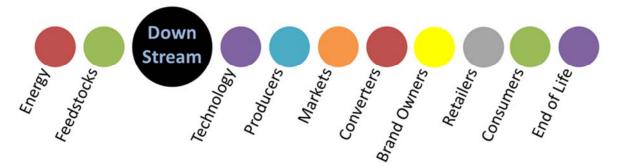


Global Polypropylene & Polyethylene Demand Outlook 2018

February 1, 2018

Applications Mega-trends Forecast Markets Strategy Bioplastics Brand Competition Circular Economy Recycling Premiums Customers Margins



Important Notices

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Global Polypropylene & Polyethylene Demand: Outlook 2018

February 1, 2018 Hyejin Kim, Research Analyst

Background

Townsend Solutions (Townsend) assesses total polypropylene and polyethylene demand in 2017 prior to the first quarter and forecasts demand in 2018 to provide a general outlook and support the industry's plan in an early stage of 2018. Townsend's 2017 demand assessment is based on 3 quarters real numbers and 4th quarter estimates using a bottom's up approach that incorporates impact of trade and market trends. Please note all demand data of 2017 will be finalized after the first quarter of 2018.

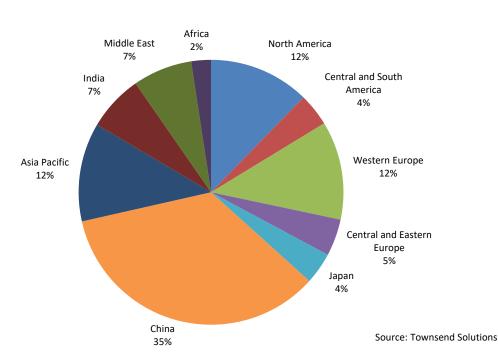
Real final demand for 2017, demand outlook for 2018 and 5 year forecast by market and application by country along with a high level 10-years forecast by country for PP and PE (HDPE, LDPE, LDPE, EVA) will be published in May.

2017 Demand

TOWNSEND Solutions

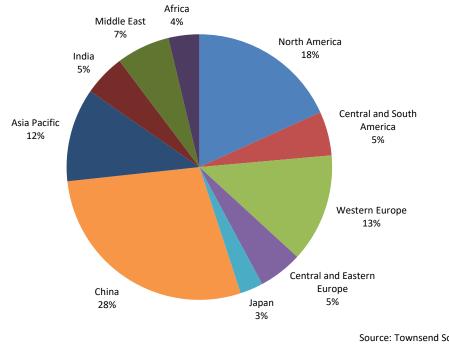
Global polypropylene demand is estimated totaling 68,876 kt in 2017, presenting a 4.7% growth rate from 2016. Meanwhile, Global polyethylene demand totaled 95,488 kt, presenting a 4.5% growth rate from the year before. The demand distribution by region is as follows:

2017 Polypropylene Demand by Region





2017 Polyethylene Demand by Region



TOWNSEND Solutions

Source: Townsend Solutions

While the new updated assessment displays the approximately same share percent in each region, it exhibits different results from Townsend's prediction made in March 2017:

Global Demand	March 2017 Estimate (kt)	Growth Rate 2017/2016	January 2018 Estimate (kt)	Growth Rate 2017/2016
Polypropylene	69,509	5.6%	68,876	4.7%
Polyethylene	94,810	3.8%	95,488	4.5%

Source: Townsend Solutions

The two estimated quantities are close to each other, showing about 1% difference. The updated estimates, however, show that more polyethylene and less polypropylene were consumed globally in 2017 as 2017 market trends favored more towards polyethylene.

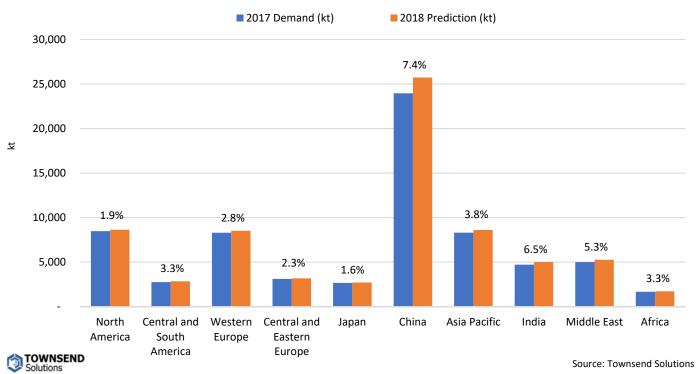
2018 Outlook

For 2018, Townsend is taking an optimistic view of the global economy and is projecting a growth rate of 3.9%, with continued recovery in investment, production, manufacturing and stronger commodity standing showing the fastest growth rate since the financial crisis of 2010. Global demand of polypropylene and polyethylene is expected to follow the economic trend.

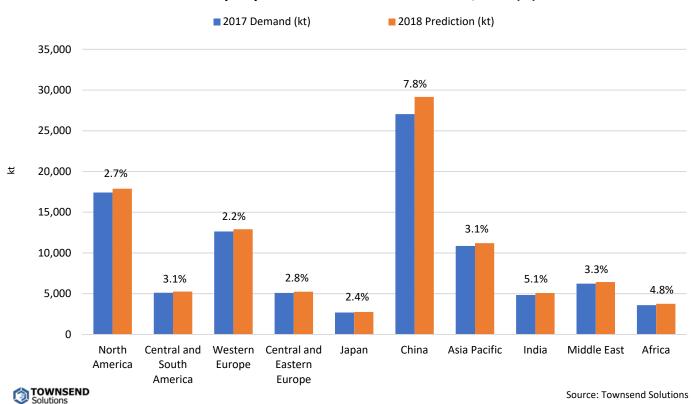
At present, Townsend estimates 2018 demand as follows:



Polypropylene Demand Growth Rate 2018/2017 (%)



Polyethylene Demand Growth Rate 2018/2017 (%)





Global demand for polypropylene and polyethylene is expected to grow 4.8% and 4.4%, respectively, in 2018. China and India are expected to exhibit higher growth rates than other regions as they are expecting the fastest economic growth as two large emerging markets.

Latin America is expecting slow yet continuous growth in 2018 since the first positive GDP growth rate last year, reflecting recoveries from recessions in Brazil and Argentina. Europe as the whole is strengthening its growth in 2018, aided by France and Spain, despite the uncertainty around Brexit. Middle East and Africa will see more stability along with the global economy in 2018 with a huge potential growth in polypropylene and polyethylene markets, yet their political and security situations will still need to be examined.

Key Influencers

While Townsend is generally optimistic about a growing global economy, it is important to note that there remain a number of uncertainties that may influence 2018 demand growth including:

Trade Agreements: U.S. President Donald Trump considers withdrawal from North American Free Trade Agreement (NAFTA) unless changes are made to protect the U.S. economy. While exiting NAFTA completely would undoubtable have a significant impact on U.S. plastics and chemicals shale-driven exports, the more likely scenario of a rules-rewrite would have less impact. In the meantime, uncertainty will continue to stall investment.

Circular & Sustainability Initiatives: The global market movement towards reducing plastic waste continues to gain momentum, driving attention and investment in recycling throughout the value chain. The potential influence of recycled or bio-based materials on demand for virgin PP/PE, while seemingly inconsequential now, is a variable which has growing weight in Townsend's demand forecasts.

China Waste Ban: China's ban on importing plastic waste has created both challenges and opportunities, the impacts of which will have a long and lasting influence on the industry as a whole. China's moves to restrict the incoming flow of plastic waste has created a sizeable deficit in the country's supply chain that could potentially drive additional growth of virgin material demand.

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About Us

Townsend Solutions has been an independent provider of market research, analysis and strategic consulting to the global petrochemical industry since 1977. Townsend Solutions is headquartered in Houston Texas, with satellite partners and affiliates worldwide.

With over 40 years of accumulated knowledge and a deep bench of industry experience, our reputation is built on providing highly detailed and specific information, keen analysis & insight. From oil price scenarios to end-use application level data, to granular details on over 60,000 plastic conversion plants, we leverage our depth and expertise to provide knowledge, context and clarity to the industry.

Our clients are oil and gas companies, midstream service providers, petrochemical companies, logistics companies, traders, distributors, equipment manufacturers, compounders, converters, brand owners, financial companies, regulators and other consultants. Our products and services include published reports, databases, grade level resin pricing, cost modeling, due diligence, strategic consulting projects, converter benchmarking, market and customer intelligence.



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Where

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 - Intelligence
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- Asia
- Europe
- Middle East
- North America
- South America

Polyolefins Supply, Demand & Trade Forecasts

DEEP-DIVE DATA

Demand & Forecast

by Resin Type

by Region & Country

by Market & Application

Trends & Drivers

Supply & Forecast

Utilization Rates

Planned Additions

Technology Share

Supplier Strategies

Investments

Feedstocks

Technology

Products

Plastic Converters & Compounders Database

FULL SEARCH & EXPORT

Plant Location / Ownership

Resins Used / Annual Volume

Markets Served

Manufacturing Process

Specific Items Manufactured

Models, Prices, Forecasts & Benchmarks

KNOWLEDGE DRIVEN SERVICES

Energy, Feedstocks & Resin Prices

Near & Long Term Forecasts

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Market Entry & Activation

Strategic Planning

Grade Slate Rationalization

Customer Surveys

Converter Benchmarking



We publish an array of comprehensive & data-intensive reports. From grade level pricing to long-term forecasts, all are deep-dive & leverage granular detail.

Global Supply & Demand Forecasts: Chemicals/Additives

Antiblocking Agents Antioxidants Antistatic Agents Biocides

Chemical Blowing Agents Coupling Agents

Flame Retardants Heat Stabilizers

Impact Modifiers & Processing Aids

Light Stabilizers

Lubricants/Mold Release Agents Nucleating/Clarifying Agents

Organic Peroxides Plasticizers Slip Agents

2018 Global Market Studies

Polypropylene (PP)
Specialty PP
PP Compounding
Polyethylene (PE)
HDPE Bi-Modal & HMW
EVA
LLDPE C6/C8 & Metallocene
Ethylene Based POP/POE
Functionalized Ethylene Copolymers
Plastics Additives 9
Stabilizer Value Chain

PS PVC PET Global Supply, Demand, Trade & Forecasts: Polymers

Polypropylene (PP)
Specialty PP
HMS PP
Polyethylene (PE)
HDPE, LDPE & LLDPE
Bi-modal HDPE
HMW HDPE
UHMW PE
EVA
C6/C8 LLDPE
mLLDPE
POP/POE

Functionalized Ethylene Copolymers

Bioplastics PS PVC PET

Monthly Market Pricing & Intelligence

PP Homopolymer PP Copolymer HDPE Extrusion HDPE Molding LDPE EVA

EVA LLDPE mLLDPE PET Polystyrene PVC

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