Breakout Session Report Out

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Introducing New Plastics: Challenges and Opportunities

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Session Report "Volunteer"

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Question 1

Do you agree with the premise that introducing new EOL plastics could reduce plastic waste? Why or why not?

- Yes, but…
- Need broad system level understanding up front
  - i.e., waste-management infrastructure needed in place
  - Not creating new / worse waste problems
- Education of design engineers and customers/users important

Question 2

What new plastics or end of life properties should be introduced to address waste plastic accumulation issues?

- Fit for purpose – not overdesigned
- Benign end products of degradation
- Reversible compatibilizers if multimaterials
- ID & Sorting capabilities built in

Question 3

What are the biggest challenges associated with introducing new plastic materials to existing systems?

- Competition with incumbent material
- Cost (raw material, qualification, new CAPEX)
- Time and effort to verify properties
- Managing huge design space for new molecules

Most Important Takeaway Thought(s)

- Summarize 1-3 high level takeaway points