

# Moving the Industry Forward

We envision a world that ships on recycled plastics



# Post Consumer Plastics - Framing the problem...

- ▶ Plastic use has increased 20x in the last 50 years.
- ▶ It will Double again in the next 20.
- ▶ Estimated only 30% of post-consumer plastics are recovered in the US now.
- ▶ “Spot Market” =
  - ▶ Low value because of cheap virgin resin
  - ▶ Unpredictable Market and Movement
- ▶ Low value:
  - ▶ Thwarts Investment; and
  - ▶ Results in too much export!

## •Background:

### QRS Companies:

- Is a family of companies consisting of QRS, Inc, QRS Direct, Re-Poly and QRS of Maryland.
- Has Plastic Recovery Facilities (PRFs) in St. Louis and Baltimore. With a future facilities in the southern and western US.

- Mission:

Provide a domestic processing solution for the Recycling Industry that transforms mixed post-consumer plastic into high volumes of reliable, quality bales, flake and resin, and products in all market conditions.



# Catastrophic Success





## Mixed Bulky Rigid



Processed in St. Louis

## "3-7" Containers



Processed in Baltimore

## Flexible Packaging



Under development in MO

# Re-Poly “Moon Shot”

- 100% yield of all post-consumer rigid plastics that enter our plant

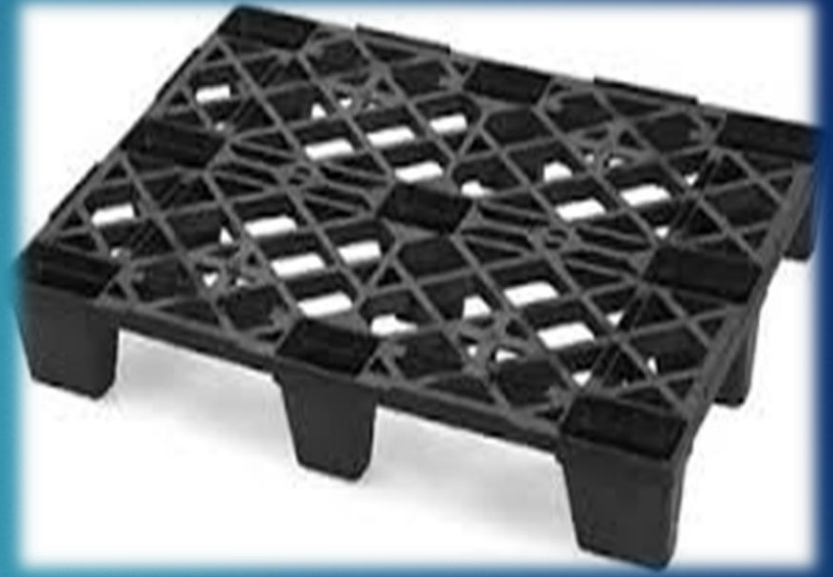
# Evertrak

"Beyond Wood"



100% Curbside PCr

# "Green Logistics"



100% Curbside PCr



# From Boom!

2014...

APR 26, 2014 @ 05:29 PM 7,140 VIEWS

The Little Black Book of Billionaire S

## Profits, Not Good Intentions, Drive The Global Recycling Industry



**Modeled Behavior**

We're economists covering everything economics. [FULL BIO](#) ✓

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**Adam Ozimek**, Contributor

Many people equate recycling with a fundamentally civic and moral duty. This is an area where markets fail, and government mandates and regulation combined with the good intentions of individuals are the primary drivers. While the government can in some ways help the industry do better, and the civic mindedness of individuals is in some places a component, the extent to which profits are what drive the industry is not well appreciated. But it is a lesson you see throughout Adam Minter's excellent recent book [Junkyard Planet](#). Minter is a journalist who has taken a deep look at how the scrapping, junkyard, recycling, and related industries of the world have long been one of my favorite journalists, and this book was easily one of my favorites of 2013, so much so that I am rereading it now. It's an engrossing look at the global scrap industry and one that truly gives you an insightful and nuanced look at how markets and sustainability are related.

## GREEN ENERGY

### Recycling Export Boom Turns Green Into Gold

Trevor Curwin, |Special to CNBC.com

Friday, 11 Nov 2011 | 4:26 PM ET



"Buy American" is back.

At least when it comes to recycled scrap materials.

Scrap materials are now the nation's largest export category by volume, and continue to set yearly records, with nearly \$30 billion in recycled commodities — notably metals and paper fiber — moving overseas, up from \$22 billion in 2009.

# To Bust...

2016...

## Trash problems: Recycling in crisis

Jennifer Schlesinger | @jennyanne211  
Sunday, 27 Mar 2016 | 8:23 AM ET




Dividing trash to be recycled has become a way of life for Americans. More than 34 percent of garbage is recycled, according to the Environmental Protection Agency (EPA), a gain of over 400 percent since 1960.

Those numbers notwithstanding, that progress could be halted as lower oil prices drive down profits in the recycling industry, according to at least one observer.


SEARCH

**The New York Times**


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Ranchers Tote Guns as Tribes Dig In for Long Pipeline Fight




Libya Starts Expanding Oil Exports — for Now, at Least



Over 190 Countries Adopt Plan to Offset Air Travel Emissions

By DAVID GELLES FEB. 12, 2016



A worker cleaning equipment used to process recycling material at the Waste Management facility in Newark. Dave Sanders for The New York Times

NEWARK — In a cavernous recycling facility crisscrossed with conveyor belts, enormous bales of crumpled plastic bottles are stacked one atop another, waiting to be sold to the highest bidder.

# Failing Infrastructure...

## The Money in Recycling Has Vanished; What Do States, Cities Do Now?

March 29, 2016 | By Jon Frandsen



© The Associated Press

A plastic recycling plant in Vernon, California. Manufacturers are trying to make recycling viable again after a decline in state payments.

*This story has been updated to clarify the reason behind the closure of the recycling plant.*

With great fanfare and promises of a new era of recycling, officials from Montgomery and from a Florida company are promoting a state-of-the-art mixed waste and material recovery

March 9, 2016

## As Hundreds of Recycling Centers Close in Calif., Calls for Reform Grow Louder

By: Jessica Lyons Hardcastle



In the wake of California's largest recycler closing more than one-third of its recycling centers throughout the state, the Container Recycling Institute is calling on CalRecycle to work with the state legislature to adjust the payment amounts for beverage container redemption centers.

About 19 percent of all US beverage container recycling — both by businesses and individuals — occurs in California, according to the Container Recycling Institute.

Last month, rePlanet said that at the end of January it closed 191 beverage container redemption and recycling centers and laid off 278 employees because of reduced state payments and dramatic declines in commodity pricing. Last year, various companies including rePlanet closed another 200 redemption centers closed throughout the state.

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### RELATED STORIES

- California's Largest Recycler Shuts 191 Recycling Centers
- Keurig Transitioning to Recyclable K-Cups
- Bottle Recycling Companies Lost \$20 Million in 2015



# Planet in Crises

- 1/3 of the plastic we produce finds its way into our oceans.



# Planet in Crises

- 1/3 of the plastic we produce finds its way into our oceans.
- If nothing changes by 2025 there will be 1/3 as much plastic in the ocean as fish



# Planet in Crises

- 1/3 of the plastic we produce finds its way into our oceans.
- If nothing changes by 2025 there will be 1/3 as much plastic in the ocean as fish
- By 2050, there will be more plastic in the ocean than fish.



# Understanding why...

- **Post-consumer plastic resin lacks VALUE!**
  - Spot market
  - “Greenwashing”

# Role of Private Industry:

- ▶ Investment
- ▶ Innovation
- ▶ Talent!

# Role of Government:

- ▶ Mandatory Content of Curbside Post-Consumer Resin.
- ▶ Extended Producer Responsibility



# Increase value of PCr

- Stimulates Demand
- Stimulates Recovery
- Stimulates Innovation!

# Our Responsibility

- **Stop exporting mixed post-consumer plastics.**
  - Only compounds global crisis
  - Thwarts domestic innovation.