Urban Management Tools for Climate Change (UMTCC) course

Programme Overview, June 11th – June 29th, 2018
UMTCC

- Collaboration of IHS – UN Habitat
- 9th year
- Focus on urban climate change tools and CC planning

**Stelios Grafakos**
- Environmental economics, climate change integrated assessment, planning and decision support, interrelationships of mitigation and adaptation
- Since 2009, IHS academic staff
- Research and Advisory: SUSTAIN, LoCAL - UNCDF, SBA - WB, CDS and CC, LEAN CC, CapaCITY
- Multiple capacity building and training projects
- Member of Advisory Committee of Cities in Climate Change Initiative UN Habitat programme and member of UCCRN

**Jen Heemann**
- Climate change mitigation, sustainable city networks, planning and governance, peer-to-peer learning
- MSc in Urban Management and Development (IHS)
- Since 2017, IHS academic staff
- Research on urban sustainability, implementation of urban-scale mitigation measures, aggregate impact of mitigation measures and cities’ target achievement
- PROSPECT: coordination support and development of city-to-city learning programme
Synergies in IHS activities

Practical solutions
Workable strategies

Lecture materials
Case studies
Publications

Policy level advice
On the job training

Reflective (best practices)
Anticipatory (new issues)
Thematic areas

- Public sector reform
- Performance
- Public Private Partnerships
- Decentralisation
- Local democratic process
- Land markets
- Land value capture
- Regularisation
- Security of tenure
- Finance
- Environmental policy assessments
- Integrated environmental and CC management
- Cities and Climate Change
- Green and low carbon growth
- Climate resilient development
- Sustainable Livelihoods
- Local economic development strategies
- Urban poverty
- Work and Income

- Housing rights
- Housing finance
- Slum improvement
- Relocation
- Revitalisation / regeneration
- Urban Policy
- Participatory and performance planning
- City – wide development strategies
- Slum upgrading and prevention
- Financing of planning interventions
- Revenue mobilisation
- Capital investment programmes
- Debt/borrowing capacity
- Creditworthiness
- Performance budgeting

- Governance
- Land
- Environment and Climate Change
- Social
Specializations at IHS

- **Managing and Financing Urban Infrastructure (MFUI)**
  The MFUI specialization addresses the use of renewable energy, green infrastructure and smart growth concepts for planning, managing and financing infrastructure.

- **Urban Housing and Livelihoods (UHL)**
  The UHL specialization enables participants to link housing issues with the livelihoods strategies of the urban poor.

- **Urban Environmental and Climate Change Management (UECCM)**
  UECCM specialization enables participants learn about urban sustainability and green growth assessment of urban environmental services (energy, transport and urban ecosystem services).

- **Integrated Planning and Urban Strategies (IPUS)**
  IPUS specialization makes strong use of a case-based approach to ensure maximum learning from both theory and practice about urban planning and strategies to manage the cities.

- **Urban Land Development (ULD)**
  ULD specialization enables participants to understand and analyze land instruments that can shape cities and the socio-economic conditions of the inhabitants of a city through its economic, legal, financial and social dimensions.

- **Urban Competitiveness and Resilience (UCR)**
  The UCR specialization shows that urban planning and management depends on an integrated knowledge of a city’s local qualities (supply) and its position within regional and global systems (demand).
Climate Change Advisory and Research

Current
- Cities Peer to peer learning for sustainable energy financing (EC)
- Land Value Capture instruments for Green Resilient Infrastructure (LILP)
- Integrating Climate Mitigation and Adaptation in Local Climate Change Action Plans (UCCRN)
- Housing and Informal Settlements in the context of Climate Change (UCCRN)
- Sustainable urbanization in the Paris Agreement – Review of INDCs for urban actions

Recently finalized
- SRBA: Developing a methodology for (urban) sustainability and resilience benefits assessment (World Bank)
- Cost (benefit) effectiveness analysis for urban climate adaptation measures in HCMC
- Green Foreign Direct Investment (FDI) and climate change policy

Past
- Urban Governance of Climate Change Adaptation in Ho Chi Minh (IHS funded)
- SUSTAIN: Strengthening Higher Education in the field of Sustainable Urban Development (EC)
- Prioritization of climate change adaptation measures against flooding in Dhaka
- LoCAL: Climate Adaptation Performance based Grants, Monitoring and Evaluation of CCA activities (UNCDF)
- CDS and Climate Change: Integrating CC in CDS (UN Habitat)
Climate Change Capacity Building and Training

- Training of ADB officials on urban climate resilience
- Tailor made and on the job training of Myanmar Urban officials
- Training on Climate Adaptation Action Plans for Local Governments in Asia, in collaboration with UN - Habitat and IUTC - Korea
- Training of IADB officials on climate change adaptation, mitigation and local CC action plans – Washington DC, USA
- Covenant CapaCITY: Capacity building for municipality officials to conduct local climate change and sustainable energy action plans in European cities (EC)
- Tailor Made Training (Courses), Indonesia, Thailand, Peru, Colombia
- Refresher courses in Peru, Philippines
14 participants from seven countries

- Philippines (4)
- Nigeria (5)
- Jamaica (1)
- Egypt (1)
- Thailand (1)
- Lebanon (1)
- Uganda (1)
Participants’ Introduction

- Name
- Country of Origin
- Organization
- Education - profession/tasks
- Experience working with CC issues
- Expectations (learning objectives)
- Course contribution to your work
Objectives of the course

• Solid background on Climate Change issues in cities
• Urban management tools for climate change planning
• Conduct:
  ▪ Vulnerability assessment
  ▪ GHG emissions inventory
  ▪ Prioritization of climate change actions
  ▪ Local climate change action plans
Training methodology

- Lectures – workshops
- Group exercises (studio)
- Case studies
- Serious games
- Field visits/excursions
- Participants’ presentations
- Self study
UMTCC curriculum: 3 modules

- **Module 1**: Climate Vulnerability, Adaptation and Resilience
- **Module 2**: Climate Mitigation and Low Carbon Urban Development
- **Module 3**: Climate Change Action Planning
Climate Change Tools

- CLIMACT Prio (climate actions prioritization tool)
- UN Habitat Planning for Climate Change guide
- Climatech wiki (UNDP/UNFCCC)
- Climate change actions registry (Carbonn)
Excursions/Field visits (4)

- Storm Surge Barrier
- Future Land
- DakAkker rooftop garden
- Rotterdam Climate Proof
### Presentations (updated)

<table>
<thead>
<tr>
<th>GROUP</th>
<th>NAMES</th>
<th>NATIONALITIES</th>
<th>DATE&amp;TIME</th>
</tr>
</thead>
</table>
| 1     | • Alvin Penaranda, Principe  
       |       | Philippines   | June 20<sup>th</sup>  
       |       | Philippines   | 15:30-17:00 |
|       | • Armand Nicod-am, Camhol  
       |       | Nigeria       |           |
|       | • Bashir Olufemi, Odufuwa  
       |       | Nigeria       |           |
|       | • Chikaodili Arinze, Orakwue  
       |       | Nigeria       |           |
|       | • Frances Ifeoma, Ukonze  
       |       | Nigeria       |           |
| 2     | • Hadiza Kabiru, Mado  
       |       | Nigeria       | June 21<sup>rd</sup>  
       |       | Philippines   | 9:00-10:30 |
|       | • Iluminado Jr., Quinto  
       |       | Philippines   |           |
|       | • Janet, Lumayag  
       |       | Philippines   |           |
|       | • Larytha Kayrona, Fletcher  
       |       | Jamaica       |           |
| 3     | • Osama Mohamed Elsaid, Omar  
       |       | Egypt         | June 22<sup>nd</sup>  
       |       | Thailand      | 15:30-17:00 |
|       | • Piyapong, Janmaimool  
       |       | Lebanon       |           |
|       | • Roland, Nassour  
       |       | Uganda        |           |
|       | • Ronard, Mukuye  
       |       | Nigeria       |           |
|       | • Yakubu, Bununu |        |             |           |
Lecturers/Trainers

- Academia and Research Institutes (4)
- International organizations/associations (3)
- City authorities (1)
- Consultancies (8)
- IHS (7)
<table>
<thead>
<tr>
<th>LECTURERS</th>
<th>INSTITUTION</th>
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<tbody>
<tr>
<td>P. Pelizzaro</td>
<td>Climalia (Italy)</td>
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<tr>
<td>J. Hoogzaad</td>
<td>Climate Focus (The Netherlands)</td>
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<tr>
<td>C. Marino</td>
<td>ICLEI (Germany)</td>
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<tr>
<td>K. Roscoe and A. Warren</td>
<td>Deltares (The Netherlands)</td>
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<tr>
<td>B. Smolders</td>
<td>Arcadis (The Netherlands)</td>
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<tr>
<td>D. Vettorato</td>
<td>European Academy of Bozen/Bolzano (EURAC) (Italy)</td>
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<tr>
<td>A. Bigio</td>
<td>Geoge Washington University (United States of America)</td>
</tr>
<tr>
<td>H. Hooghiemstra</td>
<td>Tygon (The Netherlands)</td>
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<tr>
<td>L. Freitas Ezequiel</td>
<td>ArchUrb (The Netherlands)</td>
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<tr>
<td>N. Tillie</td>
<td>Delft University of Technology (The Netherlands)</td>
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<tr>
<td>E. Bronsdijk</td>
<td>Rotterdam Municipality</td>
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<tr>
<td>R. van Veenhuizen</td>
<td>Resource Centre on Urban Agriculture and Food Security (RUAF) (The Netherlands)</td>
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<tr>
<td>M. Van Hoek</td>
<td>Strategis (The Netherlands)</td>
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<tr>
<td>M. Dabrowski</td>
<td>Delft Technical University (The Netherlands)</td>
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<tr>
<td>C. Acioly</td>
<td>UN-HABITAT (Kenya)</td>
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<tr>
<td>S. Grafakos</td>
<td>IHS (The Netherlands)</td>
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<td>J. Heemann</td>
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<td>A. Gianoli</td>
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<tr>
<td>E. M. Ensenado</td>
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<td>T. Alade</td>
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<tr>
<td>P. Rabé</td>
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<tr>
<td>S. Welsh</td>
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LECTURES FROM IHS

- Stelios Grafakos
- Jen Heemann
- Taslim Alade
- Alberto Gianoli
- Elena Marie Ensenado
- Sharon Welsh
- Paul Rabé
<table>
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<tr>
<th>Time</th>
<th>Monday 11 June</th>
<th>Tuesday 12 June</th>
<th>Wednesday 13 June</th>
<th>Thursday 14 June</th>
<th>Friday 15 June</th>
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<tbody>
<tr>
<td>09.00-10.30</td>
<td>Opening (Kees van Roojen, IHS Director)</td>
<td>Planning for climate adaptation (E. Ensenado, IHS)</td>
<td>Multi-level Governance for Climate Change in Delta Urban Regions (M. Dabrowski, TU Delft)</td>
<td>Integrated Water Management (B. Smolders, Arcadis)</td>
<td>Site visit at the Maeslantkering, Storm Surge barrier</td>
</tr>
<tr>
<td>11.00-12.30</td>
<td>Introduction to the programme (S. Grafakos, IHS)</td>
<td>City Vulnerability Assessment (E. Ensenado, IHS)</td>
<td>Cost-Effectiveness of adaptation action: the case of HCMC, Vietnam (A. Gianoli, IHS)</td>
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<tr>
<td>13.30-15.00</td>
<td>Information on library use, other practical issues (S. Welsh)</td>
<td>GIS for Climate Vulnerability Assessment (Taslim Alade, IHS)</td>
<td>Introduction to Climate Adaptation and Decision Support Tools (E. Ensenado, IHS)</td>
<td>Climate Game Delft (H. Hooghiemstra, Tygron)</td>
<td>Site visit at Future Land, Rotterdam port</td>
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<tr>
<td>15.30-17.00</td>
<td>Climate Change and Cities (S. Grafakos, IHS)</td>
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<td>Urban land and CC: instruments for risk sensitive land management and governance (P. Rabe, IHS)</td>
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# Course Programme – Week 2

## CLIMATE VULNERABILITY, ADAPTATION AND RESILIENCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday 18 June</th>
<th>Tuesday 19 June</th>
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<th>Thursday 21 June</th>
<th>Friday 22 June</th>
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<tbody>
<tr>
<td>09.00-10.30</td>
<td>Sustainable Delta Game (A. Warren - K. Roscoe, Deltares)</td>
<td>DakAkker rooftop garden (W. Bauman – R. van Katwijk)</td>
<td>Introduction to Climate Mitigation and GHG inventories (C. Marino, ICLEI)</td>
<td>Participants' presentations (2)</td>
<td>Sustainable Energy Planning in Cities (D. Vettorato, EURAC)</td>
</tr>
<tr>
<td>11.00-12.30</td>
<td>100 Resilient Cities - Turin AND Milan (P. Pelizzaro, Climalia)</td>
<td>Ecosystem services and climate change adaptation (L. Ezequiel)</td>
<td>Climate Mitigation Financing and Circular Economy (J. Hoogzaad, Climate Focus)</td>
<td>Strategies Urban Development Role Play Game (M. van Hoek, StrateGis)</td>
<td>Milan Lighthouse smart city for better energy efficiency (P. Pelizzaro, Climalia)</td>
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<tr>
<td>13.30-15.00</td>
<td>Climate Change and Urban Food Production (R. van Veenhuizen, RUAF)</td>
<td>Group discussion on case study materials</td>
<td>Participants' presentations (1)</td>
<td>Energy and Climate Mitigation in Rotterdam (N. Tillie, Delft University of Technology)</td>
<td>Cities and Climate Change: from commitment to action (J. Heemann, IHS)</td>
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<tr>
<td>15.30-17.00</td>
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<td>Participants' presentations (3)</td>
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</table>
## Course Programme – Week 3

### CLIMATE MITIGATION AND LOW CARBON URBAN DEVELOPMENT

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday 25 June</th>
<th>Tuesday 26 June</th>
<th>Wednesday 27 June</th>
<th>Thursday 28 June</th>
<th>Friday 29 June</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00-10.30</td>
<td>Urban form and climate mitigation (A. Bigio, GWU)</td>
<td>Rotterdam Climate Proof guided walking tour (Rotterdam Municipality)</td>
<td>Group exercise on prioritization of mitigation actions</td>
<td>Planning for Climate Change (C. Acioly, UN-HABITAT)</td>
<td>UN-HABITAT intervention (C. Acioly, UN-HABITAT)</td>
</tr>
<tr>
<td>11.00-12.30</td>
<td>Introduction to CLIMACT Prio tool and exercise (E. Ensenado, S. Grafakos, J. Heemann, IHS)</td>
<td>Group work on prioritizing adaptation actions</td>
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<td>Final presentation of participants</td>
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<tr>
<td>13.30-15.00</td>
<td>Group work on prioritizing adaptation actions</td>
<td>Intro Mitigation + Group exercise on prioritization of mitigation actions</td>
<td>Local CC action plans - exercise</td>
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<tr>
<td>15.30-17.00</td>
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<td>Local CC action plans - exercise</td>
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<td>Course Evaluation &amp; Closing ceremony</td>
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</tbody>
</table>
Practicalities

- Sessions (time – room)
- All material saved in central folder
- Blackboard
- Dropbox
House rules

- Attendance
- Contribution
- Punctuality
- Mobiles
Literature and sources

- Lectures/handouts
- Internet
- IHS library
- Self study
Questions?