Municipal Solid Waste Initiative

7º Forum Internacional de Resíduos Sólidos

Porto Alegre, RS
15 de Junho de 2016

Gabriela G P Otero
Coordenadora Técnica
ABRELPE – Implementer
ORIGINS OF THE COALITION

The CCAC was formed on 16 February, 2012, to mitigate the impacts of short-lived climate pollutants and address near-term climate change. The Coalition is a unique initiative to support fast action and make a difference on several fronts at once: public health, food and energy security and climate.

The founding seven members of the CCAC: the governments of Bangladesh, Canada, Ghana, Mexico, Sweden and the United States, and the United Nations Environment Programme (UNEP).
7 sectoral and 4 cross-cutting initiatives
The Waste Issue & MSWI Initiative Opportunities

• Solid waste generation is increasing; cities are growing
• Globally, landfills are the **third** largest source of anthropogenic global methane emissions (approximately 11%)
• Open burning of uncollected waste and transport of waste by outdated and polluting vehicles produces black carbon
• Black Carbon is a primary component of particulate air pollution
• Waste management improvements offer **significant co-benefits**, including health, poverty reduction and job creation
MSW Initiative is working with its partner cities on the following focus areas:

- **Reduce waste** generation
- Address **open burning**
- Improve **waste collection & upgrade waste handling equipment and transportation vehicles**
- Promote **organics diversion & treatment** programs: composting and anaerobic digestion
- Institute **recycling programs**
- Use **landfills** as final disposal options, enhance landfill operations, and promote **landfill gas recovery**
- **Measure and track** SLCP emissions reductions
How Cities Participate in the MSW Initiative

• Collect and assess MSW data through City Waste Assessment Tool

• Conduct work plans to identify the appropriate opportunities for managing waste sustainably

• Measure SLCP emissions through Emissions Quantification Tool

• Receiving capacity building support through workshops, webinars, and access to online resources, such as free expert advisory services

• City pairing / mentorship / link to international waste networks

• Obtain technical and financial analysis supporting SLCPs mitigation projects
Knowledge platform

to support cities and governments in short lived climate pollutant reduction.

waste.ccac-knowledge.net
São Paulo: Assessoria local da CCAC/MSW Initiative

Resultados

- Geração de 13.000 tons/dia de resíduos sólidos domiciliares
- 51% fração orgânica
- 2 aterros sanitários; 3 áreas de transbordo; 2 centrais mecanizadas
- Ausência de plantas de compostagem e WTE
- PGIRS 2014
São Paulo: Assessoria local da CCAC/MSW Initiative

Plano de Ações com foco em:

1. Estratégia para separação e tratamento dos resíduos orgânicos.
2. Protagonismo nas escolas municipais.
3. Assessoria técnica para a primeira planta piloto de compostagem descentralizada.
4. Projeto piloto para coleta seletiva de resíduo orgânicos domiciliares.
5. Estratégia de comunicação sobre a gestão municipal dos resíduos sólidos.
6. Treinamentos para o corpo técnico da prefeitura e demais atores.
City-to-City Partnership: Copenhagen

Propósito
Relação de mentoria entre Copenhagen e São Paulo, para auxiliar na concretização das ações pretendidas e aprimoramento dos sistemas já existentes.

Objetivos
Capacitar São Paulo em tópicos específicos como:
- otimização da coleta seletiva;
- Impactos da aplicação de taxa aos usuários;
- Estrutura e orçamento em comunicação.
São Paulo: Assessoria local da CCAC/MSW Initiative

Grupo Escolas Mais Orgânicas

COMUNICAÇÃO AMBIENTAL ESTRATÉGICA

EVALUATION AND RECOMMENDATION REPORT OF THE PILOT COMPOSTING PLANT IN THE LAPA DISTRICT OF THE CITY OF SAO PAULO

NATIONAL MEMBER OF ISWA

International Solid Waste Association
Cali: City-Level Actions through CCAC/MSW Initiative

Findings
- Generates 1,800 tons/day of waste
- 59% is organic
- 1 sanitary landfill 60 km away; 40 open dumps
- No facilities for composting, WTE or formal recycling despite policies in place to promote
Cali: City-Level Actions through CCAC/MSW Initiative

City waste assessment

Action Plan

1. Selective Routes for dry recyclables
2. Warehouses – Stockpile Centers
3. Material Recovery and Transformation Facility + Organics bioprocessing plant
4. Disposal in landfill of non-recoverable material

Trading and marketing of recovered material and products with added value

Proposed Source Separation Policy
Cali: City-Level Actions through CCAC/MSW Initiative

Key actions under Work plan

1. Develop analytical model to quantify impact (SLCP reduction and economic feasibility) of source separation policy
2. Scoping study of large generators of organic waste and pre-feasibility study of operation
3. Market study for compost
Cali: City-Level Actions through CCAC/MSW Initiative

City waste assessment

Action Plan

Work plan

Business Plan, Feasibility Study, etc.

Financing and Implementation

Status

- CCAC: Partnership with San Diego for technical and capacity exchange
- CTCN/ISWA: Assessed feasibility of treatment facilities and developed a business plan for chosen technology
City-to-City Partnership: San Diego

**Purpose**
- Assist Cali to plan and implement their source separation policy and other climate friendly SWM policies (e.g. installation of MBT facility)

**Objectives**
- Understand Cali’s waste system and introduce Cali to San Diego’s waste system and policies
- Share San Diego’s expertise in composting
- Introduce to stakeholders planned source separation policy using formalized waste pickers and composting program from large generators
Cali: City-Level Actions through CCAC/MSW Initiative

Next Steps

- Develop source separation & collection policy for recyclables, organic waste
- Seek financing for implementation of recommended technology of study
Example: Rio de Janeiro, Brazil

- Assessing large-scale sources of high-quality organic waste
- Conducting training on composting project operations
- Developing recommendations for improved operations at the Caju Composting Facility
- Coordinating city representative participation at Waste Fleet Conference
- Conducting a training on landfill leachate management
- Completing CCAC deliverables:
  - MSW management assessment, action plan, work plan, SLCP emissions baseline
WASTE INITIATIVE
Highlights on Progress and Achievements to Date

• **MSW city data assessments (30):**
  o In progress: **Six** (Cotonou, Lome, Maptaphut, Panvel, Rayong, and Bangkok)

• **Work plans (16):**
  o In progress: **Four** (Phitsanulok, Battambang, Sao Paulo and Dar es Salaam)

• **Emissions Quantification Tool**

• Capacity building through **workshops and webinars**

• City pairings through city-exchanges (3)

• **Implementation of activities** of different work plans

• Availability of **Knowledge Platform**
  • Roster of experts, databases, best practices documents
Thank you!

Sandra M. Mazo-Nix
MSW Initiative Coordinator
Sandra.Mazo-Nix.Affiliate@unep.org

Gabriela G P Otero
Coordenadora Técnica da ABRELPED
Implementer
gabriela@abrelpe.org.br

LEARN MORE:

CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS
ccac_secretariat@unep.org
@CCACoalition
facebook.com/ccacoalition
www.ccacoalition.org