Urban Development: Greenhouse gas (GHGs) mitigation in an urban context

African Carbon Forum Workshop 11-12 April 2014



UNFCCC Secretariat SDM programme

Setting the scene

Why Cities?

- Cities account for less than 4% of the Earth's surface but they house 51% of the world's population and is expected to reach 75% of the population by 2050;
- They generate around 75% of global GHG emissions; and,
- The potential to reduce these emissions through local policy and actions are significant.

Benefits:

- Contributing to climate mitigation;
- Improving the living conditions of its residents, through sustainable development; and
- Carbon finance can be sought as a key resource to blend with various domestic and international financial resources and incentives



GHG profile of cities is influenced by e.g., size, density, location, layout, urban planning, economic activity and the type of electricity production.





Possible GHG mitigation measures

Examples:

- Higher efficient lighting, e.g., street lighting network upgrade
- Energy performance improvement of buildings
- Renewable energy supply
- Comprehensive municipal solid waste (MSW) treatment;
- Low carbon footprint transport, e.g., efficient mass rapid urban transport





A programmatic approach is of obvious advantage over a project/site –specific approach while implementing cross-sector mitigation actions:

- It allows better exploiting the city' GHG mitigation potential by increasing the number of activities implemented under one programme, so that it could be aligned to the urban planning at the city level;
- It allows climate finance for GHG mitigation in cites to be scaled up to several sectors as part of a citywide strategy;
- It also increases operation efficiencies in the administrative processes, and thus reduces the transaction costs;
- It has great potential to be replicated in other cities and countries



Institutional set-up



Source: Spors & Ranade (20)



Future work

New methodology/ies is under development, which will

- Combine the key emission sources relevant to the urban context;
- Provide simplified emission reductions, baseline setting, additionality and monitoring.



