Surviving the Sword
Who is Phoenix Technologies?

- Manufacturer of recycled PET resin established in 1992
- Company that has sourced in excess of 1 billion pounds of recycled raw material
- ISO certified production plant with capacity in excess of 80 million pounds
- Backward integration of raws
Phoenix Technologies Int’l Overview

Established 1992
Wash 2015
Facilities 90,000 ft² Pellet
66,000 ft² Wash
Capacity 82MM LB/YR
Quality ISO 9001:2015

- Services
  - Sort/Grind/Wash of PET Bales
  - Melt Filtered Pelletizing
  - Agglomeration
  - Crystallizing
  - Solid Stating

- Products - recycled PET
  - NLP™ general purpose grade
    - Includes NLF (flake)
  - LNO™ food grade
    - Curbside, deposit
Wash Raw and Final Products

1 in 20 PET Bottles Recycled in the US are processed at Phoenix
“Scrap recyclers around the world are scrambling to figure out what China’s State Council means when it says it seeks to “ban importing solid waste” permanently by the end of 2020.

The directive, as reported by the Beijing-based China Daily, is designed to hold local and provincial governments accountable to Beijing in their efforts “to improve the overall environmental quality and ensure a significant decrease in pollutant emissions by 2020.”

According to statistics gathered by the Washington-based Institute of Scrap Recycling Industries (ISRI), China led the world in 2016 by importing some 28.5 million metric tons of scrap paper and more than 3.3 million metric tons of copper-bearing scrap. That same year, China imported some 775,000 metric tons of plastic scrap from the U.S. alone.”

*as reported by Recycling Today June 2018*
The most widely recycled resins are #1, #2, and #5. The rest are where the challenges arise.
Phoenix Statistics

- Plastic that is not PET, or PET that is not clear, blue, or green are kicked out of the system.
- Curbside bale yield of usable PET is between 64-68%.
- Included in the bale is 2-7 plastics, including cap. Phoenix can recover #2 and #5 plastics during processing, ~ 7% of the bale weight.
- Remaining items are aluminum, label/paper/plastic bags/trash, and rigid 3,6,&7 plastics or colored PET. Those plastics are ~ 8% of the bale weight.
Phoenix Impacts

- Many suppliers forced to focus on moving items lost from export so low focus on PET
- When the wash line was built, capital justification included assumptions for revenue and costs
- 3-7 bales had a positive additive value
- Today, no value exists and many times these bales must be landfilled –
  - 90MM lbs annually x 8% = 6,000,000 lbs of non value plastic
  - Loss of $240,000 revenue
  - Landfill = ~ $200,000 cost
Phoenix Actions

• Working closely with our customers and industry groups to help brands understand design impacts
• Working closely with our supply houses to lessen impacts to PHX
• Always on “the hunt” for markets and partners that can find a use for these materials
• Working closely with local government and industry groups on public education
Recycled Resin – Closing the Loop
THANK YOU!

Lori Carson
Director Commercial Operations
l.carson@phoenixtechnologies.net