

# **An Introduction to Plastics Recycling**

## **Module 1: (2 hours & 30 minutes)**

<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>30 minutes</b>	<b>Q&amp;A and summary</b>

## **Module 2: (2 hours & 10 minutes)**

<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>10 minutes</b>	<b>Break</b>
<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>15 minutes</b>	<b>Q&amp;A</b>

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

- 1 hour      Breaking down pricing and sales processes**
- Review the main price drivers for the recycled market
  - How do markets function and how are prices set?
  - Discuss the sales process for food grade versus flake versus bale
- 15 minutes      Q&A**
- 10 minutes      Break**
- 30 minutes      Clarifying market terminology**
- Overview of the key terms used in the recycled polymer market
  - Pricing jargon—what is contract versus spot pricing?
  - Who are the key market players?
- 5 minutes      Conclusion**

### **Module 4: (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 recyclate 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**