



## Plastics



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May 2015

There have been huge fluctuations in the price of crude oil during the early part of 2015. There is one question in the minds of many people in the plastics scrap industry: Is there a direct correlation between the oil prices and plastics scrap prices?

Considering the price movements during the last six months, I am of the opinion that in Europe, for sure, there is no direct link between the prices of these two commodities. I will explain to you why. During the recent December-January period, the oil price decreased substantially, with the NYMEX-quoted WTI oil price dipping from US\$ 68 to US\$ 47 per barrel over this period. At the same time, prices of LDPE - the most important plastics scrap grade - fell too from around Euro 520 to Euro 410 per tonne in Europe.

When the oil price increased to US\$ 55 per barrel in late February, scrap prices also started to creep up. But when oil prices slid to around US\$ 45 per barrel during mid-March, the plastic scrap price did not decline. On the contrary, it increased to almost Euro 560 per tonne, which is higher than the price prevailing before the oil price drop.

The market for plastic scrap is immature and volumes are relatively low compared to prime materials. Prices are also influenced by the policy and regulatory environment as well as by the quality of scrap. The influence of oil will be less in Europe as there is a large tax component between oil and raw material prices. This amount is sometimes fixed in Euro terms, linked to quantity and not to the value of the materials. Besides, some of the plastics may have been produced from natural gas.

Business is still concentrated in few regions of the world, thus adding to the distortion of fundamentals. I should add that European plastic prices have gone up partly due to currency as well: the Euro has depreciated significantly during the last six months.

Due to these various factors, I am convinced that there is no direct linear connection between oil prices and plastics scrap prices in Europe.

### What is the outlook for the rest of 2015?

I feel there will be a substantial increase in local recycling and that the availability of good-quality scrap will be reduced. New production facilities are being established in Europe, including the following:

- MTM Plastics in Germany is going to increase its capacity to produce PE and PP from 20,000 tonnes per annum to 40,000 tonnes next year.
- Jayplas in the UK has installed capacity to process 20,000 tonnes of LDPE this year.
- QCP in the Netherlands is going ahead with a project to produce 110,000 tonnes of PP and PE per year.
- Several recycling plants are also being commissioned in Central and Eastern Europe.

Lower carbon dioxide emissions owing to shorter distances and also clear traceability in recycling are encouraging scrap generators to sell to local recyclers. At the same time, the weaker Euro is leading to increased exports from Europe. Lower sea freights are also helping exports from Europe to the Far East.

The state of a country's virgin plastics processing industry is a reflection of the state of its plastic scrap industry. Germany's plastics processing industry had a very good year in 2014, with sales increasing by 2.6% compared to GDP growth of only 1.5%. Confidence for 2015 is strong and positive, and so prospects for the plastics scrap industry look very promising too.

Earlier this year, the EU scrapped plans to introduce its Circular Economy Package which had been announced with great enthusiasm in July 2014. It had made many promises, including up to 60% recycling /reuse of plastics.

A European group has launched the Reloop Platform consisting of representatives from industry, government and non-governmental organisations. This group will assist the EU in launching a more ambitious Circular Economy Package which is expected to create an additional 6 million tonnes of recycled plastics in the EU. This is very good news for the plastics recycling industry.

## Update on the China and Hong Kong plastics market

(Dr Steve Wong, China Scrap Plastics Association)



The market atmosphere for the plastics recycling industry in China and Hong Kong has been gradually revitalised following the improvement in oil prices to US\$ 58 per barrel (New York) and US\$ 65 per barrel (Brent) as at April 30, equivalent to increases of 34-38% from the low point of US\$ 42-43 per barrel. Buyers in the market are generally looking for large volumes of scrap which is of high purity as well as easily washed and processed, such as LDPE film scrap, HDPE regrind for extrusion, TV cases and PC bottles.

Demand for polyolefin scrap - and particularly LDPE and HDPE - is high, especially in Shandong, Jiangxi, Hubei, Henan, Guizhou, Guangdong and the eastern part of China as farmers are encouraged by the government to use agricultural films made mainly of LDPE to protect their crops. Through extensive utilisation of agricultural films and technological breakthroughs at plantations, productivity has been enhanced in western interior China and therefore the government has introduced the same strategy to coastal provinces in the south.

In 2013, the Chinese government adopted its first initiative to control the recycling of agricultural film owing to "white pollution"; the "Regulation on recycling and utilization of used agricultural film scrap in Gansu Province" prohibited sales and consumption of ultra-thin agricultural film with thicknesses of less than 0.008mm, and the films used are required to have a minimum thickness of 0.01mm in order to facilitate collection, washing, shredding and all the necessary recycling processes. Moreover, agricultural film recyclers enjoy tax reductions, tax rebates, additional interest on their bank savings, etc. The recycling rate for agricultural film in Gansu stood at 67% in 2012 and increased to 70.7% in 2013, but failed to meet the target of 75% in 2014.

The above-mentioned oil prices of US\$ 58 per barrel (New York) and US\$ 65 per barrel (Brent) on April 30 this year are almost half what they were in April 2012, ie US\$ 93 per barrel (New York) and US\$ 109 per barrel (Brent). Nevertheless, the price of virgin LDPE has been able to withstand the oil price impact and remain at US\$ 1457 per ton as compared with US\$ 1435 in 2012 when the oil price was substantially higher.

Although trading is more active than prior to Chinese New Year, the price of PET remains weak as a result of overproduction in recent years. Although the conflagration at a PX petrochemical factory in Zhangzhou, Fujian, south China, in early April resulted in a PTA price increase, it did not help much in pushing up the price of PET for obvious reasons. Comparing every April since 2011, the price of PET bottle flakes has been dropping - from US\$ 1507 per ton to US\$ 1272, US\$ 1227, US\$ 953 and finally to US\$ 768 in April 2015, which is equivalent to a 14% decrease year on year. POM is also weak owing to increased supply from local petrochemical production plants in China. Making the same April 2011-2015 comparison, the price of prime POM has dropped from US\$ 1838 per ton to US\$ 1610, US\$ 1523, US\$ 1310 and then to US\$ 1280 in April this year.

Since the end of March, market information has revealed that Chinese Customs will tighten import controls by: inspecting incoming scrap containers thoroughly; random visits to registered recycling plants in China; and tracking the final destinations of imported scrap materials. How long this lasts, however, remains to be seen.

## Update on the European market

(Grégory Cardot, Veolia Propreté France Recycling)



After the decline for virgin materials which began in the summer of 2014 and became more pronounced last December, prices have rebounded strongly and have returned to levels equivalent to, or even greater than, those witnessed in 2014.

Some factors have confirmed this price explosion, including the growing number of force majeure conditions among producers of virgin materials - such as Sabic, Borealis and LyondellBasell - and the availability of certain resins and grades (eg PP, PE and PVC).

The upturn in prices for virgin materials in early 2015 halted the decline in recycled material prices, but increases for the latter have not been equivalent to those for the former. The decline in collections of plastic waste since the beginning of the year, coupled with strong seasonal demand from users, has put pressure on the European market, thus implying price increases over the coming months for the valuable grades in particular.

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