



**Changing Markets
Material Quality
Associated Cost**

New Mexico Recycling & Solid Waste Conference
September 25-26, 2018



AGENDA

- Introduction
- History – China Situation
- New and Emerging Markets
- Quality
- Costs
- Questions and Answers

Friedman Recycling



□ Who We Are:

- Family Owned & Operated for Over 41 years
- Founded in Arizona in 1977
- State-of-the-Art Commercial Sorting Facilities
- Locations: Arizona, New Mexico, Texas
- Modern Commercial Truck Fleet
- An Expert in Secure Data Destruction since 1985



Designs & Supports Commercial & Municipal Recycling Programs

Provides Traditional Solid Waste Hauling Services



Provides Certified Destruction Services

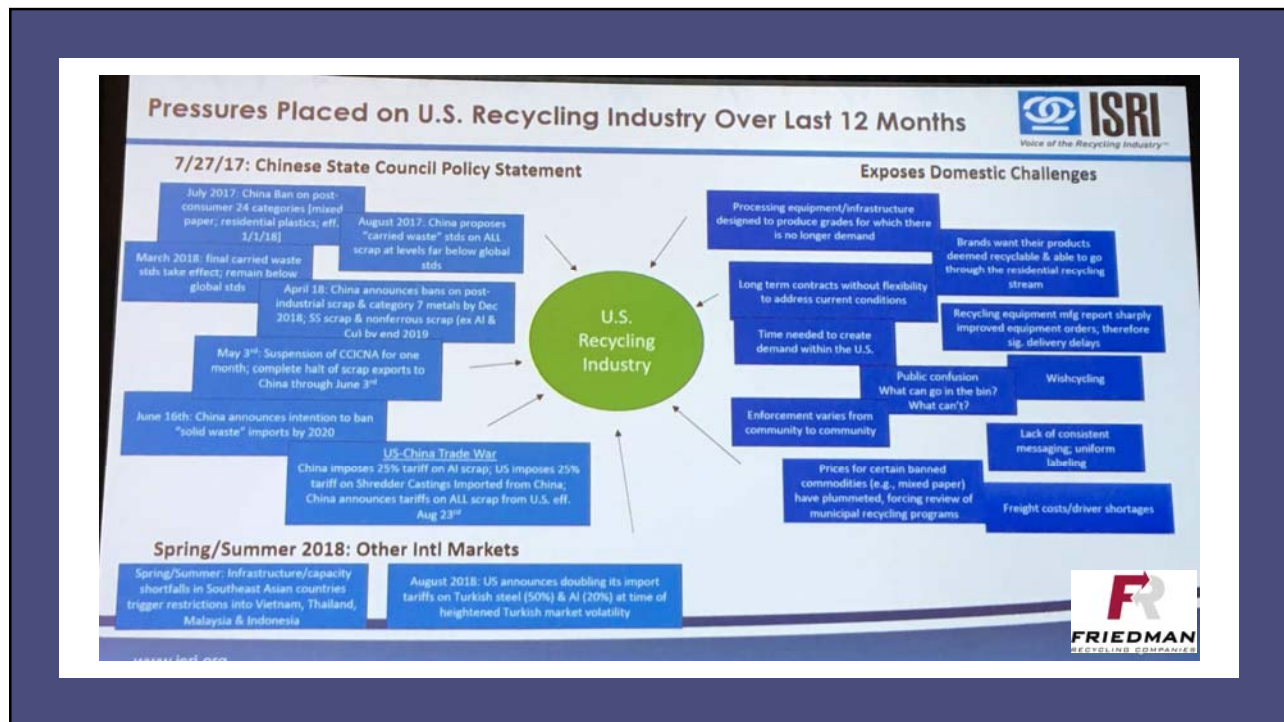




Friedman Recycling

- What We Do:
 - Recover and recycle materials such as:
 - Cardboard
 - Paper
 - Aluminum
 - Plastic
 - Select Metals





"China has a demand for 10 tons, and they're only getting 1 ton. The rest of the world wants 1 ton and they're getting 10. Too many tons are being offered to everywhere that's not China, and not enough tons are going to China because people can't meet the specification required and the risk if you get claimed when it goes through customs [isn't worth it]." – An exporter based in the Pacific Northwest

OCC Purchases in Asia – metric tons

	<u>Jan – May '18</u>	<u>Jan – May '17</u>
China	2.07 million	2.45 million
India	833,297	332,017
Vietnam	206,944	80,944
Indonesia	200,248	105,944
Korea	197,531	92,531



New Mill Capacity – Asia

- Nine Dragons –Vietnam 1.2 Million Tons
- Lee and Man – Vietnam 400,000 Tons
- Shandong - Laos 1.2 Million Tons



New Mill Capacity – USA

2018-2021 will add
2.035 million tons
- 70% OCC
- 30% MIX



New Mill Capacity – USA

Intl. Paper – Kentucky 150,000 new tons OCC
Midwest Paper – Wisconsin 420,000 tons OCC
Pratt – Ohio – 400,000 tons OCC & MIX
Mckinley Paper- Washington State 220,000 tons OCC
Green Bay Pckg. – Wisconsin 445,000 tons OCC & MIX
Cascades Paper – Virginia 400,000 tons OCC



Quality is King!
Recycle Right!!



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Recycle Right!





Quality is King. Recycle Right!

“pricing and quality are certainly the two most important components of mill furnish purchasing, and, with the increase of available generation, I will most definitely weed out the poor quality accounts and replace them with better quality...I expect most if not all mills have the same idea...we no longer have to take poor quality.”
said a large mill system buyer.
RISI July 27, 2018




Quality Is King. Recycle Right!

China 99.5% Purity
Asia 95.0% Purity
USA 93.0% Purity



Quality is King. Recycle Right!
Those who do not know.
Those who do not care.
Those who care to much.



Quality is King. Recycle Right!



Poor Quality In

MRF



Low Prices Out





INCREASED COSTS



MRF Cost on the Rise.

- Slower Production
- Additional Labor
- More Shifts
- Increased Down Time
- Increased Maintenance
- Greater Residual



MRF Cost on the Rise:

- Slower Shipments
- Increased Inventories
- Higher Insurance Cost
- Greater Cost of Money



Cost Control:
New Equipment
Fee for Service – Tip Fees
Reject Poor Quality Material
Educate Customers



Conclusion:

- Not a Market Driven Issue
- Markets Will Return
- Fundamental Change in Pricing (in/out)
- Quality is King



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