



THE **AZEK**<sup>®</sup>  
COMPANY



**NO PVC LEFT BEHIND**

VSC – Recycling Summit  
July 2021

# Resilience – To Drive a Movement

- Internal driving forces - improving
  - VSC participations has increased from only 35 participants in 2018 to over 140 participants today
  - Membership has increased by over 60% during the same time frame
  - Pilot Projects in both major product technologies
    - Flexible Vinyl Recycling - Roofing
    - Siding - NE Ohio Vinyl Siding Recycling Coalition
  - +Vantage Vinyl increased the number of verified companies
  - Desire to control our own environmental destiny
- External driving forces support of the movement
  - Wall Street investors and stakeholders are increasingly selecting company stocks with high standards of ESG performance.
  - Suppliers / Customers are using ESG performance as a metric for selection.
- Recycling Performance<sup>1</sup>
  - ~1.1B lbs recycled , split into 985 MM lbs. pre-consumer and 148MM lbs. post consumer
  - ~1.9B lbs still landfilled
- VSC Goal of a 10% increase in post consumer to ~160MM lbs by 2025

*Note 1: 2019 levels according to EPA 2018 Municipal Solid Waste Report*

- “No Child Left Behind Act” – 20 years ago last month
  - Identified “at risk” students – Title 1
  - Set Standards
  - Established Measurable goals to improve a desired outcome
  - Funding was required to make to happen
  - Adapted in later years to improve based on initial results
- PVC recycling is very similar
  - Set Standards
    - +Vantage Vinyl implemented to ensure the industry continues to improve and move forward
  - Established measurable goals to improve a desired outcome
    - 10% increase in Post Consumer Recycle
    - Pilot programs
  - Funding / Capital / Technology Investment
    - Will be required and is the focus of the summit’s agenda.
  - Adapting
    - Absolutely based on initial results, changing industrial knowledge, technology development and environmental norms

**The “Title 1” Challenge: The industry has only been successful with the “Easy” portion - 37%**

# Perfect World from Recyclers' Perspective

- Pipe

- Small diameter
- No contamination (labels, metal, rubber)
- Short length (less than 10')
- Strapped in a bunk for easy manipulation.



- Sheet

- One color
- No labels
- Sturdy pallet / separator
- Strapped for safety
- Reasonable weight / length / width such that it can be safely manipulated



# Perfect World from Recyclers' Perspective

## Window profiles - Baled

- No contamination (labels, metal, rubber, weatherstrip)
- Baled:
  - Easy to manipulate
  - Maximizes weight on truck
- Not all the same color but a high concentration of one.



## Window profile - Gaylord

- Uniform color
- No contamination (labels, metal, rubber, weatherstrip, woolpile)
- Length manageable



# Perfect World from Recyclers' Perspective

- Siding

- Baled:
  - Easy to manipulate
  - Maximizes weight on truck
- No contamination (labels, metal, instructions, non PVC panels)
- No packaging



- Flexible profiles

- Single polymer
- Single durometer
- No contamination (labels, metal)
- Reasonable color



## ■ **Factors Effecting Recycling trends 2020 / 2021**

- Effects of Texas supply issues
- Inflationary resin pricings making supply short
- Ingredient shortages beyond resin
- Housing and Repair/Renovation market growth
- Labor shortages
- Positive effect of ESG and carbon footprint metrics
- First generation products of the 1970's are now being removed and replaced
- Products are typically not designed for recycling rather initial life performance requirements

## ■ **Recycling Reactions**

- OEMs attempting to increase the use of internal sources
  - Labor issue
  - Need to focus resources on primary products and not recycling
- Recyclers will see the “easy” 37% supply sources diminish as OEM's process internally
- Collection programs
- Technology and capital investments to process the other 63%

# The New Reality – Degraded (Burnt)



# The New Reality – Mixed Contamination



# The New Reality – Complex



# The New Reality – Post Consumer



# The Challenge – NO PVC LEFT Behind – Phase II

- Implement a collaborative and open dialogue as a default corporate stance
  - Recyclers do not read minds. Require full understanding of your product and its recycling challenges
  - Seek out and partner with recyclers that have the skills to support your challenges.
  - OEM collection / replacement / design programs when a product is launched.
- Technology investment and innovation is required to process the remaining 63%
  - Contamination elimination
    - Melt Filtration
  - Logistics Solutions
  - OEM components designed for high performing but wider specification recycling products
  - Recycle compounding / understanding
  - Waste to energy alliances
  - Waste to primary raw materials
  - Post consumer focus
- Landfill is a last resort and fundamentally a failure – Ask ONE MORE TIME

**Never be Satisfied by 37% - Upcycle 63% more**

**No PVC Left Behind !!!**

We'll Get There !!!!

THE **AZEK**<sup>®</sup>  
COMPANY

