Municipal Solid Waste Update
Canada

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Avoid the formation of landfill gas, produce valuable compost and renewable energy (anaerobic digestion)

- 18 comprehensive chapters (lessons learned and expert knowledge)
- Composting and Anaerobic Digestion
- Science & Principles, Technologies
- Benefits of diverting organics
- Biogas treatment and utilization
- Odour control, facility siting
Technical Document on Municipal Solid Waste Organics Processing – (Cont’d.)

To obtain a copy:
visit
www.ec.gc.ca/gdd-mw
or contact
WRMD-DRGD@ec.gc.ca
Update

- Increased emphasis on organics diversion
- Provincial regulations for landfill gas recovery and starting to implement organics bans in landfills
- Landfill gas:
  - 68 landfills with LFG recovery
  - Generation: 24.9 Mt eCO$_2$
  - Capture: 7.3 Mt eCO$_2$ (30% recovery rate)
  - Emission: 17.6 Mt eCO$_2$
- Composting:
  - Leaf and yard waste: well developed
  - Food waste: increasing number of facilities
- Anaerobic Digestion:
  - Option for larger municipalities (e.g. Toronto, Montréal, Vancouver, Surrey)
  - Beneficial use of biogas (electricity/vehicle fuel)
Nationally Appropriate Mitigation Actions (NAMA)

Building on its experience and expertise, Canada is supporting the development and implementation of NAMA in the waste management sector.

**Objective:**
Support country-led development of long-term sectoral mitigation strategies that enable the partner country to identify, select and develop alternatives to “business as usual” and create enabling conditions for transformational mitigation action.
Nationally Appropriate Mitigation Actions (NAMA) – Cont’d

**Approach:**
- Canada is providing financial support ($2.55M) to help partner countries identify opportunities for mitigating emissions in the waste management sector that create enabling conditions for transformational action that support national priorities.

**Country Partners:**
- Chile
- Colombia
- Mexico
- Dominican Republic

**Delivery Channel:**
- Center for Clean Air Policy
Colombia and Chile:
Development of an integrated approach including a series of measures: diversion of organics, composting, use of RDF and recycling; and increased methane capture and biogas utilization from landfills and wastewater treatment facilities.

Dominican Republic,
Development of an integrated approach in the tourism industry with a pilot project in Punta Cana that will eventually lead to the development of a national strategy.

Mexico,
Development of feasibility studies for the implementation of a bio-digester in Colima while building capacity with Mexican experts.
Climate and Clean Air Coalition (CCAC)

- Canada is a founding member of the CCAC
- Active co-lead of the Municipal Solid Waste Initiative, with the US, Mexico, and the World Bank.
- Contributed $300,000 to the CCAC Municipal Solid Waste Initiative (first year)
- Works directly with 8 cities in Latin America, Africa, and South East Asia
  - Rio, Brazil
  - Cali, Colombia
  - Vina del Mar, Chile
  - Accra, Ghana
  - Lagos, Nigeria
  - Hi Chi Minh, Vietnam
  - Dhaka, Bangladesh
  - Penang, Malaysia
Goal:

Identify concrete and on-the-ground action that can effectively reduce short-lived climate pollutant (SLCP) emissions from the MSW sector.

Next Steps:

- Implement new actions to reduce SLCP emissions from the MSW sector
- Bring on more cities and country partners to take direct action
- Quantify potential and real emissions reductions
- Explore sustainable financing for MSW projects
Questions?

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