How do municipalities drive a reuse and recycling economy within their cities/towns?

Presentation at IFAT 2019

by

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• Estimated resource value of the waste is R25.2 billion per annum (0.86% of GDP)
  – Recycling at ±10% (as at 2011 baseline) unlocked R8.2 billion/year worth of resources into the South African economy
  – There is potential to recover a further R17 billion per annum worth of resources back into the economy
  – R10 300 is the monthly living wage for a family in SA
  – R17 billion can pay a monthly living wage to 137 540 families

• 70-90% of packaging waste recycled is sourced from informal collectors (2012)
Municipal solid waste generation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2011</th>
<th>2016</th>
<th>% change</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (’000)</td>
<td>51 771</td>
<td>55 654</td>
<td>7.5</td>
<td>StatsSA, 2018</td>
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<tr>
<td>Municipal solid waste generation (’000)</td>
<td>20 157</td>
<td>26 646</td>
<td>32.2</td>
<td>DEA, 2012; estimate based on 23 WCS</td>
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</table>
How to grow recycling in SA

• Supply side
  – Investment in collection infrastructure
  – Creating entrepreneurial opportunities, for example in collection and sorting of activities
  – Policies and incentives driving separation and collection systems at the household and municipal levels

• Demand side
  – Innovative uses of recycled materials in SA
  – Development of innovative new high quality products using recycled content
Status of MSW recycling in South Africa

- 34.5% of all general waste is recovered or recycled in SA (2017) (DEA, 2018)
- 27.1% of all households in SA showed some recycling behaviour in 2015 (CSIR, 2016)
- 7.2% urban households were dedicated recyclers in 2015 (CSIR, 2016)
- 2.6% households in towns and rural areas were dedicated recyclers (CSIR, 2016)
- 81% households in towns and rural areas - no recycling (2015) (CSIR, 2016)
- 67% households in urban areas – no recycling in 2015 (CSIR, 2016)
Bridging the service and value chains

**Service Chain:** (Typically) Municipal activities
- Generator
- Uncontrolled dumping
- Collection
- Disposal
- Informal waste pickers
- Small businesses, e.g. co-ops
- Waste and recycling businesses

**Value Chain:** (Typically) Private activities
- Junk shops / Buy-back Centres
- Recyclers
- Exporters
- End-users, e.g. manufacturing

Increasing Voluntary EPR Programmes
What do your household normally do with your recyclable waste?

- Put in normal wheelie-bin/black bags: 43.1%
- Use the provided recycling bags: 24.9%
- Other recycling bags: 3.9%
- Put out for informal collectors: 17.7%
- Take to drop-off: 1.0%
- Take to BBC: 0.3%
- Other: 9.1%

Responses from a study in SA metro with kerbside collection of recyclables
Willingness to ...

...**put out** recyclables  ...**take to** drop-offs

2010 and 2015 National surveys - CSIR

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<tr>
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<td>41.3</td>
<td>14.9</td>
<td>13.0</td>
<td>13.5</td>
<td>17.4</td>
<td>18.0</td>
<td>12.1</td>
<td>11.2</td>
<td>0.0</td>
<td>41.3</td>
<td>51.7</td>
<td>18.2</td>
<td>17.9</td>
<td>15.7</td>
<td>18.9</td>
<td>15.4</td>
<td>8.8</td>
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<tr>
<td>2015</td>
<td>29.8</td>
<td>19.4</td>
<td>4.6</td>
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<td>46.6</td>
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Household’s reasons for not participating

Which THREE of the following are the most important reasons why you (or others) might not participate?

- We don’t know what, how, where or when to recycle: 38%
- It is too much trouble to separate different kinds of waste into different bags: 25%
- Service delivery is unreliable or non-existent: 26%
- We prefer to recycle in other ways: 14%
- We don’t think recycling is important: 13%
- Recycling takes up too much time or space: 17%
- We don’t benefit from recycling: 19%

Responses from a study in a SA metro with kerbside collection of recyclables
Discussion points

- What is/should be the role of municipalities in the drive to growing the recycling economy?
- What should industry do to support municipalities to drive the recycling economy?
- What is the role of households in growing the recycling economy?
- What, if any, should the role of the informal sector be?
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