# Municipal Solid Waste Update Canada

Alain David GMI Municipal Solid Waste Subcommittee Meeting Vancouver, Canada, 13 March 2013



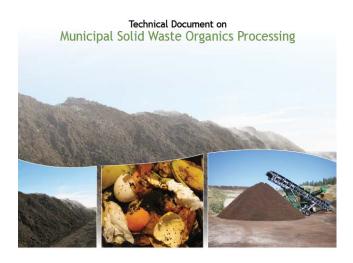
### **Technical Document on Municipal Solid Waste Organics Processing**

- 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.)





Canada

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<sub>2</sub>
  - Capture: 7.3 Mt eCO<sub>2</sub> (30% recovery rate)
  - Emission: 17.6 Mt eCO<sub>2</sub>
- 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



### Nationally Appropriate Mitigation Actions (NAMA) – Cont'd

### **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



### Climate and Clean Air Coalition – Cont'd

#### 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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