Addressing Challenges and Opportunities of the Circular Economy

Utech Europe 2018

Marcel Moeller | Marketing Director | Dow Polyurethanes EMEA I
Imagine stacking all polyurethane mattresses discarded in Europe in 2017…
Mount Everest
Aconcagua
Mont Blanc

215 times the Mount Everest
Circular Economy: Key Driving Forces

**EU Waste Rules**
Ambitious recycling and landfill reduction targets

<table>
<thead>
<tr>
<th>Recycling targets for municipal waste</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>55%</td>
<td>60%</td>
<td>65%</td>
<td></td>
</tr>
</tbody>
</table>

**Brand Owner Corporate Strategy**

- Process materials from recycling schemes
- Produce products with recycle ability at EoL

**Social Pressure**
Perception is Reality
Polyurethanes = Plastic = Same Recycling Targets
What Needs To Change?

Circulating molecules

Verbund

1. Renewable raw materials
2. Product reuse
3. Mechanical recycling
4. Chemical recycling
5. Energy recovery and carbon utilization

Maximizing utility of existing molecules
(e.g., reusing/recycling molecules such as through the reuse of PET bottles)

Source: “Taking the European Chemical Industry into the Circular Economy” Accenture, January 2018
2025 Sustainability Goals

- Leading the Blueprint
- Delivering Breakthrough Innovations
- Advancing a Circular Economy
- Valuing Nature
- Increasing Confidence in Chemical Technology
- Engaging Employees for Impact
- World-Leading Operations Performance
Advancing a Circular Economy

Through innovation and collaboration, Dow will help facilitate the world’s transition to a circular economy, where waste is designed into new products and services.

Our Goal is to advance a circular economy by delivering solutions to close the resource loops in key markets.

Dow will partner with other industry leaders, NGOs and governments to deliver three major projects that deliver solutions and provide a blueprint for the implementation of principles of the circular economy by 2020.

By 2025 Dow, working with partners, will implement three additional projects located at Dow manufacturing sites or directly impacting Dow businesses.
What if mattresses could be recycled, enabling reuse of materials and reducing waste streams?
A Circular Economy Approach

Critical to Success:
• Product Performance in End Application
• Process Performance at Manufacturer
• Environment, Health and Safety
• Economics
We have a choice: to look at it from the outside and believe it’s not our business, or endorse circular economy to make it part of our business life.
Stay Connected

Marcel Moeller
Dow Polyurethanes Marketing Director EMEAI
mmoeller@dow.com

Follow us to stay up to date with Dow Polyurethanes

dow.com/polyurethane
linkedin.com/dow-chemical
@DowChemicalPU
@DowEurope
facebook.com/DowEurope
youtube.com/DowChemicalCompany