Content

1. Why focus attention on urban waste management?
2. Situation of current waste management in Cambodia
3. Solid Waste Management in Siem Reap
4. Key of Success
To support and promote the responsibility of sub-national administration on urban solid waste management, the government has provided environmental sanitation budget to sub-national administration to support and fulfil the gaps temporarily (in 2015 amount 5,000 million riel (USD 1.25million) and 2016 amount 8,000 million riel (USD 2 million)).

Source: Mr. Nget Bol, Deputy Department Director of Solid Waste Management Department
1. Solid waste management in Cambodia

Institution:

- National Council for Sustainable Development-2015
- National Council on Green Growth-2012
- National Climate Change Committee-2006

National Level:

- Ministry of Environment
  - General Directorate of Environmental Protection
  - Department of Solid Waste Management
  - Department of Hazardous Substances Management
  - Department of Inspector and Law Enforcement
  - Provincial Departments of Environment

- Ministry of Agriculture, Forestry and Fisheries
  - General Directorate of Agriculture; Department of Agricultural Legislation; and Provincial Department of Agriculture, Forestry and Fisheries

- Ministry of Health
  - Department of Hospital; and Provincial Departments of Health

- Ministry of Interior
  - Department General of Local Administration
  - Department of Function and Resources
  - Department of Adm. Affairs - Capital city, Khans and provinces

- Provincial Administrative Organization
- Capital City-Phnom Penh
- NCDD

- Municipalities
- Districts
- Khans
Population: 14.7 million people in 2013
Waste Generating: 2,672,019 T/Y (0.498 per day for Phnom Penh)

Collection Rate (whole country) : 37% in 2013

Municipal Solid Waste disposal at landfills (2004-2014) and forecast (2015-2029) (T/yr)
## 1. Solid waste management in Cambodia

Waste in Capital city – 05 Major cities in Cambodia in 2010

<table>
<thead>
<tr>
<th>City or Town</th>
<th>Food/Organic Waste</th>
<th>Paper</th>
<th>Plastic</th>
<th>Metals</th>
<th>Textile</th>
<th>Glass</th>
<th>Wood and dry matter</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phnom Penh</td>
<td>70</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Battambang</td>
<td>71</td>
<td>2</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Siem Reap</td>
<td>54</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Kampong Cham</td>
<td>60</td>
<td>5</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Kampong Chhnang</td>
<td>78</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Average</td>
<td>66.6</td>
<td>4</td>
<td>8.6</td>
<td>2</td>
<td>2.6</td>
<td>2.6</td>
<td>5.8</td>
<td>7.8</td>
</tr>
</tbody>
</table>
1. Solid waste management in Cambodia

Waste collection and transport of Municipal Waste

In Cambodia, there are 2 main private municipal waste collection and transport companies for main cities; and for less urbanized provincial and district towns, it has market fee collectors for such service.

- CINTRI: Cities: Phnom Penh, Kampong Cham, Sihanoukville, Battambang...
- GAEA: Cities: Siem Reap, Kampot, Serey Sophorn, Kampong Thom ..
- Market fee collectors
1. Solid waste management in Cambodia

Recycling Centre
By COMPED-WM

Organic Waste Recycling
By IRRC and CSARO
### 3. Current waste management approaches

#### National recyclable waste amount

<table>
<thead>
<tr>
<th>Type of raw materials</th>
<th>Amount (Tone/year)</th>
<th>Exported to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Iron scraps</td>
<td>3,300</td>
<td>4,300</td>
</tr>
<tr>
<td>Aluminium scraps</td>
<td>4,075</td>
<td>7,523</td>
</tr>
<tr>
<td>Cu scraps</td>
<td>18,000</td>
<td>0</td>
</tr>
<tr>
<td>Mixed recycle Waste</td>
<td>6,700</td>
<td>3,250</td>
</tr>
<tr>
<td>Paper scraps</td>
<td>15,300</td>
<td>12,400</td>
</tr>
<tr>
<td>Broken Bottle</td>
<td>1,417</td>
<td>3,277</td>
</tr>
<tr>
<td>Plastic scraps</td>
<td>11,966</td>
<td>14,634</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Current waste management approaches

National recyclable waste management
3. Current waste management approaches

Landfills of Cambodia

Landfills in Cambodia 76 landfills/dumpsites
(mostly open pits and open burning)

Kampong Cham
Preah Sihanouk Ville
Phnom Penh
Battambang
Siem Reap
Kampot
3. Current waste management approaches

**Siem Reap Municipality:**

Waste-resource and recycling of about 20T/day

*Source: DOE Siem Reap, 2016*
3. Current waste management approaches

Siem Reap Municipality (10,299 km²; pop. 995,057 pax)

- Landfill has 3 ha land area operation and Total 8ha, 28 Km from urban city
- Solid waste generation/day: 230-250 T/day (transfer station)
- Solid waste collection to landfill 230T/day
- Waste collection by GAEA company and Vgreen company

Source: DOE Siem Reap, 2016