

**Initial International Workshop for the IAI Project:
"Can Cities Reduce Global Warming?
Urban development and the carbon cycle in Latin America"**

Mai 27-29, 2004 Metropolitan Autonomous University -Xochimilco¹

1. Introduction

Cities are contradictory front-runners of development in terms of economic growth, industrial transformation, quality of life, lifestyle changes, economic and demographic dynamics, and environmental impacts. They are key drivers of climate change and transformations in the global carbon cycle. Their activities release carbon directly, through the consumption of fossil fuels, and indirectly, such as through electricity consumption in the production of cement.

Urbanization as land cover relates to the structure of transport systems and to city's effects on land change elsewhere through transformations of urban-rural linkages or urban ecological footprint.

Cities' development priorities are paradoxical. City governments are required to address local issues, but at the same time they are the key players for promoting the behavioral changes necessary to abate carbon emissions and to adapt to global climate change. However, local governments could integrate the global concern with local policies in air pollution, land-use, and energy to produce economic and social benefits.

Considering this framework, the Metropolitan Autonomous University (UAM-Xochimilco) in Mexico, the University of Chile, and the University of Mendoza in Argentina are conducting a research project on strategies to reduce global warming through urban development in Latin America. As part of the project this workshop is sponsored by the Inter American Institute for Global Change Research (IAI), the International Human Dimensions Program on Global Environmental Change (IHDP), the Global Carbon Project (GCP), and START.

The main goal of the study is to explore the linkages among three dimensions of urban development (social, economic, institutional) and the changes in the carbon cycle resulting from energy and land used. In addition, the project aims

¹ Co-ordinated by Patricia Romero Lankao, Angélica Rosas Huerta, Miriam Rodríguez Armenta, Hugo Villafranco and Gricelda Ghünther

at identifying innovative mitigation alternatives that can simultaneously reduce local air pollution and improve local welfare (see the research proposal).

2. Goals and Objectives of the Workshop

This workshop intends to contribute to referred project objectives and to:

1. Establish a well-coordinated network of case studies
2. Promote the discussion on the role of cities in global carbon emissions (GCE)
3. Promote the discussion about strategies to reduce GCE
4. Develop common and comparable methodologies
5. Provide a platform for collaborative planning, research and synthesis
6. Enhance communication with policy makers
7. Produce peer-reviewed publications

3. Structure

The first component of the workshop (morning sessions, open to students and specialists) will include presentations of research projects on empirical findings, modeling tools and policy programs in the following topics:

1. Current trends and scenarios of energy and land use in selected cities. Inventories, carbon emissions from key sectors and processes (e.g. transportation, land use change, industry, waste generation)
2. Main drivers of urban development: economic and demographic dynamics, institutional settings. Two heuristic tools: “Kaya identity” and “local regimes” or management strategies
3. Flow accounting analysis, factor decomposition approach, cost-benefit analysis

During the second component of the workshop (afternoon sessions closed to the general public) participants will undertake the following tasks:

1. Draft a protocol for individual and/or comparative case studies
2. Establish an activities’ agenda for products achievable within 1 year
3. Design a strategic framework for linking the IAI-supported case studies with the Global Carbon Project, the urbanization project of IHDP, the

APN research network, and START-NCAR's projects on Urbanization, Emissions and the Carbon Cycle

- a) Discuss a plan of action aimed at obtaining additional funding from national and international organizations

4. *Participants and institutions*

Participants and institutions	Contribution in the areas of
Enrique Puliafito University of Mendoza, Argentina	Emissions inventories, spatial and temporal modeling of cities' emissions
Shinji Kaneko, Hiroshima University, Shobhakar Dhakal Institute for Global Environmental Strategies, Japan ¹	Assessment of CO2 Emissions and their drivers in selected Asian Cities
Eduardo Behrentz UCLA, US	Greenhouse gas emissions from mobile Sources in Bogotá
Juan Carlos Balcazar, University of Los Andes	Greenhouse gas emissions from mobile Sources
Mauricio Osses, Riverside, US and U of Chile (IAI project) ¹	Inventories of Transport Emissions in South American Mega cities
Alejandro León, U of Chile Eduardo Martínez, U of Chile	Socioeconomic and institutional drivers, management options for reducing global warming
Patricia Romero Lankao UAM-X, México	Socioeconomic and institutional drivers, management options for reducing global warming
Claudia Holgate, Monash University, South Africa	Institutions and information flows in South African Government
Pep Canadell Global Carbon Project (GCP), Australia	Urban development and management strategies, two key themes of GCP
IHDP, IT Germany Erna López, UNAM-Morelia México	Urban development within IHDP
Drinya Totrakool APN-network, USER, Thailand	Carbon Management and development strategies in Asian cities
Adrián Fernández and Julia Martínez National Institute of Ecology, Mexico	Management of carbon emissions in Mexico
Oscar Vázquez Government of the Federal District, Mexico	Inventory of Emissions and Strategic Climatic Action in Mexico City
Jorge Escandón Government of the Federal District, Mexico	Greenhouse gas emissions from land use change in Mexico City
Mónica Conte Grand, Argentina	Assessment of local benefits by management of GHG
Angélica Rosas H., Miriam Rodríguez A., Hugo Villafranco and Graciela Ghünther, Research Assistants, UAM-X, México	

1. These researchers will participate in this project, but will not attend the first workshop

**Agenda of the
Initial International Workshop for the IAI Project:
"Can Cities Reduce Global Warming?
Urban development and the carbon cycle in Latin America"**

Mai 27-29, 2004 Metropolitan Autonomous University -Xochimilco

Day	Theme and Purpose
Mai 27th	
8.30-9.00	Inauguration
9.00-9.30	Informal introductions by participants
9.30-10.00	Presentation of IAI project and proposed activities Patricia Romero Lankao
10.00-10.30	The inventory of greenhouse emissions in Mexico city, Oscar Vázquez
10.30-11.00	Break
	Theme 1. Current trends and scenarios of energy and land use in selected cities
11.00-11.30	Greenhouse gas emissions from mobile sources and solid wastes in Latin American cities (especial reference to Bogotá, Colombia), Carlos Balalcazar
11.30-12.00	Emission inventories for mobile sources: advantages and disadvantages of various methodologies, Eduardo Behrentz
12.00-12.00	Emissions from land-use changes, Jorge Escandón
12.00-13.30	<i>Inventories of carbon emissions from energy and land-use changes, first part of a general discussion on a common research protocol, moderated by Enrique Puliafito</i>
13.30-14.30	Lunch-break
14.30-16.30	<i>Inventories of carbon emissions from energy and land-use changes, second part of general discussion on a common research protocol moderated by Enrique Puliafito</i>
16.30-17.00	Urban development and management strategies, two key themes of GCP, SSC member
17.00-17.30	Urban development within IHDP, Erna López

Day	Theme and Purpose
Mai 28th	
	Theme 2. Main drivers of urban development and carbon related emissions
9.00-9.30	Drivers of carbon emissions in Mexico city, Santiago, Patricia Romero Lankao, Alejandro León
9.30-10.30	How do institutions drive carbon emissions and how could they manage them? Patricia Romero Lankao
10.30-11.00	Institutions and information flows in the South African Government, Claudia Holgate
11.00-11.30	Break
11.00-11.30	Carbon management and development strategies of Asian cities, Drinya Totrakool
11.30-12.30	Global and local benefits from managing carbon emissions in Latin America, Adrián Fernández, Julia Martínez, Mónica Conte
12.30-13.00	Plan of Climatic Action in Mexico City, Oscar Vázquez
13.00-14.00	<i>Main drivers of urban development and carbon related emissions, first part of a general discussion on a common research protocol moderated by Alejandro León</i>
14.00-15.00	Lunch-break
15.00-16.30	<i>Main drivers of urban development and carbon related emissions, second part of a general discussion on a common research protocol moderated by Alejandro León</i>
16.30-17.00	Common indicators, a proposal by Patricia Romero Lankao
16.30-18.00	<i>General discussion on common indicators and data moderated by Patricia Romero</i>

Day	Theme and Purpose
Mai 29th	
	Theme 3. Analytic and Modeling tools:
9.00-9.30	Spatial and temporal modeling of urban emissions, Enrique Puliafito
9.30-10.30	Modeling of vehicle emissions under urban conditions, Eduardo Behrentz
10.30-11.00	Assessing the “carbon” related metabolism of cities, Enrique Puliafito and Patricia Romero
11.00-11.30	Break
11.00-13.30	<i>General discussion on a common methodologies, moderated by Eduardo Behrentz</i>
13.30-14.30	Lunch break
14.30-16.00	<i>Plan of action: networking with other regional projects (START, APN) and additional funding, moderated by Alejandro León</i>

4. Purpose of presentations and discussions

Participants in the workshop are expected to prepare their presentations as well as the follow up discussions with following questions in mind:

- How does the issues addressed fit into the main goal of the study, namely to explore the linkages among three dimensions of urban development (social, economic, institutional) and the carbon cycle?
- What should each case study agree to do?
- Do we need more cases/problems, if we do, by what criteria should they be selected?
- How can this be done in ways that would facilitate comparison and synthesis?
- What are some of desirable optional things they should address?
- Which modeling and analytical tools are more useful for our efforts?
- What other indicators do we suggest?
- What data is needed and what are we likely to get? How can data limitations be addressed? How can data quality be improved?
- What, if any, additional funding is needed in next two or three years? How might it be obtained and when? Which other cases or networks should we seek to co-operate with? How?
- What papers can we realistically produce in year 1?

5. Venue and Meeting Logistics

The meeting will be held at the graphic Design Building of the Metropolitan Autonomous University, Campus Xochimilco,
Calzada del Hueso 1100
Col. Villa Quietud,
C.P. 04960
and will be held in English.

Our contact persons are Angélica Rosas Huerta, Miriam Rodríguez Armenta, Hugo Villafranco, at UAM-Xochimilco, tel. (5255) 54837110 and 11 Fax. E-mails: politica_gestion_social@yahoo.com, angelica_rosas_huerta@hotmail.com and patyromerolankao@yahoo.com.mx

Opening and registration

The first initial workshop will be from 8:30 a.m. till 18:00, on Thursday 27 to Friday 28, and from 9:00 to 16:00 on Saturday 29 May, 2004. If you confirm your presence you won't need any registration process

All the sessions of the workshop will be in the seminary room from the Design Building. Participants will be picked up from the University houses and brought to the university.

Documents and Visas

Most of you don't need a visa, just be sure to have with you an official ID, your passport, and to fill the migration form. This is the authorization of the Mexican government to visit us. You find one for free in the International Airport in México, and it is valid for 180 days. Please don't lose the blue copy; you will need it to leave the country. You'll find more information on visa procedures in <http://www.migracion.gob.mx/Principal.asp>

Quick Facts

The weather on these days is around 25° C.

The official time is -5 hrs GMT.

The electric voltage is 220 volts.

The telephone codes are, for the country (52) for México City (55).

The local current is the Mexican peso. The current rates of exchange are 1 USD = 11.80. All credit cards are accepted in most hotels, malls, restaurants, and services in México City.

Ground transport from and to México City International Airport

Inside the airport you will find a taxi service of the airport *land services*. **You should try to use only this authorize service.** The cost between Airport and the university is around \$220 pesos (20 USD). The trip takes 1 hour, depending on traffic conditions.

Services to participants

You will be able to access your e-mails for free.

Breakfast, Lunch, Dinner and coffee breaks, will be provided by UAM-X

Your stay in México during the course is provided by the UAM-X, in two houses we have paid, from the Wednesday 26 to Sunday 30. The houses are located in the following address:

Mirador 39, Casa 4
Col. Villa Quietud
C.P. 16800
Coyoacán ward (delegación)
México, D.F.