

# Market Scenario Planning: LDPE Regulation Development 2023



Market Scenario Planning: LDPE Regulation Development – 2023 is one in a series of new reports published as part of NexantECA's Markets & Profitability program.

Published: March 2023

# **Report Abstract:**

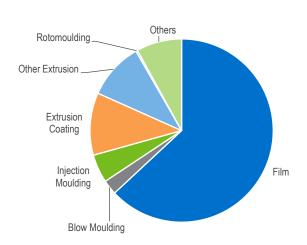
The introduction of policy targeting plastic has been due to the increased public concern for plastic waste entering natural ecosystems. There are several forms of legislation that are seen to have the most have impact on polymer markets including plastic waste taxies, plastic levies, extended producer responsibility mechanisms and plastic content targets.

On the demand side, plastic consumption into single use plastics and other applications with significant legislative pressure is expected to fall. This is likely to be seen more in regions that are leading legislation development such as the EU, Australia, Japan and South Korea.



Legislation is also expected to positively impact the growth of recycled polymers, green polymers including bioplastic chemistries (e.g. PLA) as well as green alternatives of existing polymers (e.g. green polyethylene). However, their adoption is limited by technoeconomic factors such as performance, cost competitiveness and carbon intensity which will limit their penetration into virgin polymer markets.

# Global LDPE Consumption by Application 2022



This report provides an overview of the current and future legislative picture for LDPE markets before outlining existing green polymer investment to understand the current situation. In order to appreciate the barriers to adoption, an analysis of the cost competitiveness, carbon intensity and potential pricing mechanisms for alternative LDPE production routes is completed. This all feeds into the three market scenarios for LDPE market development out to 2050.

# The report addresses:

- What pieces of plastic waste legislation have been and are likely to be adopted by each country worldwide?
- What is the competitiveness and carbon intensity for alternative routes to production of LDPE?
- What are the potential mechanisms for pricing of green LDPE products?
- What is the market outlook for virgin LDPE, green LDPE and recycled LDPE products based on three scenarios of industry implementation?

# Market Scenario Planning: LDPE Regulation Development – 2023



## **Table of Contents:**

- 1. Executive Summary
- 2. Market Overview & Drivers
- 3. Policy Development
  - 3.1. Americas
  - 3.2. Europe
  - 3.3. Middle East & Africa
  - 3.4. Asia Pacific
- 4. Green Polymer Investment Profiles
- 5. Cost Competitiveness
- 6. Carbon Intensity
- 7. Pricing Mechanisms
- 8. Market Scenarios

For related analysis, please refer to:

Market Analytics: Polyolefins Market Analytics: Vinyls

NexantECA defines the three market scenarios as:

- Base: NexantECA's expectation for development of the market given current knowledge of policy, technical and market drivers.
- Aggressive Adoption: NexantECA assumes that there is higher ambition than current assessments to achieve plastic waste goals among the political and industrial community.
- Business As Usual: NexantECA assumes that there is lower ambition than current assessments to achieve plastic waste goals among the political and industrial community.

This analysis will identify the key policy, technology and market drivers shaping these scenarios.

# **Subscription Details:**

Subscription to Market Scenario Planning: LDPE Regulation Development – 2023 includes:

- 12 month access via the NexantECA website, to:
  - Unlimited downloads of PDF reports
  - Downloadable data in Excel from the Online Database
- Webinar presentation
- Consultation time with the project team

Customized subscriptions are also available.

## **Contact Us:**

For more information please contact <u>Markets@NexantECA.com</u>

or

www.NexantECA.com



**NexantECA Subscriptions and Reports** provide clients with comprehensive analytics, forecasts and insights for the chemicals, polymers, energy and cleantech industries. Using a combination of business and technical expertise, with deep and broad understanding of markets, technologies and economics, NexantECA provides solutions that our clients have relied upon for over 50 years.

Markets and Profitability tracks over 60 feedstocks, petrochemicals, polymers, chemical intermediates and fertilizers on an ongoing basis and provides regularly updated reports covering all commercial aspects of these global industries. The accompanying database provides global analysis and forecasts in two major inter- related areas: Markets and Profitability.

NexantECA serves its clients from over 10 offices located throughout the Americas, Europe, the Middle East, Africa and Asia.

#### **Americas**

Tel: +1 914 609 0300 44 S Broadway, 4th Floor White Plains NY 10601-4425 USA

#### **Europe, Middle East & Africa**

Tel: +44 20 7950 1600 110 Cannon Street London, EC4N 6EU United Kingdom

### **Asia Pacific**

Tel: +662 793 4600 22nd Floor, Rasa Tower I 555 Phahonyothin Road Kwaeng Chatuchak Khet Chatuchak Bangkok 10900 Thailand