



INDONESIA MANUFACTURING SNAPSHOT

Contribution to GDP	: 20.41% (Q3 2015)
Sector Growth	: 4.33% (yoy, Q3 2015)
Number Employed in the Sector	: 16.38 million (February 2015)
Highest Minimum Wage by Province	: 3,100,000 IDR/month (DKI Jakarta)
Lowest Minimum Wage by Province	: 1,482,950 IDR/month (West Nusa Tenggara)
Main Areas	: Automotive, Electronics, Textile & Garment, Footwear, Food & Beverages, Metal Products, Chemicals.
Main Export Markets	: USA, Japan, China, Turkey, South Korea, Germany, Singapore, Thailand, Philippines, Saudi Arabia, Malaysia.
Indonesia's Plastic & Packaging Industry	: Still Dependent on Raw Material Imports

Indonesia's plastic and packaging sector has shown strong growth of the back of the country's intensified consumption habits. The food packaging industry remained the largest plastics end-user in 2015 in Indonesia, after enjoying another year of considerable growth. Meanwhile, the infrastructure and automotive sectors have rapidly become new growth drivers over the course of 2015, which has helped to boost sales of plastic products. Despite this demand, the potential of Indonesia's plastic sector remains unfulfilled due to an over-reliance on imported raw materials. Furthermore, a recent government initiative to begin charging for use of plastic bags at modern retail outlets as of March 2016 may place more pressure on the plastic sector going forward. Indonesia's plastic sector still relies on imports to meet 40% of local demand signaling the extent of the opportunities still available to local manufacturers.

Stifled growth

The global economic slowdown and the decline of the rupiah against the US dollar are major factors behind the more sluggish growth of Indonesia's plastic industry in 2015. The Indonesian Olefin, Aromatic and Plastic Industry Association (INAPlas) estimated that plastic sales in 2015 recorded a meager growth of just 3% versus 7-8% in previous years. The plastic and packaging sector's dependence on raw material imports has also been more acutely felt as a result of the weakening of the rupiah which has caused production costs to soar. Indonesia's plastic sector still relies on imports to meet 40% of local demand signaling the extent of the opportunities still available to local manufacturers. In 2014, for example, 2.5 million tonnes of total plastic demand of 4.2 million tonnes was met by imports. Indonesia's plastic exports in 2015 decreased by 18.44% compared to the same period in the previous year. At the close of 2015, the plastic industry recorded export earnings of just \$2.25 billion USD versus \$2.76 billion USD in 2014.

In terms of volume, Indonesia's plastic exports fell by 5.58% to 1.39 million tonnes in 2015 from 1.47 million tonnes in the previous year. Likewise, the imports of plastic raw materials and products dropped by 12.36% to \$6.83 billion USD compared to \$7.79 billion USD in 2014. Indonesia's annual plastic consumption per capita of 10



kilograms is still relatively low compared to other ASEAN countries, such as Singapore, Malaysia, and Thailand, which reached 40 kilograms per capita per year. Based on this, INAplas predicts that Indonesia's plastic sales will increase to 7 million tonnes by 2018. Plastic products in Indonesia are used by a wide array of industries such as the food and beverage packaging industry which accounts for 60%, building and household appliances for 15%, the automotive sector for 8% and the remainder by other sectors including agriculture and horticulture. The food and beverage packaging industry continues to be the bedrock of Indonesia's plastic sales. There are 892 companies operating in this sector throughout the country, with an installed capacity of 2.35 million tonnes and employing 350,000 workers. Their products include rigid packaging, flexible packaging, and extrusion thermoformed products.

Besides the food and beverage industry, the infrastructure sector, which is currently being pushed by the government also helped boost sales of plastic construction materials. The domestic demand for plastic products is expected to increase to keep pace with the growth of the manufacturing industry. INAplas estimated that in 2015 the construction sector consumed 600,000 tonnes of plastic products, or increased by 7% compared to 2014.

Another promising market for Indonesia's plastic industry in recent years is the automotive sector. Nearly three-quarters of plastic parts used by automakers in the country are imported. At present, the domestic plastic industry is only able to supply 60,000-70,000 tonnes of total plastic parts of the 250,000 tonnes used by the automotive industry. This means that the sector still offers plenty of scope for growth as Japanese automotive brands present in Indonesia are increasingly demonstrating their commitment to use Indonesian domestically-manufactured components. The challenge in meeting this potential lays in the limited expertise of local plastic manufacturers to move up the value chain and meet the exacting standards of higher value industries such as that of automotive parts. INAplas has set a target to increase plastic raw material production by up to 4 million tonnes per year by 2023. Indonesia's local petrochemical industry has therefore asked the government to allocate naphtha from domestic refineries. Others are exploring ways to produce olefin from coal which it is hoped can increase plastic raw material production by 2 million tonnes in 2022.

Another problem faced by the Indonesian plastic industry is that of environmental issues as cities such as Jakarta face major problems regarding waste management. To address this, starting in March 2016, the Ministry of Environment and Forestry requires modern retailers in the country to charge shoppers 200 IDR for each plastic carrier



bag. This policy has been tested in 22 cities across Indonesia since 21st February 2016. The majority of plastic manufacturers support the policy but demand more detailed technical guidance related to the use of funds, its tax report, and plastic waste management. In addition, many expect the policy to be applied to traditional markets too in order to maximise its impact. Today, the use of plastic bags in modern retail stores only accounts for 30% of total plastic bag usage in the country with the remaining 70% being taken up by traditional retail.

Moreover, the paid plastic bag policy should be followed by the development of biodegradable plastic and a plastic waste recycling industry which does not harm the environment. Various manufacturers in Indonesia have successfully developed biodegradable and bio-polymer plastic substitute products using cassava and other organic compounds; however, such products have yet to be taken up en masse in the domestic market. The Jakarta government has expressed their interest in requiring the use of environmentally-friendly plastic substitutes as opposed to adopting the paid plastic bag policy. INAPlas has also warned the government that the policy should aim at reducing plastic waste and not plastic consumption. At present, plastic bags accounted for 20% or 940,000 tonnes of total national plastic consumption in 2015 of 4.7 million tonnes but only a fraction of them are going back to the plastic waste recycling industry.

Plastic Packaging Opportunities in Indonesia

Indonesia's plastic packaging industry grew by 8% to around 55 trillion RP (\$5.3 billion USD at the time) in 2013, according to the Indonesian Packaging Federation (FPI) and was expected to grow at the same rate or faster in 2014. Accounting for more than two-thirds of national demand, the food and beverage industry is of overwhelming importance for Indonesia's packaging industry, followed by pharmaceuticals and cosmetics (See Indonesia's Fast Moving Consumer Goods Sector). Plastic consumption in Indonesia is still relatively low on a per-capita basis at just over 17 kilogrammes (kg) per year, compared to around 35 kg in Malaysia and Thailand and 40 kg in Singapore, according to the Indonesian Olefin, Aromatic and Plastic Association (INAPlas). This highlights the scope for future growth as personal income continues to rise in Indonesia's consumption-led economy. The domestic industry is able to supply around 3.6 million tonnes of plastic a year against total demand of 4.3 million tonnes, leaving imports to fill the gap. Besides the food and beverage industry, which accounts for the bulk of plastic use in Indonesia, agriculture and the construction sector as well as the automotive and electronics industries are the main buyers of plastics.

The increasing use of recycled materials is one way to address the local plastic industry's dependence on imports while at the same time tackling the pressing issue of municipal waste. Recycling is still in its early stages in Indonesia due to a lack of supporting infrastructure, notably with regards to waste collection and sorting. Recycling is mainly in the hands of micro-sized and small businesses in the informal sector, with PT Rejeki Adigraha in Jakarta being one of the few exceptions. As such, the industry lacks economies of scale and mainly employs simple crushing and pelleting technology leading to inferior output compared to sophisticated chemical methods.

INDONESIA PACKAGING



1. **Rigid plastic packaging** will increase its market share and see the highest growth, an estimated year-on-year rate of 4.4%, among the packaging segments. Most of this growth can be attested to the rise in popularity of plastics as substitutes to heavier packaging materials like metal and glass, with companies' aiming to reduce their material consumption and costs, as well as the CO2 footprint during transit. **Here, the biggest growth is to be expected in less developed regions of Africa, Asia and The Middle East.**



2. The growth of **flexible packaging-paper, plastic and foil laminates** is expected to continue, albeit at a slower pace. The market for flexibles has expanded significantly over the last decade, mostly due to technological advances that has allowed for a transition from mostly industrial use to consumer grade options. Here, research shows that **Asia will continue to be the most significant market** for flexibles and food products will continue to dominate the demand.



3. **Board packaging-corrugated formats, folding cartons and liquid cartons**

can be seen as holding the position of highest value, and will continue to do so up until 2020. The increase in online retail is one of the major reasons that board packaging has seen such a rise in demand, lately putting many Asian countries on the same frequency as its European and North American counterparts. **This continued growth in online retail will put an ever increasing demand on the user-experience of the packaging.**



4. **Metal packaging**

will continue to show stability in its growth. **The biggest demand will come from Asian countries,** as Western Europe and Northern America already have seen a switch in demand to more light weight and consumer friendly materials.



5. **Glass** will continue to be seen as a luxury product, thus having the slowest growing rate, reflected by the long-term transition from commodity to luxury material.

