Waste Management

• Recycling Services

Michael Florio
The Rocky Road Ahead
Waste Management, Inc. (NYSE: WM), based in Houston, Texas, is the leading provider of comprehensive waste management and environmental services in North America.

- 137 landfill-gas-to-energy projects
- 58 natural gas fueling stations; 27 serve the public
- 58 independent power production plants; 2 produce renewable energy
- 17 waste-to-energy plants
- 262 active solid waste landfills
- 5 active hazardous waste landfills
- 1 active hazardous waste underground injection facility
- 18 secondary processing facilities
- 36 organics processing facilities
- 310 transfer facilities
- 120 traditional recycling facilities; 50 are single stream and 12 are for construction and demolition material recycling
- 390 thousand employees
- 43 collection operations
- +21 million customers

We create enough energy to power more than 1.1 million homes every year.
We manage over 15 million tons of recyclable commodities.
We dedicate 27,000 acres to wildlife habitat.

$1.3 billion in capital expenditures
$1.3 billion in free cash flow
$922 million returned to shareholders
$14 billion in revenue

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Company Overview

• WM is the largest waste services provider and residential recycler in North America

• We processed and brokered over 11 million tons of recyclables in 2015 and operate 100 recycling facilities with an investment of over $1 Billion

• Our 43,400 employees serve nearly 20 million customers
  • Over 3,000 employees in recycling
• Waste Management recycled and composted more than 14 million tons of commodities and other recyclable materials (organics, C&D materials) in 2015.
  • We recycled enough materials to fill the U.S. Capitol Building more than 9 times!
  • This amount of material weighs more than 184,000 Boeing 737’s!

<table>
<thead>
<tr>
<th>Material</th>
<th>Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper/Cardboard</td>
<td>8,437,781</td>
</tr>
<tr>
<td>Mixed Organics *</td>
<td>2,468,740</td>
</tr>
<tr>
<td>Glass</td>
<td>766,981</td>
</tr>
<tr>
<td>C&amp;D/Wood</td>
<td>397,799</td>
</tr>
<tr>
<td>Metals</td>
<td>462,040</td>
</tr>
<tr>
<td>Plastics</td>
<td>440,053</td>
</tr>
<tr>
<td>E-Waste/Other</td>
<td>89,076</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>1,062,203</td>
</tr>
</tbody>
</table>

**Total Tons** 14,124,673

* Mixed Organics were composted; all others recycled
WM MRF locations: 104 MRFs in June 2016
Single Stream locations

Number of WM Single Stream MRFs:
2014: 50
2016: 41
The Change in North American Recovered Paper Consumption Over Time

Source: Numera Analytics
2015 Groundwood Grades

• Majority coming from 43 Single Stream Facilities

• Groundwood Paper Tonnage
  • Newspaper – 1,425,568 tons
  • Mixed paper – 2,332,721 tons
Market Trends
WM commodity sales

- **65-70% of WM’s paper is sold domestically.**
  - WM sells **30-35% of its tons to China**
  - **2.5% to Mexico** and
  - Small amounts to Europe, South America and India

- **WM exports very little plastic (more from the West Coast)**
  - PET markets are fiber and some bottle
  - HDPE markets are sold to rigid containers

- **Most metal is sold domestically, but market pricing is global**

- **Glass goes to regional markets**
  - 40% is to bottles
  - The rest is for various construction application

**WM Non-Asia Exports**

<table>
<thead>
<tr>
<th>Country</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>9,000</td>
</tr>
<tr>
<td>Mexico</td>
<td>224,277</td>
</tr>
<tr>
<td>Netherlands</td>
<td>18,277</td>
</tr>
<tr>
<td>Peru</td>
<td>5,355</td>
</tr>
</tbody>
</table>
State of Recycling – Challenging Economics

- This 4-plus year decline in commodity prices is driven by global market conditions - with no end in sight.
- Chinese economy
- Strong U.S. dollar
- Low oil prices
State of Recycling – Overview

• Commodity prices
  • Almost 45% lower than they were at their peak five years ago.
  • Lowest prices in 7 years.
  • While they have stabilized, they are not expected to improve dramatically in the near future.
  • Paper, plastics and metals markets are all low for various reasons beyond our control: low oil prices and overall global economic conditions
Economic/Market Projections (RISI June Market Report)

• **Economic Growth**
  • Chinese economy expected to slow from 6.4% in 2016 to 6.1% in 2017
  • U.S. economy expected to improve from 1.9% in 2016 to 2.4% in 2017
  • Europe (before Brexit vote) expected to slow from 1.6% in 2016 to 1.4% in 2017
  • Expect seasonal marginal improvement in pricing over the summer, then weaker by fall due to low global demand.

There are no global economic projections that would indicate a significant improvement in commodity markets in 2016-2017
• The Good: OCC and Mixed Paper pricing under upward pressure?

➢ 1.4 million tons of new containerboard capacity to be launched in China in 2016 and about 900,000 tons to start up in the second half of the year.

➢ Added containerboard capacity and already high collection rates in North America and Europe will put a ceiling on China recovered paper imported volume.

➢ OCC Collection rate in China are stable, with lower supply in Northern China especially during winter season. China Resource Recycling Association CRRA reported of some collection disappearing in areas where medium and small/midsize mills shut down.

• The Bad: Slower economy and Newsprint consolidation.

➢ The Chinese economy is expected to slow down from 6.9% in 2015 to 6.4% in 2016 and then further to 6.1% in 2017.

➢ China Paper & Board Industry is consolidating in fewer Group Mills and Newsprint capacity is shrinking below 3 million tons per year.

• The Ugly: Another Green Fence?

➢ March 2016 talks of China’s Government initiatives to stop the import of metals and plastics from U.S. could affect also the import process of recovered paper.
China’s Recovered Paper Demand/Supply

Source: Nine Dragons Paper Industries
• WMRA China Market Share

- In 2015 WMRA (direct export) was by volume the 7th largest exporter of recovered paper from the U.S. to China.

- In 2015 WMRA shipped a total of 29,788 containers directly to paper mills in China. 2015 JOC stats listed WMRA (direct export) as the 15th largest exporter from U.S. across all export sectors.

- 2016 WMRA volume target: MT 57,000/month min volume
• **WMRA Europe Market Share and Outlook**

- In 2015 WMRA represented by volume ~10% of the high grades supply from U.S. to Europe. Market of imported recovered paper is smaller than 5 years ago, due to the exchange rate. Europe with its high collection and recycling rate has alternatives to the North America grades.

- In 2016, 1 million tons of new packaging capacity will be added. Opportunities to supply DLK and DSOCC from U.S. and additional volume of high grades for White Top.

- 2016, New capacity added in France with a de-ink pulp mill: opportunities for SOW and specialty grades.

- Collection is stable, but production is increasing: forecast calls for short supply of OCC, MIX and SOW in 2016.
• WMRA Mexico Market Share & Strategy

- In 2015 WMRA was by volume the largest waste paper shipper from U.S. to Mexico with 17% market share.

- No new capacity will be added in 2016.

- Collection of recovered paper is increasing in Mexico, thus most of the S&M efforts are dedicated to maintain market share.

- 2016 focus: increase brokerage with WMRA Latin America
In less than 3 years, WMRA became the second largest waste paper shipper from U.S. to India.

In 2015 WMRA represented 17% of the total volume of recovered paper shipped from U.S. to India or 4,786 containers.

WM has huge growth potential.

WM covers all 4-zones of the Indian market, shipping cargo to all major ports & key customers.
Conclusion

• In Recycling for the long Haul

“We believe that recycling and materials management can survive this storm and thrive, and can create lasting, positive environmental impacts.”

David Steiner, CEO, WM
Think Green.
Think Waste Management