



# Urbanization and Global Environmental Change

AN IHDP CORE PROJECT

The UGEC e-Newsletter  
Issue 4 – July/August 2007

## WELCOME NOTE

Dear recipients of the fourth UGEC e-Newsletter,

We are very excited as the project will be holding its 'Urban responses to climate change' workshop in about a month's time. This is an important event since cities are increasingly considered as prime spaces for the responses to the challenge of climate change. An increasing number of cities around the world have begun to respond to climate change but policies and initiatives have generally been limited. In particular for the region that the workshop will be focusing on, the Americas, a growing number of cities have established mitigation initiatives to reduce their impact on climate change. Fewer cities have created comprehensive responses to climate change – that is, combined mitigation and adaptation efforts. Urban responses in the Americas are deemed critical for the sustainable urban futures of the region as lack of responses is expected to be very costly.

The workshop will be the platform for discussion on a wide range of drivers of current responses to climate change (with a special attention on the contrast of experiences in the Americas and the rest of the world). The workshop will focus particularly on several aspects of responses to climate change in cities: which are the main actors in those responses; what is the role of different actors (public sector, private sector, social sector, informal sector, and international organizations); what are their actions and their involvement in the responses to climate change in urban areas and are these actions effective; what are the deficiencies and

resistance of institutions to respond to climate change and what are the windows of opportunities to overcome them.

The workshop will explore whether mitigation and adaptation are part of local strategies to respond to climate change in the region. Information will be provided on how local decisions are made in the selection of mitigation or adaptation actions internationally and how compatible those actions can be to the local urban development agenda. In short, the workshop will showcase what steps need to be taken to foster urban sustainability through responses to climate change.

### In This Issue:

Welcome Note

About This Newsletter

UGEC Events

- UGEC Workshop – Urban Responses to Climate Change

Other Events

- UNU Sustainable Urban Futures
- Rockefeller Foundation Global Urban Summit

UGEC Announcements

- New Project Associates
- New Project Endorsements
- UGEC Research in the News
- Selected Recent Publications
- UGEC Int. Working Paper Series – Recent Additions
- UGEC Int. Working Paper Series – Call for Contributions

Other Announcements

- Job Opportunities
- UGEC SSC Member and Project Associates Activities

Coming Soon

About the Project

Contact Information

Subscribe/Unsubscribe Information

The workshop is also focusing on the major deficiencies and resistances posed by institutions in the response to climate change. We will explore what windows of opportunity exist to modify these obstacles; what the strengths are in current institutions in the region to respond to climate change; which institutions can take a leading role in these responses; what levels of cooperation can be expected and recommended among institutions operating at different administrative and political levels.

Furthermore, we welcome in the UGEC family Dr. J. Marshall Shepherd, professor at the Geography Department at the University of Georgia. Also we are happy to announce the endorsement of the Risk Habitat Megacity project. More information on Dr. Shepherd and the Risk Habitat Megacity project can be found below.

Best regards,  
Michail Fragkias

## ABOUT THIS NEWSLETTER

The Urbanization and Global Environmental Change project (an International Human Dimensions Programme on Global Environmental Change – IHDP - Core project) initiated its e-Newsletter this year as an electronic avenue for important announcements regarding international meetings, workshops, conferences, colloquia, lectures, seminars, calls for papers and grant proposals, and job opportunities. If you wish to contribute content of that scope to the next issue of e-Newsletter please submit the information you wish to see distributed to the UGEC network of scholars and practitioners to [fragkias@asu.edu](mailto:fragkias@asu.edu). At this stage we plan to send out a digest every couple of months (with the possibility of establishing it as a monthly circulation as the project expands). Directions on how you may subscribe or unsubscribe are included at the end of this message. An archive of messages sent to the list is available at <http://lists.asu.edu/archives/ugec-l.html>. Our website ([www.ugec.org](http://www.ugec.org)) will always carry the

most up to date so do not forget to visit it from time to time.

## UGEC EVENTS

### *UGEC Workshop Announcement – Responses of Urban Areas to Climate Change – Sept. 26<sup>th</sup> and 27<sup>th</sup>, 2007*

The present and future of societies are intrinsically associated with the growth of their cities. Concerns about the well-being of current and future urban inhabitants have promoted approaches to balance both the promise and threat that urban growth presents to development of sustainable societies. The UGEC project is an effort to expand our knowledge and understanding of urban areas in the context of global environmental change. We believe that opportunities for urban sustainability in the 21<sup>st</sup> century need multidimensional approaches, looking beyond the local scale and integrating a dynamic perspective of the interactions between local, regional and global biophysical and social processes generated by and affecting urban areas.



UGEC sponsors and carries out research on the interactions between urban areas and global environmental changes, as well as other activities seeking to expand the knowledge on this topic. Workshops are instrumental tool in this regard. They create forums where scholars and practitioners share knowledge and ideas in an effort to create integrate perspectives of the complex reality and dynamic of urban areas.

The topic of the first UGEC workshop is to understand how cities respond, fail to respond, or could better respond to climate change. Recent international attention to climate change highlights the interactions between urban areas and global and regional biophysical processes. It also provides an excellent opportunity to assist urban areas to better respond to the challenges created by climate change. The development and collapse of civilizations have a strong link with environmental management and, in particular, with adapting to and mitigating climate impacts and stresses. Human society has undergone several climate adaptation phases, particularly evidenced in the structure and organization of settlements and urban space. Technological advances have gradually transformed the capacity for adaptation to adverse climate conditions in urban areas. Changes have been particularly dramatic in the last century, where the adoption of mechanical means has facilitated the prioritization of aesthetic aspects over functional aspects in urban design and adaptation to climate. Those changes have been based on significant energy costs (e.g., air conditioning, new materials), and new architectural and urban forms.



Attention to the bidirectional relation between urban areas and climate has focused on the impacts of urban areas on climate change, in particular, the effects of green house gas emissions and the so-called heat island effect. Unfortunately, less attention has been provided to the impacts of climate change on urban areas. The increasing frequency and magnitude of climate related natural disasters in urban areas during

the past decade are some of the clearest indicators of the magnitude and significance of those impacts. There is, however, a broad range of pathways through which climate change affects urban areas. These impacts depend on a number of factors, including the vulnerability of peoples and places and their capacity to adapt.

Some international efforts have begun to focus on urban areas as key actors addressing the challenges of climate change, both in terms of mitigation and adaptation. The recent C-40 summit that brought together leaders of 40 major cities around the world and other similar events, propose a series of actions in this direction. Despite the benefits of these initiatives, there is still an incomplete knowledge and discussion that would facilitate expanding these initiatives to a larger number of urban areas around the world, particularly middle and small cities in countries. This workshop seeks to create a constructive discussion in this direction. Attention to the responses of urban areas to climate change during the workshop will explore the compatibility and coherence between mitigation and adaptation responses. The workshop will focus particularly on two aspects:

- What do we know about the role of different actors (public sector, private sector, social sector, informal sector, and international organizations), their actions and their involvement in the responses to climate change in urban areas, and;
- The deficiencies and resistance of institutions to respond to climate change and what are the windows of opportunities to overcome them.

The regional focus of this first UGEC workshop is the Americas. Future UGEC workshops will rotate their regional focus. This will facilitate the development of regional focuses, securing funding opportunities for the workshop, facilitate the discussion during the event, and obtain concrete results from each workshop.

We expect several types of products: to develop a first contribution from UGEC to the debate on climate change, explore the development of new research proposals covering key area on this topic, develop three joint publications (an article in a leading journal, a UGEC working paper, an opinion letter), enhance the attention to global environmental change in urban areas and the contributions from UGEC to the study and practice of this topic through media communications.

The workshop will bring together approximately 20 scholars and practitioners from the Americas and will take place on the campus Hunter College in New York City between September 26<sup>th</sup> and 27<sup>th</sup>, 2007. The CUNY Institute for Sustainable Cities will be the key host of the event.

A flyer for the event is appended at the end of this newsletter.

## OTHER EVENTS

### ***Sustainable Urban Futures: Urbanization in an era of Globalization and Environmental Change***

UGEC Scientific Steering Committee members, Karen Seto, Bill Solecki, and Ooi Giok Ling participated in the United Nations University 'Sustainable Urban Futures' workshop titled and held in New York City on July 9-10, 2007.

The workshop was organized around several key themes: re-conceptualizing the urban challenge, creating responsible societies, governance of urban places, the forces driving urban change, increased quality of life and the reduction of urban impacts, identifying urban constellations and social development and the attractiveness of urban milieus.

As the post-workshop report suggests the workshop emphasized the urgency in addressing global future urbanization at several scales: *"Specifically, there are documented danger signals from the social, economic and environmental im-*

*pacts of urbanization as well as the vulnerability of settlements to a growing variety of threats, not least of which is climate variability.*

*"These challenges however, are not yet being awarded high priority by policymakers. Too often, traditional data and methodologies have inadequately informed policy relevant research and may have been misleading policy. New data and methodologies are available, [...] promising in terms of their ability to identify new perspectives and new points of leverage for planning, policy and practice. At the same time, we cannot afford to spend another decade collecting data. Rather, we need to reform urban research processes and speed up their flow to policymakers."*

*"Our new vision challenges traditional thinking and therefore has policy, planning and practice implications for enhancing livelihood opportunities, ensuring economic resilience, equity, social justice and redistribution, governance, human well-being, livability and the environment. Moreover, at this moment in history, there are opportunities to engage in visioning exercises about sustainable urban futures in regards to design and land use, transportation, environment and social life. The final results of the workshop strongly suggest a policy relevant research product at this moment in history is necessary and can be provided through continued work with this group."*

Peter Marcotullio, UNU-IAS Fellow and UGEC project associate authored the report for the workshop.

### ***The Rockefeller Foundation Global Urban Summit at Bellagio: Innovations for an Urban World***

Karen Seto, UGEC co-chair, participated at the Rockefeller Foundation Global Urban Summit at Lake Como, Italy in July of 2007. The main purpose of the summit was to highlight the challenges cities face in an era of increasing globalization and to orient philanthropic organizations, donors, and international leading institutions to invest in solutions to reduce urban vulnerabilities. Central to this effort is a

powerful emphasis on identifying critical areas of urban research and practice that will set the direction of global urban-focused scholarship for the next decade. This four day summit discussed issues on urban migration, sprawl, governance, and development.

The goal of the summit was to develop a strategy for a multiyear research agenda that addresses the emerging issues of the 21<sup>st</sup> century urbanization. Daily discussions included urban populations movement (issues in population predictions and estimates, cities in transition: trends and indicators, urban growth and migration: rural urban and transnational), urban special growth and development (drivers of urban expansion and outcomes, tracking global urban expansion, modeling urban growth, and remote sensing, sustainable development), urban governance (new governance forms and techniques to meet urban infrastructure needs, issues in finance management or urban development, public private partnerships and urban development), institutions fostering urban development (thinking about urban service needs in fast growing cities: housing, health issues in 21<sup>st</sup> Century cities, and education of future urban dwellers).

## UGEC ANNOUNCEMENTS

### *New Project Associates*



*Dr. Marshall Shepherd*  
Dr. Shepherd is a professor at the Department of Geography at the University of Georgia working in the fields of meteorology and climatology. He has been conduct-

ing research, publishing refereed articles, securing funding, and organizing workshops on the topic of how urbanization affects weather, climate, and water cycle. In 2004 he was recognized by the White House for pioneering research in his area of expertise and has generally been looked to as a leader in urban effects on

precipitation. He plans to contribute to the UGEC project by helping to develop regional and thematic research networks, co-authoring scoping reports and other publications, engaging in outreach and synthesis activities, coordinating and convening panels and workshops, seeking funding for UGEC-related research and activities, and cultivating partnerships with research and practitioner communities and organizations.

He currently works to continue and extend an innovative line of research to address the human impacts on precipitation variability, hydro-meteorologic processes, and the water cycle-climate system. His initial work was funded by the NASA Precipitation Measurement Missions program (FY03-FY06, FY07-2010) and the Defense Threat Reduction Action and fully utilizes satellite data and models. Numerous high impact publications, conference sessions, and book chapters have emerged from his work. His professional objectives track high-level science questions: (i) what are the relative roles of urban dynamics and aerosols in short- and long-term precipitation variability and what role do aerosols play in the initialization, modulation, or dissipation of clouds and precipitation systems? (ii) how do such processes affect precipitation efficiency? (iii) can a long-term satellite data record confirm observed precipitation anomalies over sustained periods of time for multiple urban areas or under varying aerosol environments? (iv) under what environmental or climate regimes do aerosols (urban surfaces) suppress, alter, or invigorate precipitation processes? (v) how can emerging cloud, aerosol, and precipitation datasets be optimally integrated to address precipitation variability related to human forcing and (vi) can emerging cloud, mesoscale, general circulation, and climate models adequately represent processes related to urbanization and aerosols and their interactions with precipitation processes?

We welcome Dr. Shepherd to the UGEC project and look forward to joint future activities.

### *New Project Endorsement*

### *Risk Habitat Megacity*

The Risk Habitat Megacity project adopts governance, risk and sustainable development concepts as the cross-cutting research themes and integrating framework. It applies all three themes to a set of megacity-typical problem areas such as socio-spatial polarization, deficits in water supply, air pollution and its associated health risks, land use conflicts, and energy supply. Based on an interdisciplinary analysis, the initiative aims to provide strategies for sustainable urban development by overcoming the ecological, social and economic risks of mega-urbanization.



Geographically the research concentrates on Latin American megacities and large agglomerations. Santiago de Chile has a key function as anchor city. With the establishment of a Centre for Sustainable Urban Development, the location will serve as a platform for the coordination of research and dissemination of results.

This newly endorsed project is supported by the Helmholtz Association. Please visit the project's official website for the research plan of the Risk Habitat Megacity project: <http://www.ufz.de/index.php?en=6143>

### *UGEC research in the news*



New research by UGEC project co-chair, Karen C. Seto, and project associate, J. Marshall Shepherd, received significant exposure in the popular press this past July. Here's a clip from

the piece 'The sky is falling: it's rain - big cities are changing rainfall patterns around the world' by Lee Dye, published on July 18, 2007:

*"Karen Seto, assistant professor of geological and environmental sciences at Stanford University, returned to her family's homeland near Hong Kong, where she was born, for her research. Seto and Robert K. Kaufmann of Boston University reported their findings in a recent issue of the Journal of Climate. They analyzed Landsat satellite images to determine the explosive growth in the region, and then compared that to monthly climate data from 16 meteorological stations."*

*"The results, they report, "constitute the first statistically meaningful empirical evidence for an 'urban precipitation deficit.' This effect may be generated by changes in the surface hydrology that reduce the flow of water from the land to the atmosphere."*

*"We found that as the cities get bigger, there is a negative impact on precipitation patterns, such that in the winter season there is a reduction in rainfall as an effect of urbanization," Seto said. "Primarily it is caused by the conversion of vegetated land to asphalt, roads and buildings. As a result, the soils have significantly less ability to absorb water, so in the winter months there is less moisture in the atmosphere and therefore a reduction in precipitation. We don't see the same impact in summer months, in part because the effect of the Asian monsoon masks the effect of urbanization."*

*"If you think global climate change is something that only happens far away, you may want to take a look at your nearest megalopolis. Two very different studies have found evidence that rainfall patterns near major cities have changed over the last few decades, and not because of greenhouse gases. But the changes have some things in common with the greenhouse effect: Both result from human activities that are having a significant impact on the entire planet. And both demonstrate that we are in for some major changes in the years ahead, many of which will probably catch us by surprise."*

The full article can be found here: <http://abcnews.go.com/Technology/Story?id=3385877&page=1>

The full article can be found here:

<http://abcnews.go.com/Technology/Story?id=3385877&page=1>

See also: Landsat Links Urban Growth and Rain-fall Pattern Change, by Jesse Boyett Anderson, Stanford Report, July 4, 2007

(<http://news-service.stanford.edu/news/2007/july11/seto-071107.html>)

### **Selected Recent Publications**

Fragkias, M., and Seto, K. C., (2007) Modeling urban growth in data-sparse environments: A new approach, *Environment and Planning B*, 34 (5), 858-883.

Kaufmann, R. K., Seto, K. C., Schneider, A., Zhou, L., and Liu, Z., (2007) Climate Response to Rapid Urban Growth: Evidence of a Human-Induced Precipitation Deficit. *Journal of Climate* 20(10): 2299-2306.

Parnell, S., Simon, D., Vogel, C. (2007), Global environmental change: conceptualising the growing challenge for cities in poor countries *Area* 39 (3): 357–369.

Seto, K. C., Fragkias, M., and Schneider, A., (2007) 20 Years After Reforms: Challenges to Planning and Development in China's City-Regions and Opportunities for Remote Sensing, in *Applied Remote Sensing for Urban Planning, Governance and Sustainability*, Redman, C., Stefanov, W., and Netzband, M., eds. Springer-Verlag.

### **UGEC International Working Paper Series – Recent Additions**

The newest working paper in the UGEC International Working Paper Series is titled “Urbanization, increasing wealth and energy transitions: comparing experiences between the USA, Japan and rapidly developing Asia Pacific economies” and was co-authored by Peter Marcotullio (Distinguished Lecturer, Hunter College, City University of New York and Adjunct Senior Fellow, United Nations University, Institute of Advanced Studies) and Niels Schulz (Research Associate, Imperial College London, Energy Futures Lab).



**Abstract:** This paper explores differences between energy transitions experienced by developed nations (USA and Japan) and those of several rapidly developing economies (China, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Thailand and Vietnam). We argue that those economies that underwent energy transition before the period of intensive globalization (pre-1970) had significantly different energy transition experiences than those that developed during contemporary times. Specifically, we suggest that due to the Time-space telescoping of development, which has accompanied globalization, transitions occur sooner, conditions change more rapidly and challenges emerge more simultaneously now than during in the past. Indeed, transitions between energy supplies and consumption sources are difficult to observe in contemporary developing economies making the notion of transitions questionable. At the same time, total energy supply and consumption at any comparable level of GDP per capita and urbanization level, for most rapidly developing economies are lower than experienced by the USA. This result translates into is lower total carbon emissions when compared across these parameters. We explore these relationships focusing on total primary energy supply and total final energy consumption transitions and comparing the linkages between these transitions and GDP per capita and urbanization levels. These results have implications for both theory and policy.

The working paper can be found at:

[http://www.ugec.org/docs/UGEC\\_WP07-03.pdf](http://www.ugec.org/docs/UGEC_WP07-03.pdf)

**UGEC International Working Paper Series - Call for contributions**

The UGEC International Working Paper Series aims to circulate and promote original and innovative work on Urbanization and Global Environmental Change issues. This Series targets work done by the academic and practitioner communities of the UGEC project.

Work in progress that addresses one or more themes of the Science Plan is especially welcome. Working papers on the need and practical use of scientific knowledge on global environmental change in managing, planning, and development of urban growth are also welcome.

This series provides the opportunity to scholars and practitioners to present the results of their research available in a timely fashion and receive feedback from a broader community of scientists and practitioners. The UGEC working paper series is maintained by the UGEC International Project Office. Many of the working papers will be in draft stages of articles that eventually target publication in scholarly or professional journals. More information on Policies and Procedures, the Review Process, copyright issues and submission instructions can be found on our website (under Activities – Int. Working Paper Series).

On our website you can find the existing list of papers in the Series.

## OTHER ANNOUNCEMENTS

### *Job Opportunities: Collaboratory for Research on Global Projects at Stanford University in partnership with the State of Qatar*

Two job opportunities exist at the **Qatar Economic Zones Project**, in the State of Qatar. The employer (Qatar Economic Zones Project) is developing a new Economic Zone in the state of Qatar. The creation of the zone will stimulate a massive program of urban growth and development including sophisticated industry

clusters, supporting buildings and infrastructure technologies

#### *Position one: Urban Planning and Economic Specialist*

**Job Description:** The successful candidate will transition to a period of permanent employment in Doha, Qatar and will be responsible for:

- Developing forecasts of key metrics as part of a 4D/GIS model.
- analysis of different development scenarios within the QEZ.
- Maintaining and revising economic policies and procedures for QEZ.
- Analyzing relevant policies to ensure they meet with the overall strategic goals of QEZ.
- Assisting in conducting economic research and viability studies for projects.
- Other roles requested by the employer .

#### **Must have:**

- Education and background in micro-economics, mathematics, forecasting and/or computational/simulation modeling, especially with respect to urban development and/or real estate and infrastructure planning, finance and construction.
- Lifestyle flexibility and availability to spend up to 3 months with CRGP/CIFE at Stanford University in Autumn 2007 and then to transition to Doha, Qatar for permanent employment

#### *Position Two: Urban Planning Engineer*

**Job Description:** The successful candidate will transition to a period of permanent employment in Doha, Qatar and will be responsible for:

- Performing scenario-based 4D/GIS model analysis of different development scenarios within the QEZ area
- Overseeing detailed design, site preparation, construction management, project management and contracts management un-



til project completion through high level monitoring of Joint Ventures engaged in providing these services

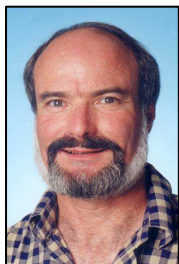
- Other roles requested by the employer
- The job may necessitate that the successful candidate spend short intervals with CRGP/CIFE at Stanford University with an R&D team that is now in the process of developing a new software system for the simulation of the coming together of all of the infrastructure and building components in the QEZ over a multi-year build-out period

Must have:

- Education and background in urban planning, architecture, or Construction.
- Strong conceptual thinking skills especially with respect to work processes and data integration.
- Proficiency with 3D modeling and scheduling tools.
- Lifestyle flexibility and availability to spend up to 3 months with CRGP/CIFE at Stanford University in Autumn 2007 and then to transition to Doha, Qatar for permanent employment.

For more information on either position contact Ryan Orr before Sept. 7<sup>th</sup>, 2007. Please send your CV to Ryan Orr, (rjorr AT stanford.edu), by September 7, 2007. Include in your CV your earliest possible start date.

### ***UGEC Scientific Steering Committee and project associate activities***



David Simon now chairs the UK National Committee on Human Dimensions of GEC (which met in London on July 3<sup>rd</sup>). A major public launch for this event is planned for autumn of 2007.

Cheikh Gueye attended the Governing Council Meeting of the UN-HABITAT in April (16<sup>th</sup> -

20<sup>th</sup>) to discuss the possibility to build a UN-HABITAT/ENDA/UGEC partnership and a program for 12 South cities. Cheikh is also currently developing a program on climate change and fishery sectors in six West African countries (Senegal, Gambia, Bissau Guinea, Guinea, Mauritania, Cabo Verde) with a three year span.



Sue Parnell has attended several events: the Gauteng Department of Housing Provincial Housing Summit in Ekurhuleni, a workshop in Holland on urban exclusion, a sociology meeting in New Zealand, and the project planning meeting of the Stockholm Resilience Centre in Cape Town. She will be participating in a Woodrow Wilson funding event in Washington D.C. organized by the Comparative Urban Studies Project (CUSP) on a session titled "Why is Urban Assistance Important? Inserting Urban Issues Into the Development Agenda"

David Simon and Sue Parnell submitted a major research grant application to the UK Economic and Social Research Council on 'The urban challenges of global environmental change: poverty, vulnerability and adaptation in Cape Town, South Africa'.

## **COMING SOON**

The project is planning the publication of its first hardcopy newsletter product and would appreciate your contributions. Please send us summaries of your published research or thought pieces in a 2-page article, between approximately 1600 and 1850 words, depending on whether a picture is included or not, but also on the number of subsections. A contribution cannot exceed a total of 2000 words. Examples of the writing style can be found on the IHDP website and the IHDP Update publication. ([http://www.ihdp.uni-bonn.de/html/publications/update/pdf-files/IHDPUpdateUGEC2\\_06.pdf](http://www.ihdp.uni-bonn.de/html/publications/update/pdf-files/IHDPUpdateUGEC2_06.pdf)).

Please be aware that the word count includes the title of the article and the authors' credits (names, position, institution & city, email, web-URL). A picture (graph, table, photo) is welcome but the photo has to be 300 dpi or more.

Please submit all relevant information (book publications, meetings, job postings, workshop announcements etc.) that you would like to see distributed through our e-Newsletter before the end of September of 2007.

## ABOUT THE PROJECT

The Urbanization and Global Environmental Change (UGEC) project is a science project that targets the generation of new knowledge on the bi-directional interactions and feedback loops between urban areas and global environmental change at local, regional and global levels. It follows a multi-disciplinary approach and utilizes an innovative framework for the comprehensive understanding of the driving and resulting economic, political, cultural, social and physical processes. An important feature of this core project is the explicit commitment to translate abstract knowledge about GEC into local decision-making contexts. The project is expected to provide a platform for close interaction between practitioners, political decision-makers and researchers and targets a stronger coordination and collaboration between academics, political decision-makers and practitioners working on urban and environmental issues. The UGEC project is currently engaged in ongoing efforts to expanding its regional and thematic networks.

Our website provides links to the UGEC Science Plan, information on how researchers can join our network as project associates, and how research projects and agencies can get their projects endorsed by UGEC ([www.ugec.org](http://www.ugec.org)). You can assist us in achieving our goals by forwarding this e-Newsletter to any potentially interested party.

## SUBSCRIBE/UNSUBSCRIBE INFORMATION

If you have been forwarded this e-Newsletter by email and would like to subscribe directly to the list, please send an email to [LISTSERV@LISTS.ASU.EDU](mailto:LISTSERV@LISTS.ASU.EDU) with the text (command) "SUB UGEC-L" at the message body. If you believe you were added on this list by mistake or wish to not receive email from the UGEC project, you can unsubscribe by sending an email to [LISTSERV@LISTS.ASU.EDU](mailto:LISTSERV@LISTS.ASU.EDU) with the command "SIGNOFF UGEC-L" at the message body or by sending a message to the list owner, Michail Fragkias at [fragkias@asu.edu](mailto:fragkias@asu.edu)

## CONTACT INFORMATION

UGEC International Project Office  
Arizona State University  
PO Box 873211  
Tempe, AZ 85287-3211  
Fax: +1 (480) 727-9680  
<http://www.ugec.org>

Michail Fragkias, Ph.D.  
Executive Officer  
Email: [fragkias@asu.edu](mailto:fragkias@asu.edu)  
Tel: +1 (480) 727-7833

Danielle Tomerlin  
Communications Coordinator  
Email: [danielle.tomerlin@asu.edu](mailto:danielle.tomerlin@asu.edu)  
Tel: +1 (480) 965-2185



Urbanization and Global  
Environmental Change  
An IHDP Core Project

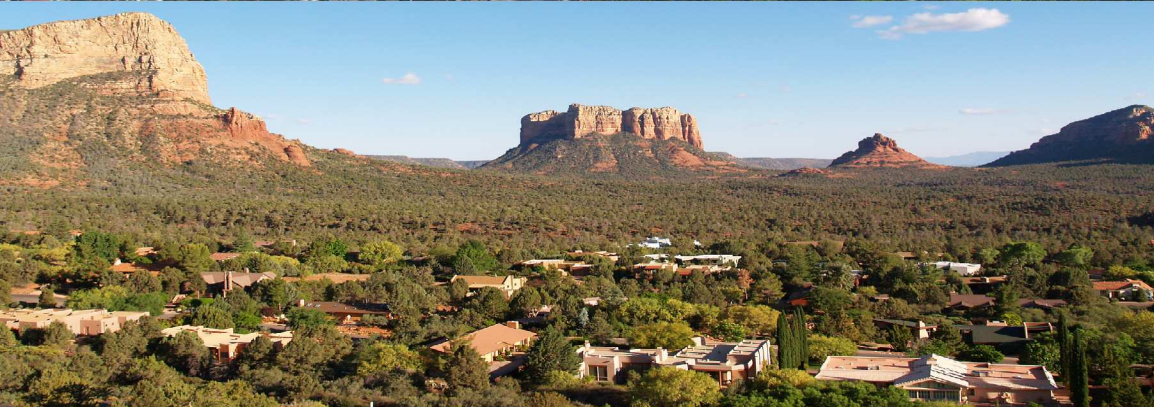


# Urban Responses to Climate Change

## An International Workshop



Hunter College, New York City  
September 26-27, 2007



Co-Sponsors



The INSTITUTE for  
SUSTAINABLE CITIES  
CITY UNIVERSITY OF NEW YORK



IHDP

International Human Dimensions Programme  
on Global Environmental Change

GLOBAL INSTITUTE  
of SUSTAINABILITY  
ARIZONA STATE UNIVERSITY