

Co-Sponsors: AIMES; START; Global Land Project; IHDP/IGBP Urbanization Project; Industrial Transformation (IT); National Institute of Ecology (INE); and Metropolitan Autonomous University



## Global Carbon Project First International Conference Carbon Management at Urban and Regional Levels: Connecting Development Decisions to Global Issues Mexico City, September 4-8, 2006

Pathways of regional development are sequences of interlinked transformations in socioeconomic processes and institutional settings. Regional changes over time have diverse impacts, including consequences for carbon stocks and fluxes that constrain feasible development options. Cities are complex drivers of both regional development pathways and carbon emissions. On the one hand cities are centers of key activities (e.g. transportation) driving changes in the carbon cycle and the climate system. They also have an ecological footprint extending to distant and remote places, arising from their demands for energy and material goods. On the other hand, cities are centers of cultural opportunities and changing lifestyles that can induce transformations in consumption behavior and technological development. One of the societal challenges posed by human-induced climate change is to find ways of reducing carbon emissions through changes in consumption and technology. The conference aims to address the challenge of climate change and carbon management in urban centers.

## **Conference Themes:**

**1.** Patterns and Variability (temporal and spatial) in urban and regional carbon footprints and their influence on future global carbon trajectories.

2. Measurement and Observations of regional/urban emissions trajectories using tools such as comprehensive place-based carbon budgets and inventories, sectoral carbon budgets, and material flow analysis

**3.** Mitigation Opportunities, Constraints and Challenges at local (municipality), city, regional and rural scales. Evaluation of existing management strategies that explicitly or implicitly have an impact on GHG emissions, in terms of the factors explaining their success, constraints and challenges. Evaluation and measurement of carbon consequences of

decisions in various sectors across rural and urban environments. Design of regional/urban emission reductions approaches which include and make use of win-win strategies, such as those that aim to reduce net GHG emissions, improve air quality, and human welfare.

4. Influence of Development Processes on Present Day Net Emissions (e.g., studies of spatial patterns and densities of development and their impacts on carbon emissions, changes in net emissions or carbon budgets over time, and their association with key development decisions) including examples of estimations of carbon consequences of decisions in various sectors (e.g., transportation infrastructures and systems, population dynamics, lifestyles, technological innovations, manufacturing, forestry, agriculture, bio-energy, heating, and avoided emissions)

**5. Understanding and Modeling** the factors influencing and causing changes in carbon emissions over time using concepts and tools such as carbon budgets, the Kaya Identity, STIRPAT, material flow accounting, and others.

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## Audience

We invite scientists, practitioners and scholars working on carbon related issues within the context of regional development and regional carbon budgets, to participate in this Conference and to submit abstracts for papers and posters.

## Post Conference Opportunity for Young Scientists

Directly after the Conference, the workshop on "Urbanization Impacts on Biogeochemistry and Climate" September 2006), organized by the new IGBP Analysis, Integration and Modeling of the Earth System (AIMES; <u>http://www.aimes.ucar.edu</u>) Young Scientist's Network will convene in Mexico City and will provide an opportunity for selected young scientists to present and discuss their work.

Additional information will be available on the Global Carbon Project website (<u>www.globalcarbonproject.org</u>) in late January.

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