

ISSUES IDENTIFIED THROUGHOUT THE RECYCLING PROCESS



- Single stream collection
- No curbside collection for films and flexibles
- Incorrectly recycled items
- Access to Materials Recovery Facilities (MRFs)



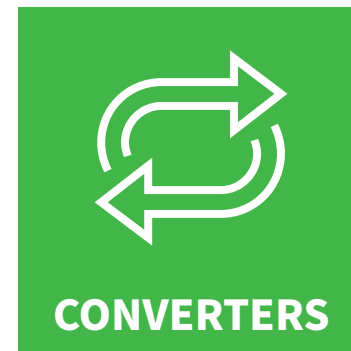
- Metal components
- Sleeves, labels and adhesives'
- Dark colors

- **Molded-in metallic**
- **Molded-in bottle color**
- **OnColor™ IR Sortable Black** for dark plastics**
- **Frost and chrome effects**



- Aesthetic challenges from barriers, labels and adhesives
- Contaminated resin bales
- Reduced mechanical properties from multiple heat histories
- IV and MRF variability

- **Aesthetic enhancement**
- **Compatibilizers**
- **Thermal stability enhancement**
- **SmartHeat™ RHC Process Aid***
- **Impact modifiers**
- **Intrinsic viscosity builders**
- **Rheology modifiers**



- Color consistency
- Slower throughput
- Higher scrap
- Mold release
- Inconsistent rheology
- Thermal stability
- Reduced mechanical properties
- Contamination
- Dimensional stability
- Compatibility
- Odor

- **Clarifiers and toners**
- **Aesthetic enhancement**
- **SmartHeat™ RHC* process aid**
- **Slip additives**
- **Nucleating agents**
- **Odor scavengers**
- **Impact modifiers**
- **Thermal stability enhancement**
- **Chemical foaming additives**
- **Compatibilizers**
- **Rheology modifiers**



- Package performance
- Managing cost
- On-shelf presence
- User experience
- Public sentiment toward plastics
- Meeting sustainability commitments

- **Ultimate™ UV Light Barrier for PET***
- **Smarteat RHC Process Aid***
- **Capture™ Oxygen Scavenger for PET***
- **OnColor™ IR Sortable Black****
- **Highly concentrated solutions**
- **Acetaldehyde scavengers**



- Believes plastic packaging is bad
- Uncertain how to recycle properly
- Wants to do the right thing

- **Package designs that are easily recycled and add value to the recycle stream**
- **Effective communications on how to recycle**
- **Support measures to increase recycling rates**

*APR Critical Guidance Recognition

**Passed APR testing protocol