



## **An Introduction to Polyolefins**

### ***Industry fundamentals and market dynamics***

#### **Module 1 (3 hours)**

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| <b>10 minutes</b> | <b>Welcome and Introduction</b>   |
| <b>45 minutes</b> | <b>Understanding Petrochemicals and Polymers</b> <ul style="list-style-type: none"><li>• What are petrochemicals and where do they come from?</li><li>• Steam cracking: a process in making petrochemical building blocks</li><li>• Polymer overview: the value chains and key feedstocks</li></ul>   |
| <b>15 minutes</b> | <b>Break</b>  |
| <b>1 hour</b>     | <b>Examining oil and gas and its relationship with polyolefins</b> <ul style="list-style-type: none"><li>• Where petrochemicals are produced in refineries</li><li>• Production, consumption and reserves</li><li>• Types of natural gas and distribution: NGL, LPG, LNG</li><li>• The US shale gas revolution: What it means for petchems</li><li>• Coal-to-chemicals value chain: The rise of China</li></ul> |
| <b>50 minutes</b> | <b>Pricing and Markets</b> <ul style="list-style-type: none"><li>• Cost analysis: What are the factors contributing to overall costs of production in a steam cracker-to-polyolefins complex?</li><li>• Understanding cost curves and margins</li><li>• Competitiveness across different regions: how margins vary between the US, Europe and Asia</li></ul>  |

#### **Module 2 (2 hours & 30 minutes)**

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| <b>45 minutes</b>        | <b>Polyolefins: different grades and end-use markets</b> <ul style="list-style-type: none"><li>• Different types of PE and PP and end-use applications</li><li>• PE and PP production technologies</li><li>• A very brief look downstream: different types of plastic processing</li></ul>   |
| <b>15 minutes</b>        | <b>Quiz: understanding the value chains</b>  |
| <b>15 minutes</b>        | <b>Break</b>   |
| <b>1 hour 15 minutes</b> | <b>Global polyolefins: headline challenges and opportunities</b> <ul style="list-style-type: none"><li>• Long-term shifts in demand patterns resulting from the pandemic.</li><li>• Scenarios for global PE and PP consumption in 2021-2025</li><li>• Impact on the developing world</li><li>• Production and logistics challenges</li><li>• A deep dive into China, the world's most important market</li><li>• A personal view on sustainability</li></ul> |

#### **Module 3 (2 hours)**

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| <b>45 minutes</b> | <b>Polyolefins Markets Part II: Spotlight on the European region</b> |
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- Europe's competitive position
- A profile of the major producers and their capacities
- Demand prospects after the pandemic
- Europe's big sustainability push in the global context

**15 minutes**

**Break**

**45 minutes**

**Polyolefins Markets Part III: Spotlight on the Asian region**

- China's dominant role in demand
- Rising self-sufficiency and the regional and global implications
- Southeast Asia and India
- And to conclude with: the global megatrends and their impact on all regions

**15 minutes**

**Summary and conclusion**