

**CDM**

## **Double Counting in Municipal Greenhouse Gas Emissions Inventories**

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## **Drivers for Greenhouse Gas (GHG) Inventories**

- ◆ **Scientific consensus**
- ◆ **Environmental indicators**
- ◆ **Rising energy costs**
- ◆ **Increased public awareness**

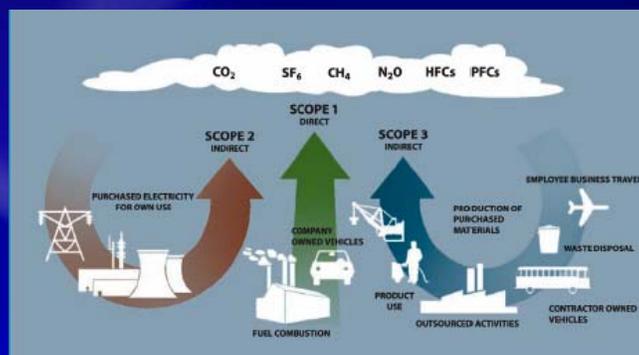
## Municipal GHG Reduction Commitments

- ◆ U.S. Mayors Climate Protection Agreement
  - ◆ Community wide reduction targets
  - ◆ “Meet or beat Kyoto” = 7% reduction from 1990 levels
  - ◆ 840 mayors representing 25% of U.S. population



## WRI/WBCSD GHG Accounting Protocol

- ◆ Scope 1: direct emissions from combustion
- ◆ Scope 2: indirect emissions from purchased energy
- ◆ Scope 3: optional, indirect emissions from all other activities



## Municipal GHG Inventories

- ◆ Includes both Scope 1 and 2 sources within city limits from:
  - ◆ City operations
  - ◆ Residential energy use
  - ◆ Commercial energy use
  - ◆ Industrial energy use
  - ◆ Transportation



## Common Issues facing Municipalities

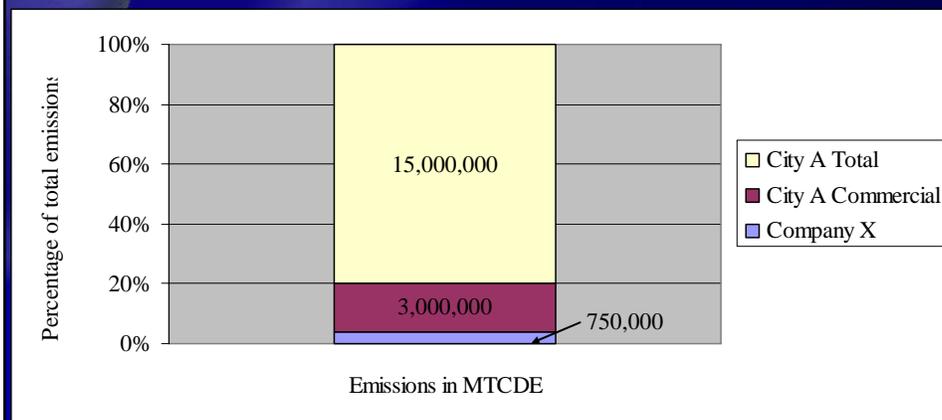
- ◆ Issue #1: cities only have control over the reductions from city operations.
- ◆ Issue #2: cities have committed to reductions from all sources, regardless of their ability to reduce the emissions.
- ◆ Issue #3: if a resident, commercial, or industrial entity creates an inventory, emissions will be double counted.

## An Example of Double Counting

- ◆ City A's GHG inventory includes:
  - ◆ city operations, residential, **commercial**, **industrial** energy use and transportation
- ◆ **Company X's** GHG inventory includes:
  - ◆ Scope 1: heating, fleet vehicles
  - ◆ Scope 2: purchased electricity
- ◆ **Power Plant M's** GHG inventory includes:
  - ◆ Scope 1: production of electricity (stationary combustion, process and fugitive emission)

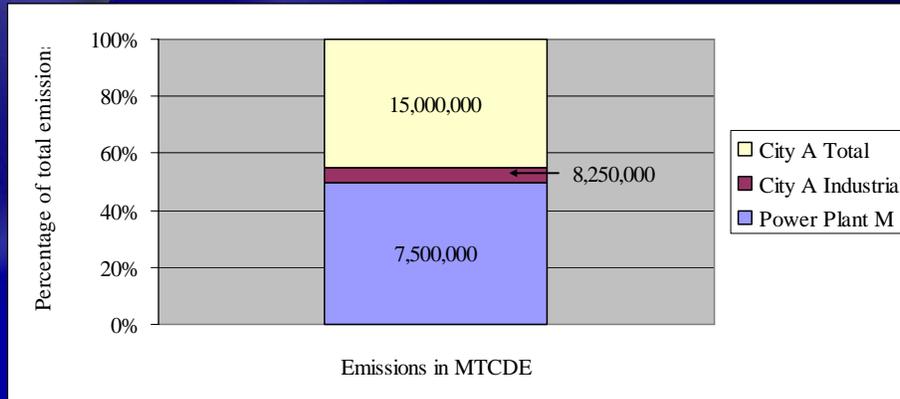
## Overlap: City A vs. Company X

- ◆ 5% of City A's total (25% of commercial) emissions are double counted in Company X's 2007 inventory

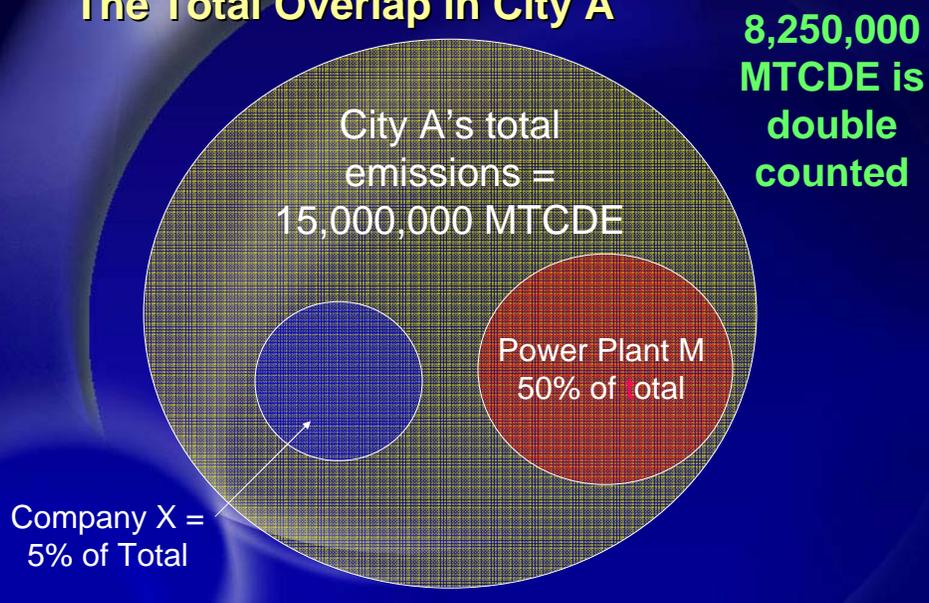


## Overlap: City A vs. Power Plant M

- ◆ 50% of City A's total (90% of industrial) emissions are double counted in Power Plant M's 2007 inventory



## The Total Overlap in City A



## Mandatory Reduction Programs

- ◆ Regulations create demand for increased baseline GHG inventories
- ◆ RGGI
  - ◆ 10% reduction from 2009 levels over 10 years
  - ◆ Electricity generation units > 25 MW
- ◆ WCI
  - ◆ 15% reduction from 2005 levels by 2020
  - ◆ Economy wide
- ◆ Sector specific regulations could create more double-counting risk

## Importance for the Future

- ◆ Use caution comparing GHG emissions inventories.
- ◆ National, sector-wide reduction regulations = reduced need for municipality to set independent reduction goals.
- ◆ Municipal inventories useful for comparison to others.
- ◆ Sectors and cities should not be regulated with overlapping programs.

## Questions?

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