

# Opportunities to reduce Methane emissions in the Waste Sector

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# The Opportunity

- Landfills are the **3<sup>rd</sup> largest anthropogenic source** of methane
- Opportunity to reduce up to **800M tCO<sub>2</sub>e** per year
- Waste management improvements offer **significant co-benefits**, including health, poverty reduction and job creation



# Proven Methane Emission Mitigation Technologies

- There are proven technologies and solutions for CH<sub>4</sub> emission abatement in the waste sector:
  - Waste prevention / minimisation programmes
  - Separate collection schemes
  - Composting
  - Recycling
  - Landfill gas collection
  - Landfill gas utilisation
  - Anaerobic digestion
  - Waste-to-energy
- *Developing Integrated Sustainable Waste management practices*



# Significant CH4 emission reductions already achieved!

- **Through regulation and infrastructure investment**



– Europe's CH4 emissions from landfills: **-35%** between 1990 and 2010. (EEA)



– Australia's CH4 emissions from landfills: **-17.8%** between 1990 and 2010. (Australian Dept. Of Climate Change & Energy Efficiency)



– USA's CH4 emissions from landfills: **-30.3 %** between 1990 to 2011 (USEPA)

- **Through the transfer of technology and financing to developing countries via the Clean Development Mechanism**

- **10.8%** of registered CDM projects are waste sector projects
- **84.3** million carbon credits have been issued for landfill gas and methane avoidance projects
- Confirmed significant potential of waste GHG mitigation projects in developing countries
- Demonstrated that Private investments can dwarf public sector contributions

# CCAC Municipal Solid Waste Initiative - Commitment

To move cities up the waste hierarchy through **transformative**, long lasting actions that can be implemented in a sustainable way, that are compatible with the local context and that are replicable through National policy support or through city to city collaboration.

## LAUNCH PLATFORM

- **26 cities** now
- Leveraging actions to link national replication and city to city collaboration
- Go beyond capturing emissions to preventing them

## SCALE-UP GOALS: Presented in the UN Secretary General's Climate Summit

- By December 2015, **50 cities** will commit to develop and implement plans of action to reduce SLCPs from waste by 2020 with Government support
- By December 2020, expand the global city network to reach **100 additional cities** to build capacity and utilise the network's tools and resources
- Replication through city to city collaboration and National linkages
- The 150 cities that join by 2020 will motivate and **lead up to 1,000 cities** undertaking action by communicating, sharing, disseminating, mentoring, and scaling up around the world their own best practices supported by Partners.

# CCAC Municipal Solid Waste Initiative - Challenges

- The CCAC MSW Initiative is working with its partner cities to meet the following challenges:
  - Eliminate open burning of waste
  - Eliminate non-sanitary landfill disposal
  - Capture and utilize landfill gas in every landfill
  - Implement segregated household and commercial collection city-wide
  - Reduce organics disposal
  - Reduce waste generation per capita

# CCAC Municipal Solid Waste Initiative - Action Plan

- Leverage a [global city network](#) to further drive replication through [collaboration](#) and best practices identification and sharing
- Partnership with National Government to [scale-up city action](#) through enabling policy frameworks
- Build Capacity for [sustainable](#) solutions and to assist cities to collect reliable waste data and to develop [financially sound](#) projects
- Accelerate [direct access to financing](#) for faster project implementation
- Develop tools to [measure](#) emissions and reductions, to [guide](#) decision making and to [evaluate](#) project financing
- Work with [a data driven](#) implementation approach



# Current Status – Cities under CCAC MSW Initiative

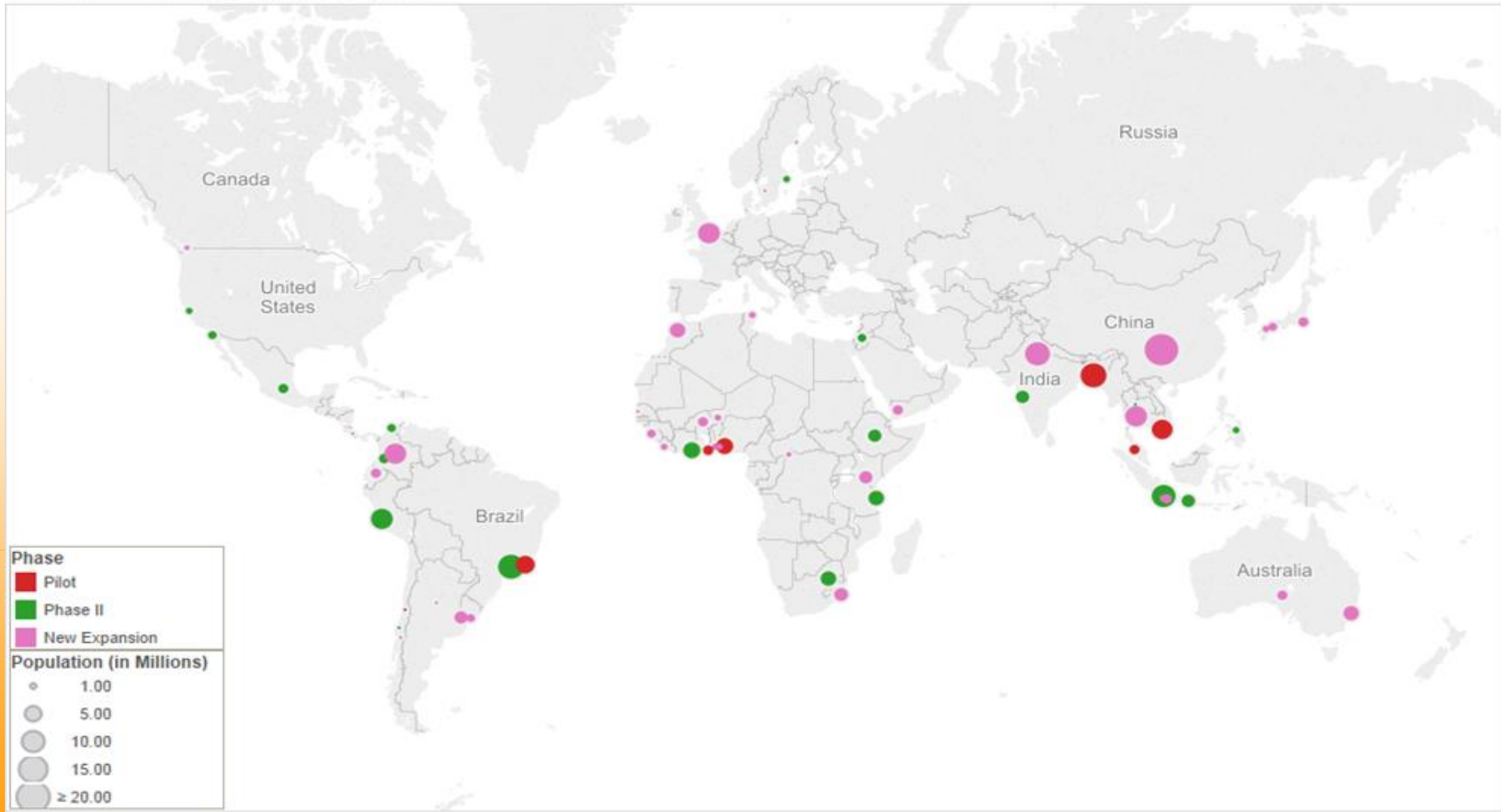
CCAC MSW Initiative





# ***Initiative Target: To benefit 200 million lives by improving the waste management system quality in participating cities.***

## CCAC MSW Initiative: Expansion Phase



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# Thank you for your attention !

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# INTERNATIONAL SOLID WASTE ASSOCIATION

the world's leading network promoting & developing professional and sustainable waste management

Representing all stakeholders and aspects within the waste sector. ISWA collaborates with National and International Organisations and Institutions in projects, research, studies, capacity building and partnerships

- Promoting resource efficiency through sustainable production and consumption
- Support to developing and emerging economies
- Advancement of waste management through education and training
- Promoting appropriate and best available technologies and practices
- Professionalism through its programme on professional qualifications



With more than **1,400** Members in **>100** Countries ISWA has a unique worldwide network in waste management matters.

# The CCAC

- **Leverage high-level engagement and political will, and catalyze action to address SLCPs as a global and collective challenge** to protect the environment and public health, promote food and energy security, and address near term climate change
- **Voluntary, Partner-led Coalition**
  - Feb 2012 -> 7 Partners
  - Feb 2014 -> 88 Partners: 40 States, IGOs, NGOs and private sector
- **Science driven, action-oriented**
- **Building on and bringing together existing efforts**
- **Complementary to global efforts to reduce CO<sub>2</sub> in particular under UNFCCC**



# Veolia, the global leader in optimized resource management

- Over 200,000 professionals dedicated to designing and implementing the best possible solutions for **local management of essential resources**: water, energy and raw materials.
- Veolia **partners with manufacturers, cities and local residents** to make optimal resource management the foundation for a **new approach** to human progress, regional appeal and sustainable growth.

Water, waste and energy:  
a unique combination of expertise

**€22.3 billion** in revenue

**202,800** employees on **5** continents

**94 million** people supplied with drinking water

**62 million** people connected to wastewater systems

**86 million** MWh generated

**38 million** metric tons of waste recovered

*(2013 global data)*