestic demand, on the other hand, to be dependent on public expenditures and the increase in export on the recovery of the EU economy, the growth in Chinese economy and decline in prices. Apart from the aforementioned, the decline occurred in oil and energy prices is expected to have a positive effect on inflation and the 2015 year end inflation to draw close to Medium Term Program targets.

Despite its regression, current deficit remains to be one of the foremost issues of the Turkish economy and for to preserve the macro-financial stability, the current deficit must be held at controllable levels.

The political and economic risks demonstrates that growth will occur at lower levels. Turkey ranks top amongst the economies with fragility risk in 2015. The root cause of this is considered to be high current deficit, decelerated growth rate and political tensions due to the general election.
High current deficit, inflation increase, deceleration in growth rate, increasing financial need and hot money outflow are considered to be amongst the risks which the Turkish economy will face in 2015. The previous crisis of Turkey were mostly within the financial sector. However, now the potential problem will occur in corporate sector. How the off-finance corporate sector, which exceedingly became indebted after 2007, will manage current debt stock and open positions is considered to be an important issue. The possible negative effects of all of these developments on the economy in 2015 can be summarised as follows;

- ✓ Decrease in economy and sector growth rates,
- ✓ Increase in unemployment rate,
- ✓ Decrease in manufacture capacities by businesses in order to particularly avoid from personnel expenditures, in order to close the deficits arising from exchange differences and to execute redundancies and refraining from creating new employment fields for the aforementioned,
- ✓ Imposing restrictions in manufacturing industry and foreign acquisitions in raw material,
- ✓ Acceleration of hot money outflow.
- ✓ The decline in foreign capital inflows due to the negative developments in Syria and Iraq ,
- ✓ Postponement of investment due to political uncertainty ,
- ✓ Decrease in sales in construction and automotive industries due to the increse in the cost of sales.
- ✓ Decline in tourism revenues due to negative developments in Syria and Iraq and the economic crisis in Russia and Ukraine.
- ✓ The effects of increasing unemployment rate due to the 2 millions of immigrants from Syria

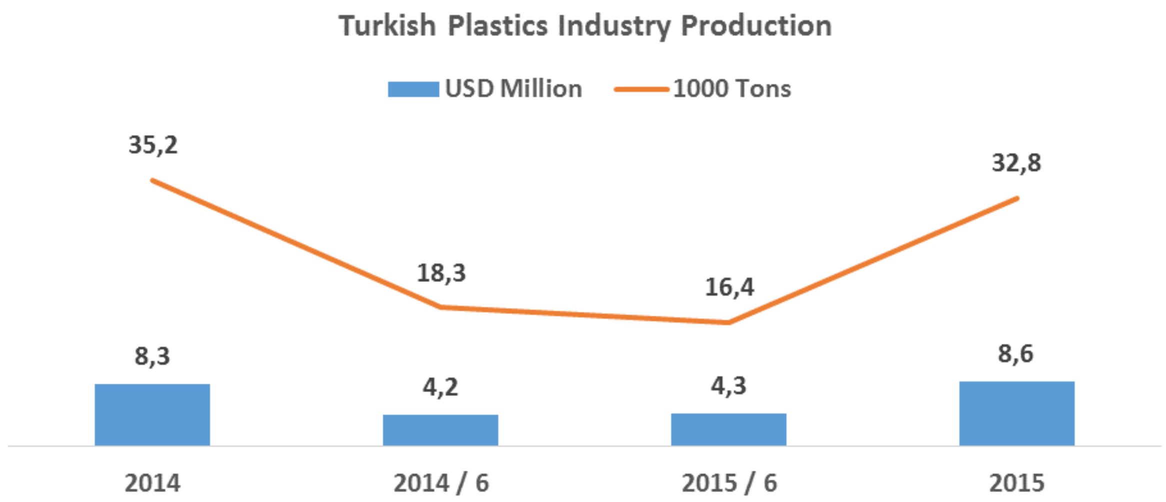
DEVELOPMENTS IN TURKISH PLASTICS INDUSTRY:

PLASTIC PRODUCT:

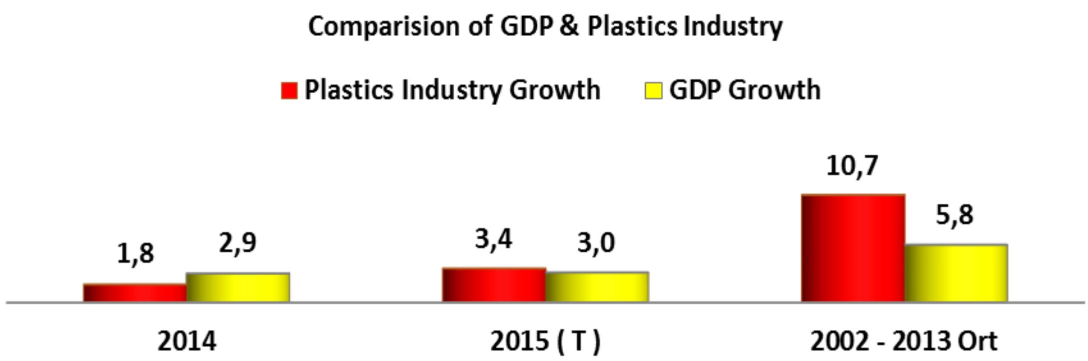
PLASTIC PRODUCT MANUFACTURING:

Plastic product manufacture, which was 8,3 million tonnes and 35.2 billion dollars in 2013 and 2014 grew by 1,4 % on unit base and decreased by % 10,5 on value base, realised as 4,3 million tons and USD billion of 16,4 in the first half of 2015

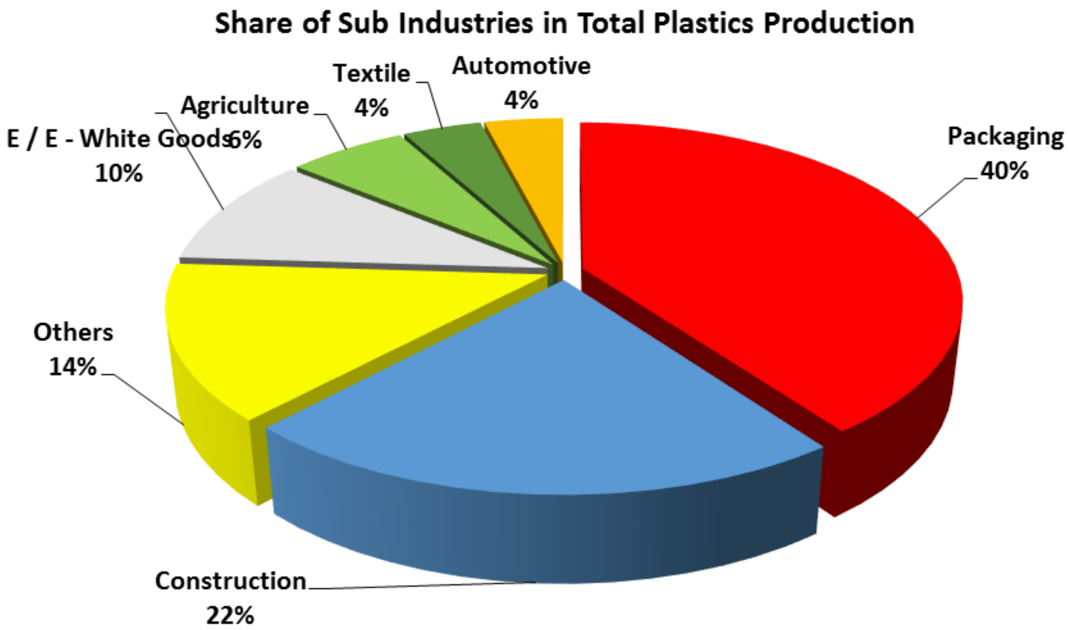
If it continues with the same trend, total production is expected to rise to 8.6 million tons and USD billion of 32.8 in 2015, increasing % 3,4 on the basis of amount and decreasing by % 6,8 on the base of vaule with compared to 2014



The growth of plastics industry, which doubled the GDP growth rate between 2002 – 2012 period, dropped below the GDP growth rate in 2014. Considering the first 6 monthly realization of the year, exceeding the growth rate of GDP growth for 2015 is estimated to be 3.4% .



It is observed that plastic packaging materials led the way with 1,7 million tonnes and plastic construction materials following packaing with 945 thousand tonnes within total plastic product manufacture of 4,3 million tonnes in the first half of 2015.

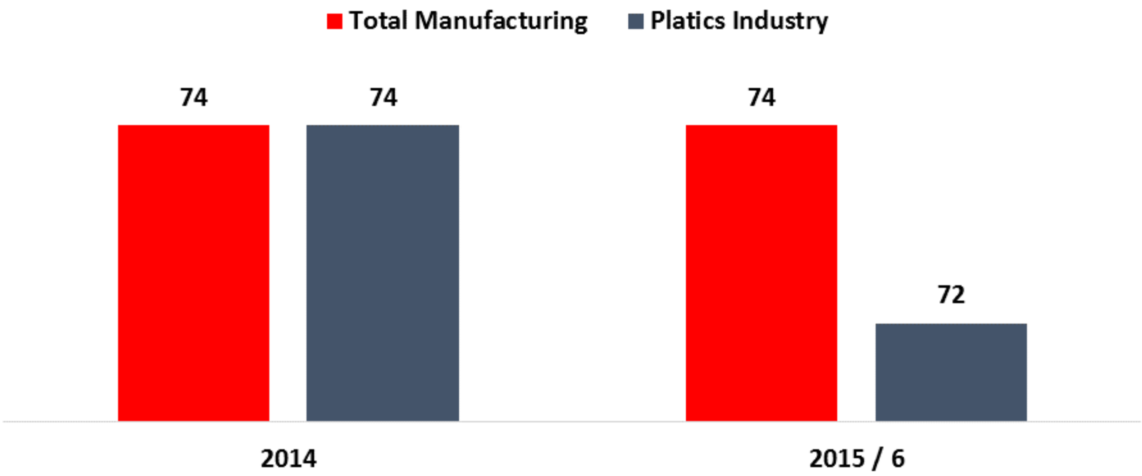


CAPACITY USAGE:

Following the 64.3% of average capacity usage rate of companies active in the Turkish plastics industry in 2009, entered into an upward trend. The average capacity usage of the industry increased to 74 % in 2014 with e same level of general manufacturing industry capacity usage

In the first half of 2015, capacity utilization rate of the industry realised as 72 % decreasing by 2 points below the general manufacturing instriey capacity utilization. This situation shows that there is a 28 % capacity surplus within the industry.

Capacity Utilization Rate (%)



FOREIGN CAPITAL IN PLASTICS INDUSTRY:

As of the first half of 2015, 311 companies have foreing capitals within the plastics industry, 64% of these are of European origin. 14% of total foreign capital companies is comprised by Germany, 9 by Italy and 8% by Syria. The companies of France, Netherlands and Iran origin receive a share of 7%, and of USA origin 4%.

Foreign Joint Venture Companies in Plastics Industry

COUNTRY	No of Companies	COUNTRY	No of Companies
GERMANY	45	JAPAN	2
ITALY	29	LEBANON	2
SYRIA	25	UKRAIN	2
FRANCE	22	JURDAN	2
NETHERLAND	22	BAHRAIN	1
IRAN	22	BELARUS	1
USA	12	UAE	1
AZERBAIJAN	9	GİBRALTAR	1
BELGIUM	9	S.KOREA	1
AUSTRIA	8	GEORGIA	1
UK	8	UK VIRGIN ISLANDS	1
SPAIN	8	CANADA	1
SWEETZERLAND	8	KHAZAKISTAN	1
BULGARIA	7	KENYA	1
IRAQ	6	KUVEYT	1
LUXEMBOURG	6	NORTH CYPRIS T.R.	1
RUSSIAN FED.	5	LETONYA	1
GREECE	5	MONAKO	1

CHINA	4	PORTUGAL	1
DENMARK	4	S.ARABIA	1
EGYPT	4	ŞİLİ	1
UZBEKISTAN	4	TACİKİSTAN	1
İSRAİL	3	TATARSTAN	1
MAKEDONIA	3	TAIWAN	1
ALBANIA	2	TÜRKMENİSTAN	1
INDIA	2	TOTAL	311

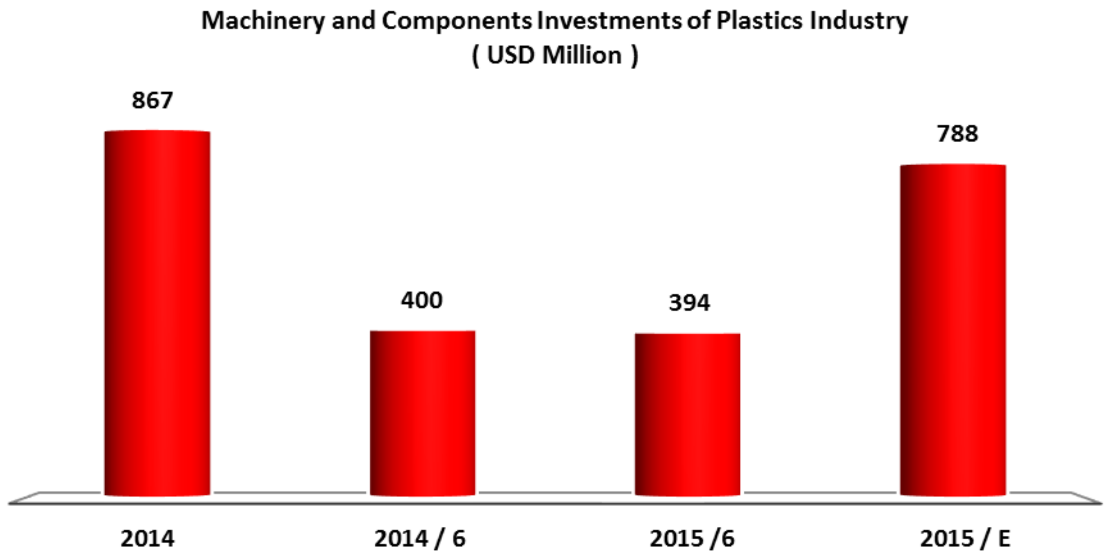
Source : Ministry of Economy

MACHINERY EQUIPMENT INVESTMENT OF PLASTICS INDUSTRY:

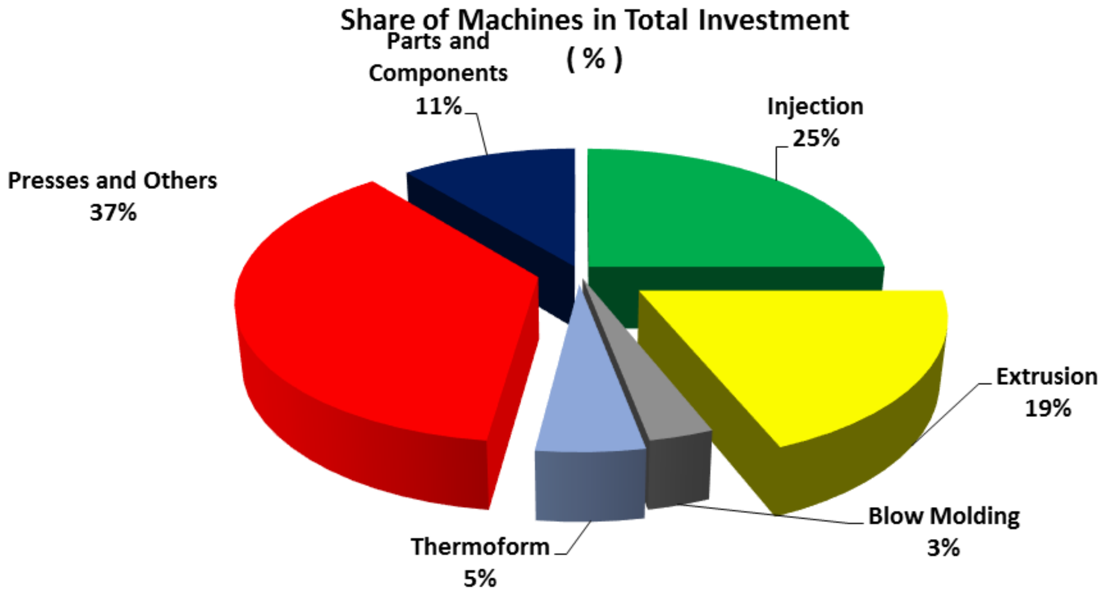
The plastics industry made a machinery and equipment investment of around 8 billion dollars between 2003 – 2015 and 79% of this investment was met by imported machines. It is observed that an annual average of 600 million dollars machinery and equipment investment has been made within the last 13 years.

The total machinery and equipment investment of the industry realised as USD million of 394 , in the first 6 months of 2015, decreasing by 2 %, when compared to the same period of 2014.

It is expected that, the sector's total machinery and equipment investment to be USD million of 788 by the end of 2015 decreasing by 9% compared to 2014.



Of the 8 billion dollars investment within the last 13 years, 37% was comprised of presses and other machinery, 25 % of injection machines, 19% of extrusion machines and 11% of components and parts.



Source : Turkey Statistics Department

INVESTMENT INCENTIVES:

A total of 631 investment incentives were provided to the plastics industry between since 2013 and 7% of the certificate total is comprised of domestic investors and remaining 93% of foreign investors. The 32 % of the amount of investment made was comprised of domestic investments and 68 % of foreign investments. The 20 % of the total employment provided by the investments was ensured with domestic capital and 80 % with foreign investments.

Investment Incentives in Turkish Plastics Industry
(2013 – 2015/6)

Domestic Investment	No. Of Certificate	Invetment Amount	Employment
2013	16	953	2.203
2014	22	767	796
2015 / 6	8	29	128
TOTAL	46	1.749	3.127
Foreign Investment	**No. Of Certificate**	**Invetment Amount**	**Employment**
2013	288	1.320	6.220
2014	186	1.216	2.970
2015 / 6	111	1.182	3.085
TOTAL	585	3.718	12.275

TOTAL Investment	No. Of Certificate	Invetment Amount	Employment
2013	304	2.273	8.423
2014	208	1.983	3.766
2015 / 6	119	1.211	3.213
TOTAL	631	5.467	15.402
	No. Of Certificate	Invetment Amount	Employment
Share od Domestic Investment (%)	7	32	20
Share of Foreign Investment (%)	93	68	80

Source : Ministry of Economy

Despite such level of contribution to the economy and exporter sectors by the industry, the industry cannot benefit sufficiently from Plastics industry investment incentives due to the fact that factors such as the importance of the plastics industry within the economy, its structural characteristic and export vision were not taken sufficiently into consideration within the "Decree on Government Grants in Investments" published on 19.06.2012 dated and 2012/3305 numbered Official Gazette.

This situation, just as for the other many industries, creates unfair competition for the plastics industry. The plastics industry, which cannot sufficiently benefit from incentives, is losing its chance to create positive contribution to the foreign trade deficit through the contributions of the new incentive system and is forced towards becoming an industry creating chronic foreign trade deficit.

The 23 % in certificate number and only 6 % in investment amount of the investment incentives provided for the plastics industry in the first 6 months of 2015 were provided to the most incentive provided 6th region. This situation does not originate from the structural characteristic of the plastics industry. Therefore, it is regarded to be more rational by the companies to be active on local basis for plastic product manufacturing.

Distribution of Incentive Certificates

Received in Plastics Industry By Regions

(2015 / 6)

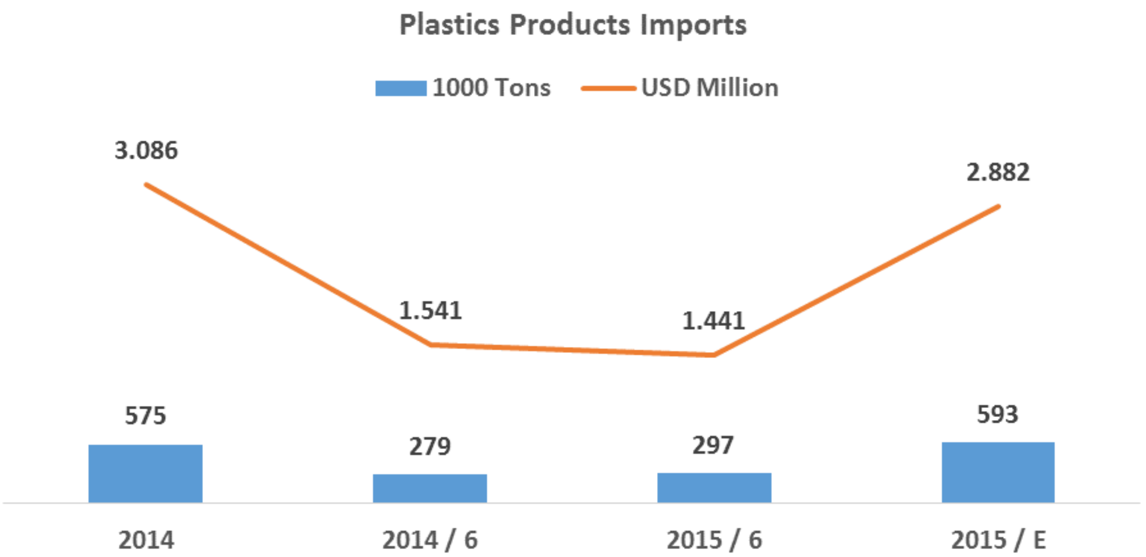
	Fixed Investments %	*Number Of Certificates %*
1st Region	36	22
2nd REGİON	13	10
3th REGİON	18	16
4th REGİON	6	45
5th REGİON	5	1

6th REGİON	23	6
TOTAL	100	100

Source : Ministry of Economy

PLASTIC PRODUCT IMPORTS:

Plastic product import constantly displayed an increase till 2014. Plastic product import, which was 535 thousand tonnes and USD billion of 2,9 in 2013, ended with 575 thousand tonnes and 3.1 billion dollars in 2014. The plastics product import, is estimated to be 593 thousand tons and USD billion of 2.9 in 2015.



Source : Turkish Statistics Department

The plastics industry (sum of products and raw materials) ranked 6th largest importers industry with a share of 6,1 % amongst 10 importers industries in the first half of 2015.

The total imports of the industry in the first 6 months of 2015 decreased by 14.1 % compared to the peers period of 2014 and its share in total imports also fell to 5.8 %.

The reason for such ranking of the industry, which created surplus in plastic product foreign trade, amongst largest importer industries originates from its dependency on plastic raw material import.

10 Importer Industries

	2014 / 6	2015 / 6	% Increase	2014 / 6 % Share	2015 / 6 Share
TOTAL Imports	119,8	106,7	-10,9	100,0	100,0
Mineral fuels and oils	27,4	20,6	-24,6	22,8	19,3
Boilers and machines	14,1	12,9	-8,5	11,7	12,1
Motor vehicles and parts	7,1	8,5	19,0	5,9	7,9
Electrical machines and devices	8,7	8,8	1,4	7,3	8,3
Iron and steel	8,9	7,9	-11,0	7,4	7,4
Plastics and products	7,3	6,2	-14,1	6,1	5,8
Organic chemical products	2,9	2,5	-13,3	2,4	2,3
Optical materials	2,3	2,3	0,3	1,9	2,2
Pharmaceutical products	2,1	2,1	-1,8	1,8	1,9
Aliminium Products	1,6	1,8	7,4	1,4	1,7
10 Industries Total	82,3	71,8	-12,8	68,7	67,3
Others	37,5	34,9	-6,8	31,3	32,7

Source : Ministry of Economy

In the first six months of 2015, compared to peers period of 2014, except 3918 and 3924 imports on unit base showed an increase in all Custom Duties Numbers. At the end of year 2015 the imports on unit base, in all Custom Duty Numbers except 3918, 3923 and 3924 are expected to increase .

Plastic Product Import on HS Basis (1000 Tonnes)

HS CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 14 ANNUAL INCREASE
3916	MONOFILAMENT, BAR, PROFILES FROM PLASTIC-CROSS SECTION OVER 1MM	9,9	4,6	5,9	11,8	30,0	19,3
3917	TUBES, PIPES, HOSES FROM PLASTIC; GASKET, ELBOW, UNION ETC	22,7	11,2	12,4	24,9	11,1	9,5
3918	FLOOR COVERINGS FROM PLASTIC – INCL. WALL AND CEILING COVERINGS	30,7	13,6	13,5	27,0	-0,7	-12,0
3919	ADHESIVE PLATE, SHEET, STRIP, SLIDE, ETC. FROM PLASTIC; FLAT	55,5	27,8	29,1	58,2	4,8	4,9
3920	OTHER PLATE, SHEET, PELLICULE AND SLIDES FROM PLASTIC	252,0	122,9	130,7	261,4	6,3	3,7
3921	OTHER PLATES, SHEETS, PELLICULES, FOILS AND SLIDES FROM PLASTIC	66,9	31,7	34,2	68,4	7,9	2,3
3922	BATHTUB, SHOWER, SINK, BIDET, WATER-CLOSET PAN AND HARDWARE FROM PLASTIC	3,2	2,2	2,6	5,1	15,8	58,3
3923	PLASTIC PRODUCTS FOR MOVING FURNITURE, TAP, CAP, CAPSULE	45,6	22,2	22,3	44,7	0,8	-2,1
3924	TABLE, KITCHEN AND OTHER HOUSEHOLD FURNITURE, TOILETRY FORM PLASTIC	12,7	6,6	6,2	12,3	-6,2	-3,1
3925	CONSTRUCTION MATERIALS FROM PLASTIC	6,5	3,3	4,7	9,5	41,5	44,9
3926	OTHER GOODS FROM PLASTIC	69,5	32,6	35,0	70,0	7,5	0,8
	PLASTIC PRODUCT TOTAL	575,3	278,6	296,7	593,3	6,5	3,1

Source : Turkish Statistics Department

In the first 6 months of 2015, Imports, in terms of value, compared to peers period of 2014, declined in all custom duty numbers except 3922 and 3925 . Value of imports in all these products except those products is expected to decline at the end of 2015 compared to 2014.

Plastic Product Import on HS Basis (Million US $)

CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 14 ANNUAL INCREASE
3916	MONOFILAMENT, BAR, PROFILES FROM PLASTIC-CROSS SECTION OVER 1MM	51,7	26,1	25,3	50,5	-3,3	-2,4
3917	TUBES, PIPES, HOSES FROM PLASTIC; GASKET, ELBOW, UNION ETC	208,7	109,0	101,4	202,8	-6,9	-2,8
3918	FLOOR COVERINGS FROM PLASTIC – INCL. WALL AND CEILING COVERINGS	76,3	36,2	32,0	64,0	-11,8	-16,2
3919	ADHESIVE PLATE, SHEET, STRIP, SLIDE, ETC. FROM PLASTIC; FLAT	338,8	173,1	159,7	319,3	-7,8	-5,8
3920	OTHER PLATE, SHEET, PELLICULE AND SLIDES FROM PLASTIC	1.004,0	508,4	459,8	919,7	-9,6	-8,4
3921	OTHER PLATES, SHEETS, PELLICULES, FOILS AND SLIDES FROM PLASTIC	297,5	134,8	131,3	262,7	-2,5	-11,7
3922	BATHTUB, SHOWER, SINK, BIDET, WATER-CLOSET PAN AND HARDWARE FROM PLASTIC	28,5	24,3	26,0	51,9	7,0	82,3
3923	PLASTIC PRODUCTS FOR MOVING FURNITURE, TAP, CAP, CAPSULE	245,9	123,6	107,0	214,1	-13,4	-12,9
3924	TABLE, KITCHEN AND OTHER HOUSEHOLD FURNITURE, TOILETRY FORM PLASTIC	93,3	49,4	42,0	84,0	-15,0	-10,0
3925	CONSTRUCTION MATERIALS FROM PLASTIC	38,9	19,7	26,0	52,0	31,7	33,6
3926	OTHER GOODS FROM PLASTIC	702,6	336,1	330,4	660,9	-1,7	-5,9
	PLASTIC PRODUCT TOTAL	3.086,4	1.540,8	1.440,9	2.881,8	-6,5	-6,6

Source : Turkish Statistics Department

PLASTIC PRODUCT IMPORT BY COUNTRIES:

Turkey imports plastic product from over 100 countries every year. Import, made from 10 countries in 2014, comprised 70% on amount basis and 76% on value basis of the total import. In the first six months of 2015 the share of top 10 countries, increased to 72 % in terms of amount and declined by 75% in terms of value.

While Germany led the way in plastic product import in the previous years, it is observed that China has become prominent since 2014 and Germany, Italy and South Korea has preserved position in being the countries with which import is conducted the most.

First 10 Import Partners for Plastics Products

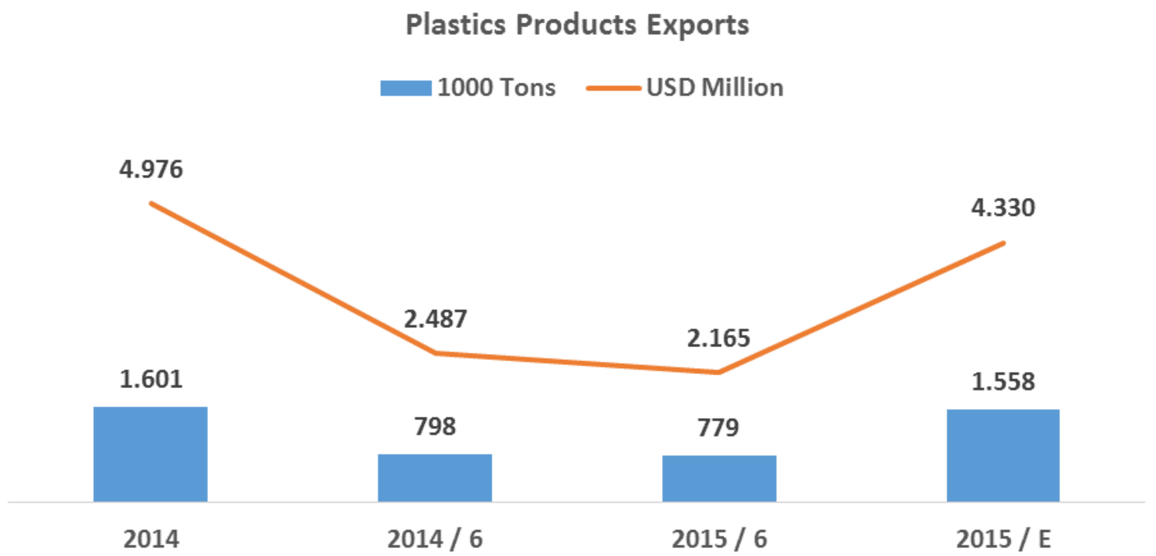
2014					2015 / 6				
Countries	1000 Ton	Milyon $	Ton - %	$ - %	Countries	1000 Ton	Milyon $	Ton - %	$ - %
CHINA	161	666	28	22	CHINA	81	323	27	22
GERMANY	88	591	15	19	GERMANY	45	262	15	18
ITALY	43	253	7	8	ITALY	24	120	8	8
S. KOREA	35	212	6	7	S.KOREA	16	89	5	6
FRANCE	24	177	4	6	FRANCE	13	82	4	6
USA	12	118	2	4	USA	6	62	2	4

UK	13	115	2	4	UK	7	54	2	4
BELGIUM	17	87	3	3	BELGIUM	9	41	3	3
SPAIN	9	61	2	2	SPAIN	6	30	2	2
JAPAN	3	50	0	2	INDIA	7	25	2	2
10 Countrıes	404	2.330	70	76	10 Countrıes	213	1.087	72	75
Others	171	756	30	24	Others	84	354	28	25
TOTAL	575	3.086	100	100	TOTAL	297	1.441	100	100

Source : Turkish Statistics Department

PLASTIC PRODUCT EXPORT:

Plastic product export comprises a large scale of Turkey's total plastic export both on amount and value basis. Plastic product export, which was 1.6 million tonnes and 4.9 billion dollars in 2014, ended with 779 thousand tonnes and 2,17 billion dollars with a decrease of 2,4 % on amount basis and 13 % on value basis in the first half of 2015. Plastics product exports at the end of 2015, compared to 2014, is expected to be 1,56 million tonnes and USD billion of 4,3 declining by 2,7 % in amount and 13 % in value base.



The export of all plastic products displayed an increase apart from 3920 – 23 and 24 HS Codes on amount basis in 2015, when compared to 2014

Plastic Product Export on HS Basis (1000 Ton)

CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 14 ANNUAL INCREASE
3916	MONOFILAMENT, BAR, PROFILES FROM PLASTIC-CROSS SECTION OVER 1MM	195	97	76	152	-21,5	-22,1
3917	TUBES, PIPES, HOSES FROM PLASTIC; GASKET, ELBOW, UNION ETC	351	181	156	312	-13,5	-11,0

3918	FLOOR COVERINGS FROM PLASTIC – INCL. WALL AND CEILING COVERINGS	17	8	8	15	-7,4	-8,6
3919	ADHESIVE PLATE, SHEET, STRIP, SLIDE, ETC. FROM PLASTIC; FLAT	21	10	9	18	-8,8	-12,1
3920	OTHER PLATE, SHEET, PELLICULE AND SLIDES FROM PLASTIC	302	148	159	319	7,5	5,5
3921	OTHER PLATES, SHEETS, PELLICULES, FOILS AND SLIDES FROM PLASTIC	121	57	59	119	3,6	-1,7
3922	BATHTUB, SHOWER, SINK, BIDET, WATER-CLOSET PAN AND HARDWARE FROM PLASTIC	26	13	12	25	-5,0	-3,4
3923	PLASTIC PRODUCTS FOR MOVING FURNITURE, TAP, CAP, CAPSULE	278	135	158	317	17,2	13,7
3924	TABLE, KITCHEN AND OTHER HOUSEHOLD FURNITURE, TOILETRY FORM PLASTIC	107	53	55	109	3,3	2,4
3925	CONSTRUCTION MATERIALS FROM PLASTIC	116	61	51	103	-15,1	-11,0
3926	OTHER GOODS FROM PLASTIC	68	35	34	69	-2,1	0,7
	PLASTIC PRODUCT TOTAL	1.601	798	779	1.558	-2,4	-2,7

Source : Turkish Statistics Department

At the end of 2015 compared to 2014, the export of all CN numbers is expected to decline

Plastic Product Export on HS Basis (USD 1000)

GTİP NO	*PLASTİK HAMMADDE TANIMLARI*	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 14 ANNUAL INCREASE
3916	MONOFILAMENT, BAR, PROFILES FROM PLASTIC-CROSS SECTION OVER 1MM	407	199	149	298	-24,9	-26,8
3917	TUBES, PIPES, HOSES FROM PLASTIC; GASKET, ELBOW, UNION ETC	925	475	382	763	-19,7	-17,5
3918	FLOOR COVERINGS FROM PLASTIC – INCL. WALL AND CEILING COVERINGS	38	19	15	30	-22,1	-22,0
3919	ADHESIVE PLATE, SHEET, STRIP, SLIDE, ETC. FROM PLASTIC; FLAT	148	71	58	115	-18,8	-22,4
3920	OTHER PLATE, SHEET, PELLICULE AND SLIDES FROM PLASTIC	968	481	435	871	-9,5	-10,0
3921	OTHER PLATES, SHEETS, PELLICULES, FOILS AND SLIDES FROM PLASTIC	420	203	179	359	-11,5	-14,6
3922	BATHTUB, SHOWER, SINK, BIDET, WATER-CLOSET PAN AND HARDWARE FROM PLASTIC	128	65	57	113	-12,6	-11,7
3923	PLASTIC PRODUCTS FOR MOVING FURNITURE, TAP, CAP, CAPSULE	816	405	396	793	-2,1	-2,9
3924	TABLE, KITCHEN AND OTHER HOUSEHOLD FURNITURE, TOILETRY FORM PLASTIC	396	200	177	354	-11,5	-10,7
3925	CONSTRUCTION MATERIALS FROM PLASTIC	326	168	134	268	-20,0	-17,7
3926	OTHER GOODS FROM PLASTIC	402	202	183	365	-9,7	-9,1
	PLASTIC PRODUCT TOTAL	4.976	2.487	2.165	4.330	-13,0	-13,0

Source : Turkish Statistics Department

SHARE OF PLASTIC EXPORT IN TOTAL NATIONAL EXPORT:

The plastics industry (product + raw materials) became the 9th largest exporter in the first half of 2015 with a share of 3.8 % within the total national export.

Share of Main Exporter Industries Within Total National Exports - (%)

	2014 / 6	2015 / 6	% Increase	2014 % Share	2015 % Share
TOTAL	80,1	73,5	-8,2	11,8	11,7
Motor vehicles and their components, parts and acces.	9,4	8,6	-8,5	8,6	8,3
Precious Metals	4,6	7,6	64,2	6,0	6,1

Boilers, machines and their components and parts	6,9	6,1	-11,1	6,2	5,8
Knitted garment products and accessories	5,0	4,2	-14,9	6,0	5,4
Electrical machines and devices and components-parts	4,8	4,0	-16,6	6,2	4,9
Iron and steel	5,0	3,6	-28,0	4,0	4,0
Nonwoven garment goods and accessories	3,2	2,9	-8,6	3,8	3,6
Goods from iron and steel	3,2	2,8	-12,5	3,5	3,2
Plastics and products	3,1	2,7	-12,9	4,0	3,8
Mineral fuels and oils substances, mineral waxes	2,8	2,4	-16,8	5,8	10,3
Total of 10 Exporter Industries	48,0	44,9	-6,4	40,0	38,9
Others	32,1	28,6	-10,8	0,0	0,0

Source : Ministry Of Economy

According to the İMMİB (Istanbul Minerals and Metals Exporters' Association) export records, plastic export (product + raw material) ranked first within total chemical industry export with a share of 33 % and 32 % in the first 6 months of 2014 and 2015.

Chemical Industry Sub-Group Exports (USD Million)

	2014 / 6	2015 / 6
Plastics Industry Exports (USD Million)	2.906,4	2.538,8
Total Chemical Industry Exports (USD Million)	8.919,5	7.994,1
Saher of Plastics Industry (%)	33	32

Source: Istanbul Minerals and Metals Exporters' Association

PLASTIC PRODUCT EXPORT BY COUNTRIES:

Turkey exports plastic products to approximately 150 countries. While the 10 leading countries received as share of 49 % on amount and 47 % on value basis in 2014, these shares declined to 47 % and 45 % in the first 6 months of 2015, respectively.

Iraq, Germany and Russian Fed. comprise the leading 3 export markets to which plastic product is exported within the last two years. However, in the first six months of 2015, the 3rd order of Russian Fed was taken by UK.

Main Export Partners for Plastics Products

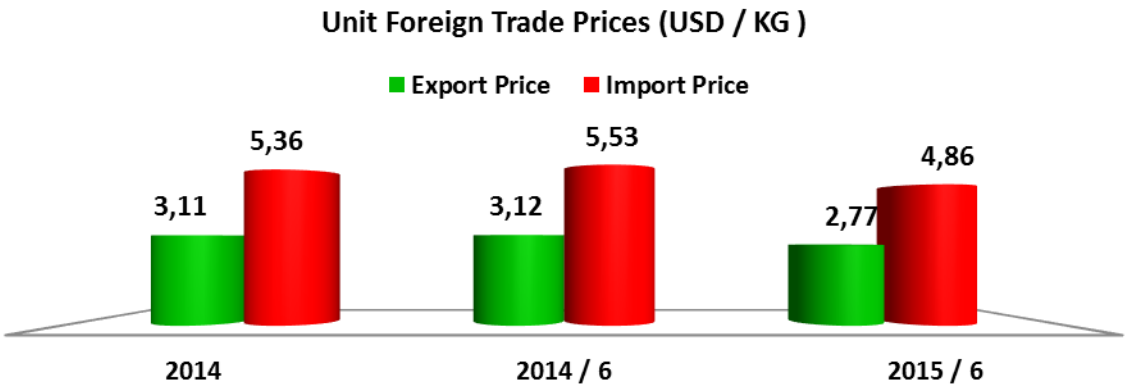
2014					2015 / 6				
ULKE	1000 Ton	Milyon $	Ton - %	$ - %	ULKE	1000 Ton	Milyon $	Ton - %	$ - %
IRAQ	242	545	15	11	IRAQ	116	240	15	11
GERMANY	68	261	4	5	GERMANY	37	120	5	6
RUSSIAN FED..	66	232	4	5	UK	35	104	4	5
AZERBAIJAN	69	231	4	5	FRANCE	27	89	3	4
UK	75	226	5	5	AZERBAIJAN	29	84	4	4
LİBYA	46	198	3	4	IRAN	21	77	3	4

FRANCE	48	187	3	4	ISRAEL	29	75	4	3
IRAN	59	158	4	3	RUSSIAN FED.	19	65	3	3
ROMANIA	50	155	3	3	LİBYA	27	64	3	3
GEORGIA	58	152	4	3	ITALY	22	64	3	3
10 COUNTRIES TOTAL	**781**	**2.345**	**49**	**47**	**10 COUNTRIES TOTAL**	**363**	**981**	47	45
OTHERS	**821**	**2.631**	**51**	**53**	**OTHERS**	**416**	**1.183**	53	55
TOTAL	**1.601**	**4.976**	**100**	**100**	**TOTAL**	**779**	**2.165**	100	100

Source : Turkish Statistics Department

PLASTIC PRODUCTS FOREIGN TRADE PRICES:

Unit import prices of plastic products has always cruised over unit export prices since 2000



In the first half of 2015, plastic product average import unit price decreased to 4,86 dollars / kg in by decreasing 12 % when compared to 2014 same period. On the other hand, average export unit price, decreased 2,78 dollars / kg by % 11 decreasing when compared to 2014 same period. The average export unit price was 43% lower than average import unit price in the first half of 2015.

Average Unit Prices in Plastic Product Foreign Trade
(USD / KG)

	UNIT IMPORT PRICES			UNIT EXPORT PRICES		
HS CODE	**2014 / 6**	**2015 / 6**	**% Increase**	**2014 / 6**	**2015 / 6**	**% Increase**
3916	5,73	4,26	-25,6	2,05	1,97	-6,0
3917	9,73	8,15	-16,3	2,63	2,44	-7,2
3918	2,67	2,37	-11,1	2,35	1,97	-14,6
3919	6,23	5,49	-12,0	7,04	6,27	-11,8
3920	4,14	3,52	-15,0	3,24	2,73	-14,7
3921	4,25	3,84	-9,7	3,54	3,02	-13,1
3922	10,99	10,16	-7,6	4,95	4,56	-8,6

3923	5,58	4,79	-14,1	3,00	2,51	-14,6
3924	7,51	6,80	-9,4	3,78	3,24	-12,8
3925	5,89	5,48	-6,9	2,77	2,61	-7,5
3926	10,32	9,44	-8,5	5,75	5,31	-9,7
AVARAGE	**5,53**	**4,86**	-12,2	**3,12**	**2,78**	**-10,5**

Source : Turkish Statistics Department

Turkey, with USD 2,8 /KG unit export price in the first 6 months of 2015, ranked 19th in average export prices of the first 20 exporter countries. This shows that Turkey's exports of plastic is not competitive enough and provide sufficient added value .

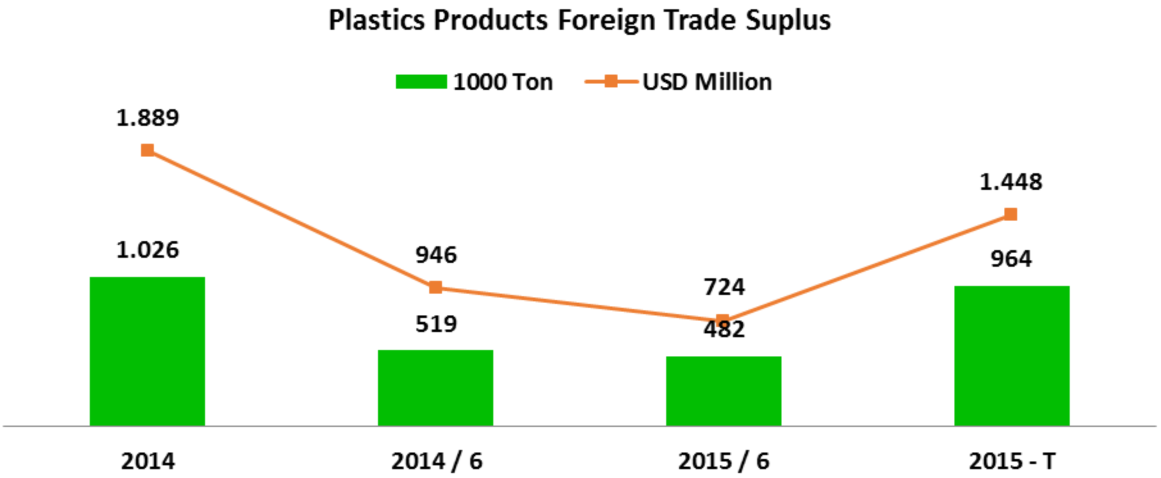
Export Unit Prices of 20 Countries
Shaping World Plastic Product Exports

Countries	USD / Kg	Countries	USD / Kg
JAPAN	**17,2**	**ITALY**	**4,8**
USA	**8,9**	**SPAIN**	**4,4**
GERMANY	**6,4**	**POLAND**	**4,4**
UK	**6,4**	**NETHERLAND**	**4,4**
FRANCE	**6,2**	**CHINA**	**3,8**
AUSTRIA	**6,0**	**TAYLAND**	**3,4**
S.KOREA	**5,5**	**TURKEY (2015 / 6 M)**	**2,8**
CHEZ REP.	**5,3**	**MEXICO**	**0,7**
BELGIUM	**5,2**	**20 COUNTRIES AVARAGE**	**4,4**
TAIWAN	**4,9**	**OTHERS AVARAGE**	**4,3**
CANADA	**4,9**	**WORLD AVARAGE**	**4,4**

Source : ITC, International Trade Center

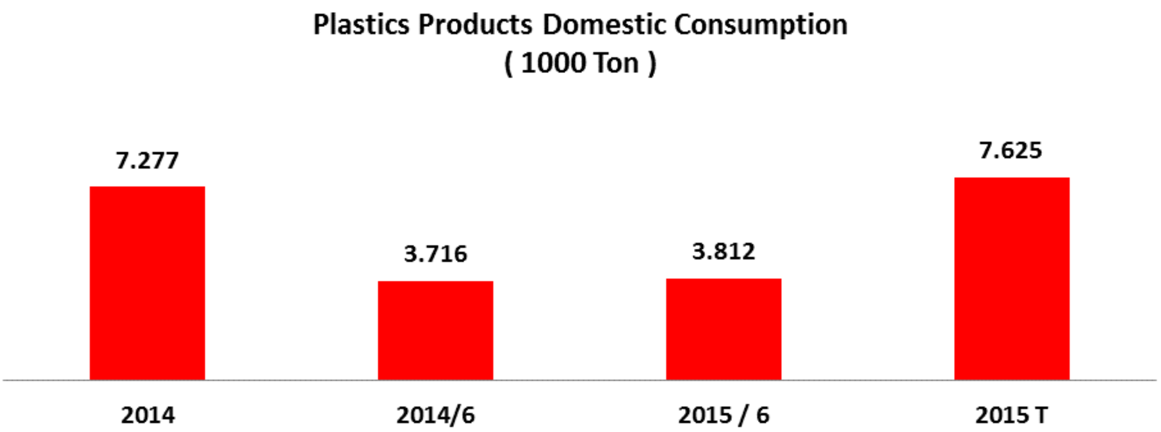
FOREIGN TRADE SURPLUS IN PLASTICS PRODUCT :

Turkey always gives foreign trade surplus in plastic products . Despite the decline of foreign trade surplus in the first half of 2015 compared to the same period of 2014, has given than USD million of 724 and 482 thousand tonnes. At the end of 2015 the trade surplus is expected to be 964 thousand tons and USD billion of 1.49 billion dropping below 2014 levels.
.



PLASTIC PRODUCT DOMESTIC MARKET CONSUMPTION:

Plastic products domestic market consumption, which was 7,3 million tonnes in 2014, realised as 3,8 million tonnes in the first half of 2015. Domestic consumption increased by % 2,6 in this period compared to the same period of 2014.



Approximately 959 thousand tonnes of 3,8 million tonne plastic product were indirectly exported in the first half of 2015 through channels of exporter industries such as automotive, packaging, construction and electronics. The remaining 2,8 million tonne section, on the other hand, was directly consumed by consumers.

When indirect export parts removed, the plastic products consumption per capita in Turkey is expected to rise to 76 kg at the end of 2015. When including indirect export parts of the consumption per capita in Turkey it is seen to be around 95 kg.

This level of per capita consumption is lower than those of developed western societies however twice the world average. This situation shows that domestic market is profoundly below the saturation point and that potential demand towards plastic consumption in Turkey is quite high.

GENERAL SUPPLY AND DEMAND EQUILIBRIUM IN PLASTIC PRODUCTS:

In the first half of 2015, with comparison to the same period of 2014, regarding plastic products;

- ✓ Manufacturing increased by 1.4 % on unit basis, decreased by 10,5 % on value basis,
- ✓ Imports increased by 6,5 % on unit basis and decreased by 6,5 % on value basis,
- ✓ Exports decreased by 2,4 % on unit basis and 13 % on value basis,
- ✓ Domestic consumption, including those used for indirect export, displayed an increase of 2,6 % on tonne basis and decreased by 9,8 % on value basis.
- ✓ Foreign trade surplus decreased by 7,2 % on unit basis and 23,5 % on value basis,
- ✓ 18 % on unit basis and 13 % on value basis of domestic manufacture was exported,
- ✓ 8% on unit basis and 9% on value basis of domestic consumption, including those used for indirect export, was met with imports,
- ✓ Export-import coverage ratio, on the other hand, realised in 263 % on unit basis and 150 % on value basis.

General Supply and Demand Equilibrium in Plastic Products
(1000 Tonnes)

	2014	2014 / 6	2015 / 6	2015 (E)	% Increase (2015 / 2014) 6 M	% Increase (2015 / 2014)
Manufacturing	8.303	4.235	4.295	8.589	1,4	3,4
Import	575	279	297	593	6,5	3,1
Export	1.601	798	779	1.558	-2,4	-2,7
Domestic Consumption	7.277	3.716	3.812	7.625	2,6	4,8
Foreign Trade Surplus	1.026	519	482	964	-7,2	-6,0
Export / Manufacturing (%)	19	19	18	18		
Import / Domestic Consumption (%)	8	7	8	8		
Export / Import (%)	278	286	263	263		

General Supply and Demand Equilibrium in Plastic Products
(USD Million)

	2014	2014 / 6	2015 / 6	2015 (E)	% Increase (2015 / 2014) 6 M	% Increase (2015 / 2014)
Manufacturing	35.169	18.314	16.398	32.795	-10,5	-6,8
Import	3.086	1.541	1.441	2.882	-6,5	-6,6
Export	4.976	2.487	2.165	4.330	-13,0	-13,0
Domestic Consumption	33.280	17.368	15.674	31.347	-9,8	-5,8
Foreign Trade Surplus	1.889	946	724	1.448	-23,5	-23,4
Export / Manufacturing (%)	14	14	13	13		

Import / Domestic Consumption (%)	9	9	9	9
Export / Import (%)	161	161	150	150

PLASTIC RAW MATERIAL:

PLASTIC RAW MATERIAL MANUFACTURING:

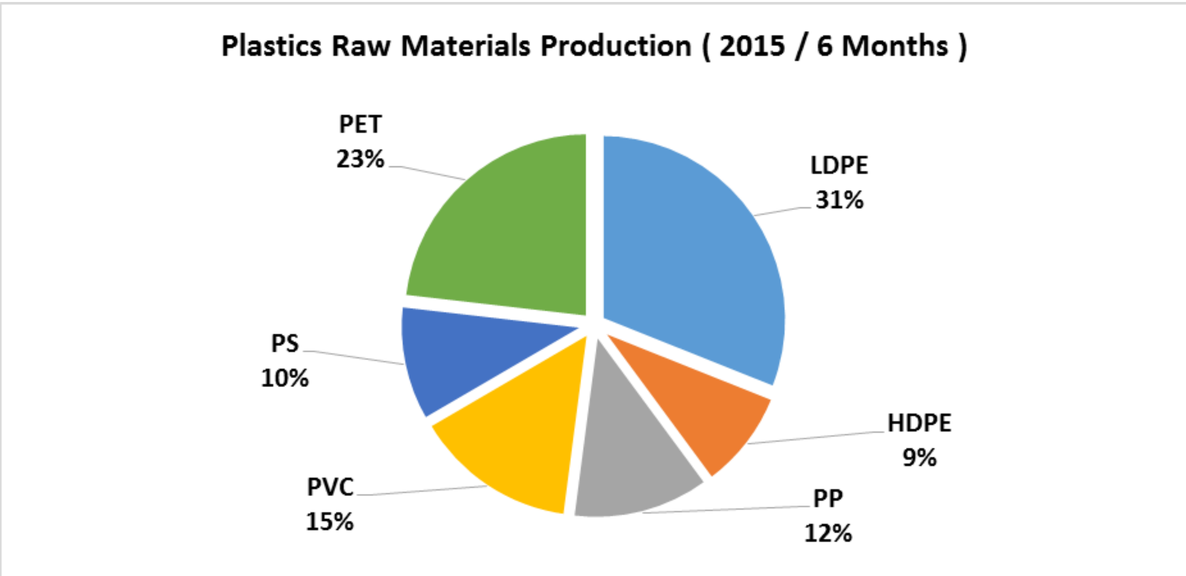
It is presumed that plastic raw material manufacturing, in the first half of 2015 ended with approximately 507 thousand tonnes.

Plastic Raw Material Domestic Manufacturing (1000 Tonnes)

	2015 / 6 M
LDPE	158
HDPE	45
PE TOTAL	202
PP	62
PVC	74
PS	52
PET	118
TOTAL PRODUCTION	507

Source : PETKİM and Other Companies

31% of the total plastic raw materials produced in the first 6 months of 2015 in Turkey is LDPE. On the other hand 24 % of the production is PET, 14 % PVC, 10 % PS, % 9 HDPE .

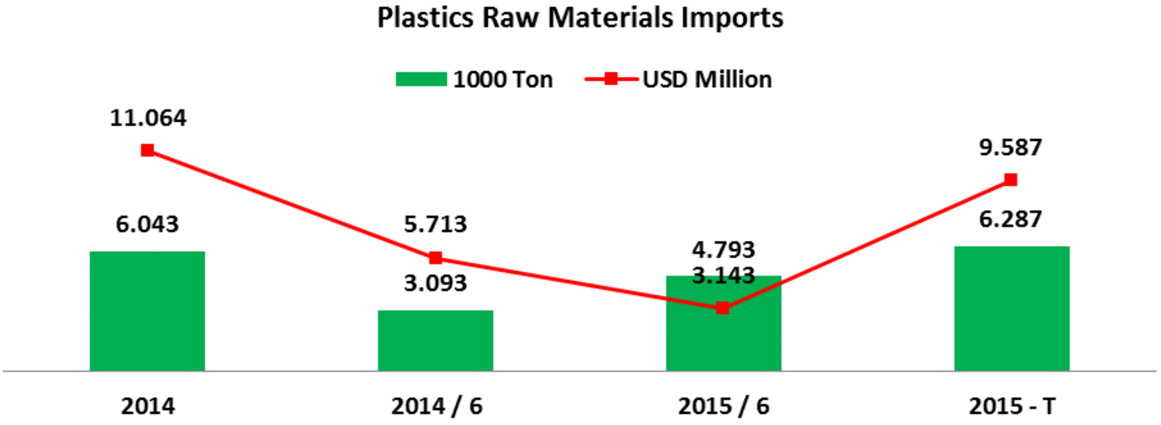


Türk Plastik Sanayicileri Araştırma, Geliştirme ve Eğitim Vakfı

PLASTIC RAW MATERIALS IMPORT:

In the first half of 2015, 3,14 million tons of plastics raw materials was imported with a value of USD million of 4,8. Imports increased by % 1,6 on unit base while decreased by % 16 on value base. By the end of 2015 plastics raw materials imports are expected to be 6.3 million tons and USD billion of 9,6 increasing by 4 % in unit base and decreasing by 13 % compared to the same period of 2014 .

Plastic Raw Material Import on HS Basis (1000 Tonnes)



At the end of 2015 compared to 2014, all the plastics raw materials except those taking place in the Custom Duty numbers in 3904, 3913 and 3915 is expected to increase.

Plastic Raw Material Imports on HS Basis (1000 Tonnes)

HS CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 2014 INCREASE (%)
3901	ETHYLENE POLYMERS (INITIAL FORMS)	1.498,5	747,8	812,1	1.624,2	8,6	8,4
3902	PROPYLENE AND POLYMERS OF OTHER OLEFINS (INITIAL FORMS)	1.898,9	954,6	955,1	1.910,3	0,1	0,6
3903	STYRENE POLYMERS (INITIAL FORMS)	476,5	263,0	264,6	529,1	0,6	11,1
3904	OTHER OLEFIN POLYMERS WITH VINYL CHLORIDE/HALOGENOUS	892,1	464,3	418,2	836,4	-9,9	-6,2
3905	VINYL ACETAT/POLYMERS OF OTHER VINYL ESTERS (INITIAL FORMS)	35,2	18,8	21,6	43,3	15,2	23,0
3906	ACRYLIC POLYMERS (INITIAL FORMS)	193,5	97,9	101,8	203,7	4,0	5,2
3907	POLYACETALS, OTHER POLYETHERS, EPOXIDE-ALKYD RESINS (INITIAL FORMS)	545,3	283,6	307,6	615,2	8,5	12,8
3908	POLYAMIDES (INITIAL FORMS)	90,8	48,9	45,6	91,2	-6,8	0,4
3909	AMINO RESINS, PHENOLIC RESINS, POLYURETHANES (INITIAL FORMS)	205,5	103,8	106,4	212,7	2,5	3,5
3910	SILICONES (INITIAL FORMS)	28,6	14,5	14,8	29,5	1,7	3,4
3911	PETROLEUM RESINS, COUMARONE, INDENE/COUMARONE-INDENE RESIN, POLYTERPENES	27,6	14,4	14,8	29,6	2,9	7,5
3912	CELLULOSE AND CHEMICAL DERIVATIVES (INITIAL FORM)	36,4	18,0	19,8	39,6	9,8	8,7
3913	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS, DERIVATIVES (INITIAL FORMS)	3,6	2,1	1,7	3,5	-15,9	-2,7
3914	POLYMER BASED ION EXCHANGERS (INITIAL FORM)	5,5	2,7	3,2	6,4	18,1	14,8
3915	WASTES, RESIDUALS AND SCRAPS FROM PLASTIC	105,3	58,5	56,0	112,0	-4,3	6,4
	PLASTIC RAW MATERIAL TOTAL	6.043,4	3.093,1	3.143,4	6.286,9	1,6	4,0

Source : Turkish Statistics Department

Plastic Raw Material Imports on HS Basis (USD Million)

HS CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 2014 INCREASE (%)
3901	ETHYLENE POLYMERS (INITIAL FORMS)	2.618	1.311	1.215	2.430	-7	-7,2
3902	PROPYLENE AND POLYMERS OF OTHER OLEFINS (INITIAL FORMS)	3.314	1.675	1.339	2.678	-20	-19,2
3903	STYRENE POLYMERS (INITIAL FORMS)	974	548	413	827	-25	-15,1
3904	OTHER OLEFIN POLYMERS WITH VINYL CHLORIDE/HALOGENOUS	1.022	536	411	822	-23	-19,6
3905	VINYL ACETAT/POLYMERS OF OTHER VINYL ESTERS (INITIAL FORMS)	103	56	53	105	-6	2,2
3906	ACRYLIC POLYMERS (INITIAL FORMS)	452	232	199	397	-14	-12,1
3907	POLYACETALS, OTHER POLYETHERS, EPOXIDE-ALKYD RESINS (INITIAL FORMS)	1.280	665	599	1.198	-10	-6,4
3908	POLYAMIDES (INITIAL FORMS)	288	157	114	227	-28	-21,1
3909	AMINO RESINS, PHENOLIC RESINS, POLYURETHANES (INITIAL FORMS)	534	277	231	461	-17	-13,7
3910	SILICONES (INITIAL FORMS)	127	67	56	112	-16	-12,2
3911	PETROLEUM RESINS, COUMARONE, INDENE/COUMARONE-INDENE RESIN, POLYTERPENES	99	52	46	93	-11	-6,0
3912	CELLULOSE AND CHEMICAL DERIVATIVES (INITIAL FORM)	166	85	78	157	-8	-5,3
3913	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS, DERIVATIVES (INITIAL FORMS)	28	16	13	27	-16	-4,5
3914	POLYMER BASED ION EXCHANGERS (INITIAL FORM)	14	7	8	16	11	10,8
3915	WASTES, RESIDUALS AND SCRAPS FROM PLASTIC	45	27	19	37	-32	-18,1
	PLASTIK HAMMADDE TOTAL	11.064	5.713	4.793	9.587	-16	-13,4

Source : Turkish Statistics Department

The dependency of Turkish plastic industry on plastic raw material supply is still continuing and increased to 86% in 2015.

PLASTIC RAW MATERIAL IMPORT BY COUNTRIES:

Turkey imports plastic raw materials from over 100 countries. 10 countries comprised approximately 66% on amount basis and 68% on value basis of total imports. S. Arabia, S. Korea and Germany ranked as the top 3 country in total plastic raw material imports and these 3 countries received a total share of 33 % within our total national plastic raw material import in the first half of 2015.

Main Import Partners for Plastics Raw Materials

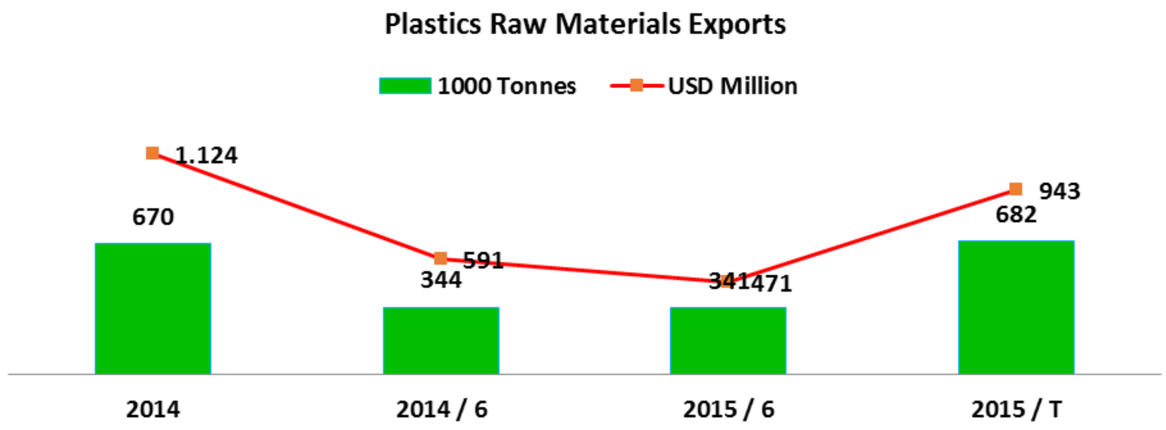
2014					2015 / 6				
COUNTRIES	1000 Ton	USD Million	Ton - %	$ - %	COUNTRIES	1000 Ton	USD Million	Ton - %	$ - %
S.ARABIA	1.022	1.705	17	15	S.ARABIA	495	684	16	14
S.KOREA	586	1.129	10	10	GERMANY	217	462	7	10
GERMANY	399	1.021	7	9	S.KOREA	267	447	8	9
BELGIUM	386	744	6	7	BELGIUM	201	315	6	7
ITALY	242	543	4	5	IRAN	190	254	6	5
FRANCE	315	525	5	5	ITALY	129	236	4	5
IRAN	305	505	5	5	FRANCE	157	215	5	4

SPAIN	277	499	5	5	NETHERLAND	115	209	4	4
NETHERLAND	206	471	3	4	SPAIN	132	204	4	4
USA	269	414	4	4	USA	111	158	4	3
10 COUNTRIES TOTAL	**4.007**	**7.555**	**66**	**68**	**10 COUNTRIES TOTAL**	**2.014**	**3.184**	**64**	**66**
OTHERS	**2.036**	**3.510**	**34**	**32**	**OTHERS**	**1.129**	**1.609**	**36**	**34**
TOTAL	**6.043**	**11.064**	**100**	**100**	**TOTAL**	**3.143**	**4.793**	**100**	**100**

Source : Turkish Statistics Department

PLASTIC RAW MATERIAL EXPORT:

341 thousand tonne and 471 thousand dollars of plastic raw material was exported in the first half of 2015 decreasing 1 % on unit base and 20 % on value base. Plastics raw materials exports is exported to be 682 thousand tonnes and USD million of 943 at the end of 2015.



In the first six months of 2015 compared to the period of 2014 exports of all raw materials except those taking place in 3901, 3904 and 3915 decreased. At the end of 2015 compared to 2014, exports are projected to increase in all raw materials other than plastic raw material located in 3901, 3904 and 3915.

PAGEV 1989

Türk Plastik Sanayicileri Araştırma, Geliştirme ve Eğitim Vakfı

Plastic Raw Material Exports on HS Basis (1000 Tonnes)

HS CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 2014 INCREASE (%)
3901	ETHYLENE POLYMERS (INITIAL FORMS)	72	49	16	33	-67,0	-54,7
3902	PROPYLENE AND POLYMERS OF OTHER OLEFINS (INITIAL FORMS)	21	11	14	27	20,9	29,7
3903	STYRENE POLYMERS (INITIAL FORMS)	24	13	18	37	45,2	51,3
3904	OTHER OLEFIN POLYMERS WITH VINYL CHLORIDE/HALOGENOUS	22	10	8	16	-21,3	-27,7
3905	VINYL ACETAT/POLYMERS OF OTHER VINYL ESTERS (INITIAL FORMS)	36	19	24	48	26,0	33,1
3906	ACRYLIC POLYMERS (INITIAL FORMS)	151	77	82	165	6,3	8,6
3907	POLYACETALS, OTHER POLYETHERS, EPOXIDE-ALKYD RESINS (INITIAL FORMS)	195	94	99	198	4,6	1,4
3908	POLYAMIDES (INITIAL FORMS)	13	6	7	15	16,2	13,1
3909	AMINO RESINS, PHENOLIC RESINS, POLYURETHANES (INITIAL FORMS)	66	30	38	76	26,8	14,5
3910	SILICONES (INITIAL FORMS)	5	3	3	6	5,9	11,6
3911	PETROLEUM RESINS, COUMARONE, INDENE/COUMARONE-INDENE RESIN, POLYTERPENES	0	0	0	0	20,3	6,5
3912	CELLULOSE AND CHEMICAL DERIVATIVES (INITIAL FORM)	43	20	22	44	8,2	2,2
3913	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS, DERIVATIVES (INITIAL FORMS)	0	0	0	0	23,2	19,6
3914	POLYMER BASED ION EXCHANGERS (INITIAL FORM)	0	0	0	0	204,5	105,8
3915	WASTES, RESIDUALS AND SCRAPS FROM PLASTIC	20	10	9	18	-13,7	-11,1
	PLASTIC RAW MATERIAL TOTAL	670	344	341	682	-1,0	1,8

Source : Turkish Statistics Department

In the first six months of 2015 compared to the period of 2014, exports of all raw materials decrease except those taking place in 3902, 3903, 3905, 3913 and 3914 in terms of value base. At the end of 2015 compared to 2014 export of all raw materials except taking place in 3902, 3903 and 3905 are expected to decline on vale base.

Plastic Raw Material Exports on HS Basis (Million USD)

HS CODE	PLASTIC RAW MATERIAL DEFINITIONS	2014	2014 / 6	2015 / 6	2015 (E)	2015 /14 6 M % INCREASE	2015/ 2014 INCREASE (%)
3901	ETHYLENE POLYMERS (INITIAL FORMS)	111	79	24	49	-69,2	-56,1
3902	PROPYLENE AND POLYMERS OF OTHER OLEFINS (INITIAL FORMS)	34	18	19	37	3,5	9,2
3903	STYRENE POLYMERS (INITIAL FORMS)	42	21	25	50	16,1	19,2
3904	OTHER OLEFIN POLYMERS WITH VINYL CHLORIDE/HALOGENOUS	28	13	9	18	-28,5	-34,6
3905	VINYL ACETAT/POLYMERS OF OTHER VINYL ESTERS (INITIAL FORMS)	41	21	22	44	4,9	8,0
3906	ACRYLIC POLYMERS (INITIAL FORMS)	229	120	100	200	-16,6	-12,7
3907	POLYACETALS, OTHER POLYETHERS, EPOXIDE-ALKYD RESINS (INITIAL FORMS)	410	203	165	330	-19,0	-19,6
3908	POLYAMIDES (INITIAL FORMS)	33	16	15	30	-9,1	-10,1
3909	AMINO RESINS, PHENOLIC RESINS, POLYURETHANES (INITIAL FORMS)	100	51	46	93	-9,6	-7,7
3910	SILICONES (INITIAL FORMS)	19	10	10	20	-2,8	0,9
3911	PETROLEUM RESINS, COUMARONE, INDENE/COUMARONE-INDENE RESIN, POLYTERPENES	2	1	1	2	-9,4	-5,5
3912	CELLULOSE AND CHEMICAL DERIVATIVES (INITIAL FORM)	56	27	27	54	-1,4	-3,8
3913	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS, DERIVATIVES (INITIAL FORMS)	1	1	1	1	8,0	-6,5
3914	POLYMER BASED ION EXCHANGERS (INITIAL FORM)	0	0	0	1	433,6	239,4
3915	WASTES, RESIDUALS AND SCRAPS FROM PLASTIC	18	9	8	16	-15,6	-10,3
	PLASTIC RAW MATERIAL TOTAL	1.124	591	471	943	-20,3	-16,1

Source : Turkish Statistics Department

PLASTIC RAW MATERIAL EXPORTS BY COUNTRIES:

Turkey exports plastic raw material to over 100 countries and 10 countries received a share of 54% both on amount and value basis within total export in 2014. The first 10 iport partners shared % 51 of total raw materials exports in the first half of 2015. Germany, Egypt and Russian Federation ranked as the top 3 country in our plastic raw material exports in the first half of 2015.

Distribution of Raw Material Export to Countries

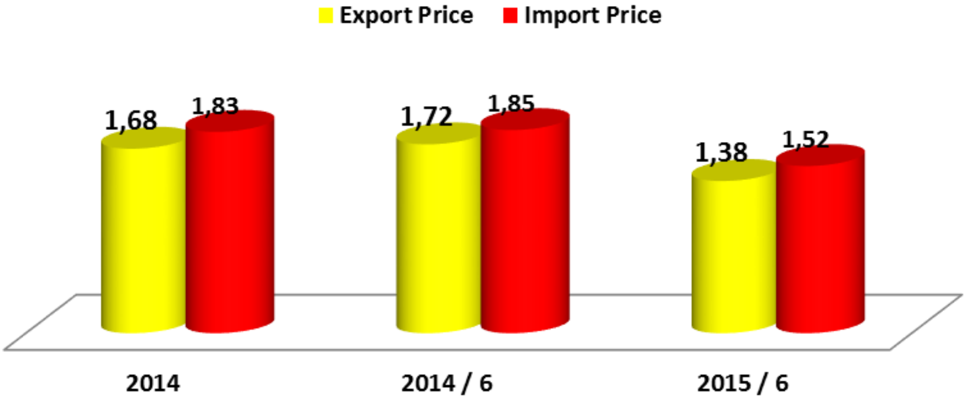
2014					2015 / 6				
Countries	**1000 Ton**	**USD Million**	**% - Ton**	**% - $**	**Countries**	1000 Ton	USD Million	% - Ton	% - $
GERMANY	65	122	10	11	GERMANY	32	45	9	10
ITALY	58	89	9	8	EGYPT	31	34	9	7
RUSSIAN FED.	30	75	5	7	RUSSIAN FED.	16	33	5	7
EGYPT	53	72	8	6	IRAN	11	26	3	6
BULGARIA	49	48	7	4	ITALY	20	25	6	5
IRAN	17	46	2	4	BULGARIA	24	17	7	4
AZERBAIJAN	24	44	4	4	ISRAEL	13	16	4	3
IRAQ	22	43	3	4	UZBEKISTAN	8	15	2	3
ISRAEL	26	39	4	3	IRAQ	9	15	3	3
ROMANIA	19	30	3	3	AZERBAIJAN	8	14	2	3
10 COUNTRIES TOTAL	**363**	**609**	**54**	**54**	**10 COUNTRIES TOTAL**	**173**	**240**	**51**	**51**
OTHERS	**307**	**515**	**46**	**46**	**OTHERS**	**168**	**231**	**49**	**49**
TOTAL	**670**	**1.124**	**100**	**100**	**TOTAL**	**341**	**471**	**100**	**100**

Source : Turkish Statistics Department

PLASTIC RAW MATERIAL FOREIGN TRADE UNIT PRICES:

Plastic raw material average unit import price in the first half of 2015 was 1.52 $ / Kg and displayed a decrease of 17 % according to the same period of 2014 averages. In the same period, plastic raw material average unit export price was 1.38 $ / Kg and displayed a decrease by 20 % according to the same period of 2014.

Plastics Raw Materials Unit Foreign Trade Prices
($ / Kg)



Turkey's plastic raw material unit prices are approximately 8 % higher than export prices. In other words, while Turkey is importing plastic raw material with high added values, she exports raw materials with low added values.

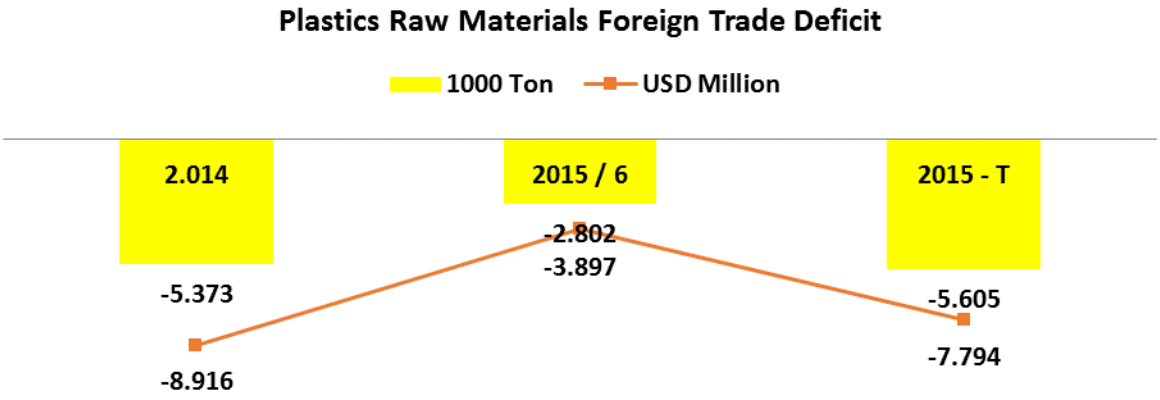
Plastic Raw Materials Export and Import Average Unit Prices
(USD / Tonne)

	IMPORT PRICES			EXPORT PRICES		
GTİP NO	2014 / 6	2015 / 6	% Increase	2014 / 6	2015 / 6	% Increase
3901	1,75	1,50	-14,7	1,60	1,49	-6,7
3902	1,76	1,40	-20,1	1,59	1,36	-14,4
3903	2,08	1,56	-25,0	1,68	1,35	-20,0
3904	1,15	0,98	-14,9	1,28	1,17	-9,1
3905	3,00	2,43	-18,8	1,11	0,92	-16,7
3906	2,37	1,95	-17,8	1,55	1,22	-21,6
3907	2,35	1,95	-17,0	2,15	1,67	-22,5
3908	3,21	2,49	-22,4	2,59	2,03	-21,7
3909	2,67	2,17	-18,9	1,71	1,22	-28,6
3910	4,60	3,78	-17,8	3,51	3,22	-8,2
3911	3,64	3,13	-14,0	5,43	4,09	-24,7
3912	4,71	3,96	-15,9	1,34	1,22	-8,9
3913	7,70	7,70	0,0	6,65	5,83	-12,3
3914	2,66	2,49	-6,3	2,13	3,74	75,3
3915	0,47	0,33	-28,9	0,91	0,89	-2,2
AVARAGE	**1,85**	**1,52**	-17,4	**1,72**	**1,38**	-19,5

Source : Turkish Statistics Department

PLASTICS RAW MATERIALS FOREIGN TRADE DEFICIT :

Turkey is a country that always gives foreıgn trade deficit for plastic raw materials trade . Foreign trade deficit for plastics raw materials in the first 6 months of 2015 stood at 2.8 million tons and $ 3.9 billion and increased in terms of quantity as compared to peers period of 2014 and declined in terms of value. At the end of 2015 foreign trade deficits estimated to be 5.6 million tons and 7.8 billion dollars .



PLASTIC RAW MATERIAL GENERAL SUPPLY AND DEMAND EQUILIBRIUM:

Regarding plastic raw materials, It is observed in the first half of 2015 that;

- ✓ Manufacturing preserved the 2014 levels,
- ✓ Import increased to 3,14 by increasing % 1,6
- ✓ Export increased to 341 thousand by decreasing by % 1
- ✓ Domestic consumption regressed to 3,3 million tonnes with a decrease of 1.7 %,
- ✓ Foreign trade deficit increased to 2,8 million tonnes by increasing % 2
- ✓ The share of export within manufacturing was 67 %,
- ✓ The share of import within total supply was 86 %,
- ✓ The export-import coverage ratio was 11%.

Supply and Demand Equilibrium in Plastic Raw Materials
(1.000 Tonnes)

	2014	2014 / 6	2015 / 6	2015 (E)	% Increase (2015 / 2014) 6 M	% Increase (2015 / 2014)
Manufacturing	1.014	507	507	1.014	0,0	0,0
Import	6.043	3.093	3.143	6.287	1,6	4,0
Export	670	344	341	682	-1,0	1,8
Domestic Consumption	6.387	3.256	3.309	6.619	1,7	3,6
Foreign Trade Deficit / Surplus	-5.373	-2.749	-2.802	-5.605	2,0	4,3
Export / Manufacturing (%)	66	68	67	67		
Import / Domestic Consumption (%)	86	86	86	86		
Export / Import (%)	11	11	11	11		

CONCLUSION:

The 2023 export vision of the industry is to accrue at least 17 billion dollars of the 50 Billion dollar export target of the chemical industry. In order for to increase the current export prices plastics industry export, which is less than 6 billion dollars, to 17 Billion dollars, the industry must export 6 million tonnes of product and escalate total manufacturing to 28 million tonnes by 2023 with an annual growth of 14% in order to meet domestic demand.

On the other hand, it is known that the aforementioned export target is also possible through export of 3.8 million tonnes of product by increasing the unit export prices to 4.5 $ / Kg. In this case, manufacturing must reach to a level of 18 million tonnes by 2023 with an annual growth of 9%.

Under current circumstances, attainment of 17 billion dollars of export seems extremely difficult. However, the realisation of export on such levels, in parallel with its growth, the industry must take measures which will increase its unit export prices, which cruises around 3$ / Kg to 4.5 $ / Kg, average of developed countries alongside with making the best of the investment incentives.

For this purpose;

- ✓ Collaboration of civil society organizations in all sectors of the plastics industry for the preparation of the strategic plan to be approved as the strategy plan of the industry by government authorities.
- ✓ Incentive opportunities must be increased as the plastics industry is in need of technological and R&D investments.
- ✓ Strategic investments must be included within the plastics industry, regardless of the foreign trade data and minimum investment amount must be specified as 5 million USD.
- ✓ Plastics industry must ensure greater portion of its raw material needs from the Middle East and European countries. Sector, although met with only 14% of domestic production needs , in order to protect domestic production , more affordable price of the raw material supply facilities , are deprived of putting taxes on imports. In this case, for the protection of domestic producers of raw materials , reducing the competitive global market and export opportunities in the sector. Domestic producers, instead of putting taxes on imports of raw materials must be protected by applying incentives to reduce production and investment costs.
- ✓ The barriers to imports should be removed for plastic raw material production which does not meet the requirements.
- ✓ Exports are declining. According to the new conditions, the incentive mechanism for exports must be revised.

- ✓ Plastics industry regardless of the external trade data should be incorporated into strategic investment and the minimum investment amount shall be determined as of 5 million dollars.
- ✓ Qualified staff in the sector for the provision of the necessary measures should be taken.
- ✓ The plastics industry must be supported in at least one province within every region due to the fact that it is more rational to be active on local basis in plastic product manufacturing.
- ✓ Considering the main objective of incentive applications is reducing the interregional developmental differences, the transfer of current investments to sub-regions must be included within the scope of the support.