Durban COP17

Side Event – Supporting Global, Regional and National Action

UN HABITAT
FOR A BETTER URBAN FUTURE

Urbanization, land-use planning and GHG Mitigation

Cities have a vital role to play in realizing LOW EMISSION DEVELOPMENT through equitable urban growth with lower carbon, energy and resource intensity

Economists, planners and landscape ecologists increasingly are focusing on the City-Region:

- Area within which there is intensive economic activity (border not clearly defined)
- City-regions with population of 3.5 million people in an area of 60 x 90 km (5,400 km2)
- Usually one large city, but may be polycentric
- Often does not correspond closely to local government boundaries

Seven strategies for achieving urban patterns for sustainable development;

together they form an operational framework for cities to plan for a transition towards low emission development

1. Embrace land mosaic patterns that provide for large green patches and more sustainable urban development

- Sustainable spatial framework for population growth and economic growth
- ‘Compact policentric zone’ and ‘satellite cities’ as best solutions
- Preservation of green spaces and natural corridors, preventing flooding or landslides

2. Promote compact cities and planned extension of urban areas

- Urban densification (inner city brownfields) or planned extension in certain areas (e. g. around public transport stations)
- Allows bigger patches of natural space preservation, while providing for connection between urbanized areas
- Allow for agglomeration economics

-- When needed, allow for compact city enlargements, without compromising the natural mosaic

→ Coordination between land use regulation and infrastructure investment essential for success!

3. Balance strategic facilities with diversified local economic opportunities

- Specialization of city comes naturally when city grows → Balance important! Avoid over-specialization and promote diversification.
- A strategic facility like a harbor, airport, university, etc. stimulates development and strengthens competitiveness → supports value chains in area → diversifies economy
- When these opportunities arise, implement in the frame of the urban pattern, reducing demand for mobility → reduces energy use

http://www.muztagh.com/china-pictures/hongkong/pic4.htm

Hong Kong

- many semi- and unskilled jobs have migrated to Pearl River Delta
- Hong Kong has retained higher value activities

Randstad Region

Cities somewhat specialized; all still provide basic services

- Amsterdam: professional, financial, tourism
- Rotterdam: freight logistics, manufacturing
- The Hague: international law

http://www.portofrotterdam.com/en/Port/port-in-picture/photo-gallery/Pages/default.aspx

4. Expand network infrastructure while getting the most out of existing networks

- Multi-modal transportation systems e. g. well developed commuter rail lines

- Adequate energy facilities (while considering renewable energy)

Bogota –
Bus Rapid Transit

- successfully improved public transportation
- now has inter-modal connectivity
- uses GPS to help manage traffic flow

http://www.streetsblog.org/2006/10/24/dot-announces-five-bus-rapid-transit-corridors/

Kenya –
geothermal energy Naivasha/ wind energy Ngong

- underground hot water sources can be turned into electricity
- alternative energy is becoming more feasible for cities in future

http://www.treehugger.com/files/2008/08/kenya-geothermal.php

5. Construct greener built environments that use water and energy efficiently

- Long-term savings > upfront costs
- Building of greener buildings through regulatory approaches and incentive-based strategies
- Important for developing countries → high construction rate of buildings over next 40 years

Cape Town
- Clean Development Mechanism Project

- solar water heaters in low cost housing

http://www.suntank.com/media/snippets/snippets_september_2004.htm

http://www.capetown.gov.za/EN/ENVIRONMENTALRESOURCEMANAGEMENT/PROJECTS/CLIMATECHANGE/Pages/SolarWaterHeaterAdvancementProgramme.aspx

6. Protect valuable ecosystem services and biodiversity hotspots while increasing resilience to some natural disasters

- Conserving blue-green patches and corridors as they provide humans with valuable services (e. g. climate control, protection of natural disasters, water purification, recreation)

- Preserving ecosystems and corridors for wildlife travels

- Biodiversity protection e.g. for ecological reasons or tourism

Berlin - Tiergarten Park
(inside city boundaries)

- the “green lungs” of the city
- shelters rare meadow plants

http://www.berlin-stadtfuehrung.de/Tiergarten.html

Vietnam – Mangrove Swamps
(outside city boundaries)

- adaptation and mitigation benefits
→ typhoon protection while acting as carbon sinks

http://www.travelthewholeworld.com/brunei.html

7. Promote clusters of green industries and green jobs

- Links between university research, business and local authorities to promote environmentally friendly economic development
- The magic triangle between university, business and adminstration

Berkeley, California –

East Bay Green Corridor Partnership

- Partnership of 8 cities and 3 universities
→ region shall be a centre for emerging green technology and innovation

Gauteng, South Africa –

Strategy for a Developmental Green Economy - 2010

- Emphasis on green job creation and equity dimension

http://www.ci.berkeley.ca.us/uploadedFiles/Mayor/Level_3__-General/EBGC.pdf

-THANK YOU FOR LISTENING-

THE END