About the report

The “Municipal Solid Waste” report focuses on the current and future (medium-term and long term) outlook of the sector in terms of policy and project development. It provides a comprehensive assessment of waste treatment and disposal requirement in Indian cities, and covers in details major projects (completed and on-going). It also highlights the potential for waste-to-energy market in India.

The report examines the funding requirement and project economics for municipal solid waste management projects in India, and potential for PPP in the sector. It highlights the recent trends and developments, and analyses the market and investment opportunities. Detailed profiles of leading players are also included in the report.
# Table of Contents

1. Executive Summary

2. Municipal Solid Waste - An Overview
   - Introduction
   - Urbanisation and Waste Generation
   - Size & Growth
   - State- and City-wise Generation
   - Composition of Waste
   - SLB Indicators
   - Key Trends
   - Industry Structure (Public and Private Players)
   - Conclusion

3. Recent Developments
   - Introduction
   - Projects Awarded
   - Projects Completed
   - Technology Developments
   - Industry Moves
   - Others
   - Conclusion

4. Municipal Solid Waste Rules
   - Introduction
   - Key Features
   - Implementation of MSW Rules, 2000
   - Expected Amendments
   - Impact on Industry
   - Conclusion

5. Review of JNNURM
   - Introduction
   - Progress and Experience
   - Key Completed Projects
   - Key Ongoing Projects
   - New Improved JNNURM
   - The Way Forward

6. Financing
   - Introduction
   - Key Sources
   - Funding Requirement
   - Internal Resources of ULBs
   - Recent Financings
   - Risks and Challenges
   - Conclusion

7. Project Economics
   - Introduction
   - Current Business Model
   - Key Cost Components
   - Capex and Opex Trends
   - Revenue Sources and Cost Recovery
   - Project Bankability
   - Financing Gap
   - Conclusion

8. Potential and Experience in PPP
   - Introduction
   - Experience So Far
   - PPP Models
   - Key PPP Projects (Completed)
   - Key PPP Projects (Under Implementation)
   - PPP Projects in Pipeline
   - Key Issues
   - The Way Forward

9. Issues, Concerns and Challenges
   - Introduction
   - Challenges
   - Issues and Concerns

10. Outlook and Opportunities
    - Introduction
    - Market Outlook
    - Investment Outlook
    - Policy Outlook
    - Capacity Building
    - Conclusion

11. Collection and Transportation
    - Primary Collection and Segregation
    - Secondary Collection and Transportation
    - C&T Expenditure
    - Technology
    - Planning and Integration
    - Conclusion

12. Treatment and Disposal
    - Introduction
    - Conventional Disposal Techniques
    - Scientific Disposal
    - Traditional Treatment Practices
    - Advanced Treatment Technologies and Practices

    - Introduction
    - Experience so far
    - Technology Options
    - Key WTE Projects
    - Programmes and Incentives
    - Market Potential
    - Issues and Challenges
    - The Way Forward

14. Project Profiles
    - Introduction
    - Completed Projects
    - Under-Implementation Projects
    - Under-Bidding Projects

15. Profiles of Leading Players
    - A2Z Infrastructure Limited
    - Excel Industries Limited
    - Hanjer Biotech Energies Private Limited
    - Hydroair Tectonics (PCD) Limited
    - IL&FS Environmental Infrastructure and Services Limited
    - Jindal ITF Limited
    - Ramky Enviro Engineers Limited
    - SPML Infra Limited
    - UPL Environmental Engineers Limited
    - Others

16. Appendix
I would like to purchase the "MUNICIPAL SOLID WASTE 2013" report:

<table>
<thead>
<tr>
<th>Format (PDF)</th>
<th>Price</th>
<th>Service tax (12.36%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Licence (Single Location)</td>
<td>Rs 45,000</td>
<td>Rs 5,562</td>
<td>Rs 50,562</td>
</tr>
<tr>
<td>Enterprise Licence (Multiple Locations)</td>
<td>Rs 67,500</td>
<td>Rs 8,343</td>
<td>Rs 75,843</td>
</tr>
</tbody>
</table>

Hard copy of the report will be available on request at an additional cost of Rs 3,000 plus 12.36% service tax.

I am enclosing a cheque/demand draft for Rs ________________________, vide cheque/demand draft no. ______________________ drawn on ______________________ dated ________________ in favour of "India Infrastructure Publishing Pvt. Ltd."

---

Name (Block Letters) _____________________________________________________________

Designation _____________________________________________________________

Company _____________________________________________________________

Mailing Address _____________________________________________________________

Telephone ______________________ Mobile ______________________

Fax ______________________

E-mail ______________________

**Wire transfer details:**

- **Beneficiary**: India Infrastructure Publishing Pvt. Ltd.
- **Bank Name**: The Royal Bank of Scotland N.V.
- **Bank Address**: M-6, Hauz Khas, New Delhi 110016, India
- **Account No.**: 1050338
- **Swift Code**: ABNAINBBDEL
- **IFSC Code**: ABNA0100327

**Contact details:**

- **Deepali Mahajan**
  - Manager, Information Products
  - India Infrastructure Publishing Pvt. Ltd.
  - B-17, Qutab Institutional Area, New Delhi - 110 016, India
  - Tel: +91 11 46038153, 41034600, 41034601
  - Mobile: +91 9971407082  Fax: +91 11 2653 1196
  - deepali.mahajan@indiainfrastructure.com

---

India Infrastructure Research www.indiainfrastructure.com