



## **An Introduction to Plastics Recycling**

### **Module 1: (3 hours & 15 minutes)**

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| <b>20 minutes</b> | <b>Welcome and introduction to the course</b>   |
| <b>45 minutes</b> | <b>Waste – collection to processing</b> <ul style="list-style-type: none"><li>• Collection infrastructures</li><li>• Post industrial waste</li><li>• Deposit vs kerbside collection</li><li>• Difference between recycling input routes</li></ul>                                   |
| <b>10 minutes</b> | <b>Break</b>  |
| <b>45 minutes</b> | <b>Production routes to new use</b> <ul style="list-style-type: none"><li>• Flake</li><li>• Pellet</li><li>• Food grade</li></ul>   |
| <b>45 minutes</b> | <b>Analysing market dynamics across polymers</b> <ul style="list-style-type: none"><li>• Overview of collection and growth rates in Europe</li><li>• Impact on virgin markets from recyclates</li><li>• Assess the impact of uncontrollable factors on recycled materials</li></ul> |
| <b>30 minutes</b> | <b>Q&amp;A and summary</b>  |

### **Module 2: (3 hours & 15 minutes)**

|                   |   |
|-------------------|---|
| <b>1 hour</b>     | <b>Breaking down pricing and sales processes</b> <ul style="list-style-type: none"><li>• Review the main price drivers for the recycled market</li><li>• How do markets function and how are prices set?</li><li>• Discuss the sales process for food grade versus flake versus bale</li></ul>  |
| <b>15 minutes</b> | <b>Q&amp;A</b>  |
| <b>15 minutes</b> | <b>Break</b>  |
| <b>30 minutes</b> | <b>Clarifying market terminology</b> <ul style="list-style-type: none"><li>• Overview of the key terms used in the recycled polymer market</li><li>• Pricing jargon—what is contract versus spot pricing?</li><li>• Who are the key market players?</li></ul>   |
| <b>45 minutes</b> | <b>Future challenges for recycling technologies</b> <ul style="list-style-type: none"><li>• Legislative framework</li><li>• Addressing contamination</li><li>• Disruptive technologies – bio-based feedstocks, light weighting</li><li>• Influence of brand and consumer pressure</li><li>• What is the current state of recycling across European markets?</li></ul> |
| <b>15 minutes</b> | <b>Q&amp;A</b>  |
| <b>15 minutes</b> | <b>Summary</b>  |



### **Module 3: (2 hours & 20 minutes)**

**45 minutes    Chemical recycling**

- Types of chemical recycling
- Status of development
- How disruptive will chemical recycling be?

**15 minutes    Q&A**

**10 minutes    Break**

**45 minutes    What are the end markets for recycling polymers?**

- How end markets will dictate the evolution of recycle markets
- Which end markets are set to decline
- What will be the impact of the refocus on design for recycle?

**15 minutes    Q&A**

**10 minutes    Summary and course conclusion**