

Breakout Session Report Out

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



Session 2c: Flexible Packaging: Challenges and Opportunities

Session Report "Volunteer"

Objective

- **Session Goals:**

- Identify challenges and opportunities related to **collecting** flexible packaging
- Identify challenges and opportunities related to **recycling** flexible packaging
- Identify potential design elements that should be targeted in a redesign of flexible packaging

Major Challenges

- Multi-layer packaging
- Need for better infrastructure
- Effect of bag bans on local laws and consumers
- Diverse markets
 - Food, cosmetics, cleaning products
 - Residues from these products
- Economics of collection - flexible packaging has low mass and value
- Meeting specs for different markets (food, FDA, sanitation requirements, global standards)

Opportunities

- Better labeling
- Consumer education
- Incentives for return
- Standardization of collection – large variance between communities
- Design:
 - Multi-layer packaging that can be disposed of with organic waste (eliminate sorting challenges)
 - Recycling methods to minimize sorting
 - Polymers with the same functionality of multi-layer packaging
- AI – trashcans (collects data, sorts waste)
- Working together across the value/supply chain
- Creation of data (bar codes, labeling) and data sharing – connect producers and consumers.
- More data on fate of composting and anaerobic digestion