

CLIMATE METROPOLE+ Initiative

Fact-Finding Workshop ‘Climate Change Adaptation: Strategies, Actions and Challenges’, 23–24 November 2015, Berlin
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INTRODUCTION

Climate Metropole+ is an initiative of Barcelona Metropolitan Area (BMA) and Metropolis in cooperation with its partners Berlin, Liverpool City Region and Grand Lyon. The aim of the initiative is to exchange experiences and generate knowledge regarding climate change adaptation. The project started in June 2015 and will finish by December 2016. It involves four workshops in each of the partner cities (Berlin, Lyon, Liverpool and Barcelona).

The first workshop of the Climate Metropole+ initiative was held in Berlin and, through presentations and a field trip, presented the main challenges and possible actions in responding to the negative effects of climate change. The practices that were presented were focused on the strategies of Berlin to adapt to climate change. The aim of the workshop was firstly to learn how Berlin currently plans and implements adaptation measures across its urban area, and how resilient infrastructures are being developed in situ. A second objective of the workshop was to provide a broad framing of climate change adaptation using the No Regrets Charter principles to guide practice.

The workshop also discussed the plans, actions and challenges faced by the other partners in the Climate Metropole+ initiative: Barcelona Metropolitan Area, Grand Lyon and Liverpool City Region. An invited guest from Buenos Aires presented an overview of climate change adaptation in their city. Another invited guest from Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), gave a presentation on the conditions and approaches of the city of Cairo regarding climate change adaptation.

PARTICIPANTS

The participants at the workshop were:

City	Name and position
Berlin	Christian Gaebler Permanent Secretary for Transport and Environment, Senate Department for Urban Development and the Environment
Berlin	Barbara Berninger Metropolis Regional Secretary Europe, Head of Division for EU and International Affairs, Senate Department for Urban Development and the Environment
Berlin	Dr Heike Stock Head of Unit Urban Development Planning: Sustainable Development, Policy on Climate and Energies, Senate Department for Urban Development and the Environment
Berlin	Dr Fritz Reusswig Postdam Institute for Climate Impact Research
Berlin	Gesa Homann Special Section for Climate Protection and Energy (SR KE), Senate Department for Urban Development and the Environment
Berlin	Astrid Endler Special Section for Climate Protection and Energy (SR KE), Senate Department for Urban Development and the Environment
Berlin	Kristine Köhler Strategic Consultant, Innovation–Entrepreneurship–Collaboration

Berlin	Michael Abraham Project Officer, Berlin Metropolis Team
Metropolitan Area of Barcelona (AMB)	Ana Romero Head of the Section on Sustainability and Environmental Education, Environmental Services Section
AMB	Merixell Martell Consultant to AMB for Climate Metropole+ initiative
Lyon	Luce Ponsar Climate Plan Manager, Grand Lyon
Liverpool	James Sharples Policy Manager of Liverpool City Region, Brussels
Sydney	Paul James Director Institute for Culture and Society, Western Sydney University
Cairo	Carl Philipp Schuck Head of Component Climate Change Adaptation and Urban Resilience, Participatory Development Programme in Urban Areas, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
Buenos Aires	Nicolás Brown Bustos Climate Change and sustainable Energy Manager, Environmental Strategies Direction of Environmental Protection Agency

AGENDA

Monday November 23

10:30	Official Welcome Chair: Prof. Paul James	Ms Barbara Berninger Metropolis Regional Secretary Europe Head of Division for EU and International Affairs, Senate Department for Urban Development and the Environment Berlin
10:40	Round Table Introduction of Participants	
10:50	The <i>No Regrets</i> Charter and Principles for Responding to Climate Change	Prof. Paul James Director, Institute for Culture and Society, Western Sydney University
11:00	Climate-Impact Monitoring: Indicators for Assessing the Success of Adaption Measures	Mr Christian Gaebler Permanent Secretary for Transport and Environment, Senate Department for Urban Development and the Environment Berlin
11:20	Discussion: Q&A	
11:30	Urban Development Planning in the Context of Climate Adaption	Dr Heike Stock, Head of Unit Urban Development Planning: Sustainable Development, Policy on Climate and Energies, Senate Department for Urban Development and the Environment Berlin
11:45	AFOK: The Berlin Concept for Adaptation to	Dr Fritz Reusswig

	the Impact of Climate Change	Potsdam Institute for Climate Impact Research
12:10	Discussion: Q&A	
12:30	<i>Lunch</i>	
14:15	Field Trip with Local Experts: Implementation Measures in Berlin <ul style="list-style-type: none"> - EUREF Campus, the city 'District of the Future' - Climate-KIC, Europe's largest public-private innovation partnership focused on Climate change - Future URBAN TECH REPUBLIC at the area of Berlin Tegel Airport - Postdamer Platz, Rainwater treatment, roof greening and innovative energy generation 	
17:30	Discussion: <i>What can be learned from these practices? What can be transferred to other cities?</i>	All
18:00	<i>End of Day One</i>	

Tuesday November 24

9:00	Opening of Day Two	
9:15	The Climate Metropole+ Initiative: Goals and Aims of Cooperation Chair: Prof. Paul James	Ms Ana Romero Head of Section on Sustainability and Environmental Education, Environmental Services Section, Barcelona Metropolitan Area
9:45	Panel discussion on climate change adaptation in each participating city – <i>strengths / good practices</i>	Ms Ana Romero, Head of Section, Barcelona Metropolitan Area Mr James Sharples, Policy Manager, Liverpool City Region Ms Luce Ponsar, Climate Plan Manager, Grand Lyon
10:45	<i>Coffee Break</i>	
11:00	Panel discussion on climate change adaptation in each participating city – <i>weaknesses / challenges</i>	Continued
12:00	Discussion: <i>What can be learned from these practices? What can be transferred to other cities? What are the goals and next steps of the cooperation?</i>	All
13:00	Concluding remarks	Prof. Paul James, Director of the Institute for Culture and Society, Western Sydney University
13:15	<i>End of the workshop</i>	

MAIN POINTS RAISED ON DAY 1

- The *No Regrets* Charter seeks to mobilise cities to adapt to climate change, recommending that cities urgently take action based on a precautionary principle. The Charter provides a systematic set of principles and guidelines within a pragmatic framework based on the cross-cutting domains of culture, ecology, politics and economics. This is based on the Circles of Sustainability approach. The Charter seeks to go beyond specific adaptation actions to involve the whole city in an integrated response to climate change adaptation (including justice, governance, and communication, etc.).
- Berlin is rapidly changing — demographically and economically. Therefore, climate protection and adaptation also needs to be accelerated. The Berlin Senate has set an ambitious agenda for transforming Berlin to be climate neutral by 2050. The Climate Neutral Berlin 2050 Feasibility Study suggests that this requires greater efforts to lower consumption and use energy more efficiently.
- The draft law implementing the energy turnaround and promoting climate protection in Berlin — known as the Energy Turn Around Act — contains specific climate mitigation goals for Berlin: 40 per cent less CO₂ by 2020, 60 per cent less by 2030 and at least 85 per cent less by 2050 relative to 1990. This act requires climate adaptation planning, which will start at the beginning of 2016.
- The Integrated Energy and Climate Protection Concept defines concrete strategies and measures for achieving climate policy objectives, with a broad public participation process.
- Berlin's population forecast is important for strategic planning and particularly for housing policy. The challenge for Berlin is to adapt existing housing stock and provide affordable new accommodation for the additional expected households. Taking into account energy-efficiency measures. The Residential Urban Development Plan outlines which steps are necessary, pursuing the principle of a compact, diverse city with a climate-friendly density.
- AFOK Berlin (Anpassungskonzept an die Folgen des Klimawandels Berlin) is an adaptation concept directed towards understanding the impact of climate change. The project seeks to illustrate the pathways to climate change responsiveness in the city. The project systematizes and evaluates possible actions to adapt using expert knowledge, and presents the results to the broad public. It aims to develop a graphic model of climate change pathways and impacts, as well as an action plan.

FIELD TRIP

A field trip was organised with local experts to visit the following facilities:

EUREF Campus

EUREF Campus (European Reference Campus) is a former industrial site turned into an innovation campus dedicated to a low-carbon future. It is intended to be an exemplar of carbon-neutral and decentralised energy-supply district in the middle of Berlin. Located

there is Climate-KIC (Knowledge and Innovation Community), Europe's largest public-private innovation partnership focused on Climate change and established a Green Garage that functions as a clean-tech incubator for start-ups.

Urban Tech Republic

Berlin's Tegel Airport comprises a total area of 495 hectares. After the airport is closed, it will be developed as a location for research and industry for the city of tomorrow. Sustainable technological developments and innovations will cover in particular the sectors of energy, mobility, recycling, water, new materials, and information and communications technology. Berlin TXL is managing this process.

Postdamer Platz

Potsdamer Platz is an office, entertainment, and retail centre at the heart of Berlin. The area was destroyed during World War II and then redeveloped after the reunification of East and West Berlin in the 1990s. This mixed-use site features an elaborate, naturalistic storm-water retention system designed to minimize the burden on the city's existing water infrastructure. The system incorporates green roofs on most buildings in the complex to reduce storm-water runoff. Beneath the ground-level streets is a labyrinth of roads for waste recycling and management.

MAIN POINTS RAISED ON DAY 2

- **Barcelona Metropolitan Area** has 3.2 million people distributed in 36 municipalities across an area of 636 km² with a density of 5,093 inhabitants per km².

The preliminary diagnosis of Barcelona conducted during this project aims to compare the principles and recommendations included in the *No Regrets* Charter with adaptation measures included in the metropolitan strategies of Barcelona, Berlin, Liverpool and Lyon.

Barcelona has an adaptation strategy and has already developed some actions in line with specific recommendations as set out in the *No Regrets* principles: a round-table on energy and climate change; university fellowships on climate change; advice to farmers on how to adapt food production techniques to climate change; and inclusion of criteria for adaptation in relation to water use and energy savings in new buildings, etc. into urban practice. Different studies such as: climate downscaling, island heat, scarcity of water resources, etc. have been launched between 2014 and 2015.

- **Liverpool City Region** has around 1,5 million inhabitants in the city of Liverpool and the five surrounding municipalities with a density of 2,061 inhabitants/km². There is no metropolitan authority as such, but climate

adaptation is undertaken by the Local Enterprise Partnership — politicians and key business which set priorities. There is not a single adaptation strategy, but several initiatives touch upon adaptation actions related to green infrastructure, sustainable energy, flood protection, and mobility, etc.

- **Grand Lyon** includes 500,000 people in the City of Lyon and a total of 1.5 million people across the 59 surrounding communes. Grand Lyon has a mitigation plan and started working on adaptation in 2006 with the European Union project AMICA (Adaptation and Mitigation: An Integrated Climate Policy Approach). However, there is not a formal adaptation strategy yet. Several studies have been carried out on urban heat island maps and have tested on-site adaptation measures with private companies. There is a trees' charter as part of the road service and are working on species.
- The city of **Buenos Aires** has a comprehensive climate change adaptation strategy, which includes a permanent meteorological network, the increase of green areas, urban tree management, urban green corridors designs, the relocation of those inhabitants on the heavily polluted coast of the Riachuelo river and a water plan that improves the capacity of the city to respond to extraordinary rainfall events and storms.
- **GIZ** works in nine informal areas of **Greater Cairo** region in a participatory climate change programme. The objective is to improve living conditions whilst trying to integrate climate change adaptation, from a community based approach. There is no defined metropolitan area and no authority responsible for the metropolitan area. There is little knowledge on climate change but GIZ tries to undertake very practical actions like rooftop farming projects to adapt to climate change or supply of clean drinking water.
- **Challenges** raised by the partners included the following:
 - Communication of technical-scientific information to politicians (e.g., using clear models);
 - Identification of useful indicators and quantitative objectives for adaptation;
 - Extension of public awareness of strategies regarding adaptation, keeping the whole complexity of adaptation simple (political, economical, cultural, ecological dimensions) and balancing factual and emotional issues in a way that behavioural change is achieved. A working distinction between education and awareness-raising is needed.
 - Interaction with other public departments to promote adaptation actions in an efficient manner, sharing ideas for innovation and improvement; and
 - Allocation of specific resources for adaptation: not only for technical purpose but also for governance aspects;

- There are on-going initiatives at European level (Mayors Adapt, Covenant of Mayors, C40, and ICLEI, etc.) which need to be taken into consideration. The diagnosis will include a summary of the existing initiatives at the European level and the possible links with the *No Regrets* Charter. It was also suggested to invite somebody from the Mayors Adapt for the next workshop.
- Meritxell Martell will work on the diagnosis, based on exchanges with each individual partner. She will also get in touch with Luce Ponsar to organise the workshop in Lyon.
- A peer review process, positive and constructive, organised by Paul James and Michael Abraham could help cities to get further guidance on adaptation, based on the insights gained at the workshop.
- Next workshop will be in Lyon: 8-9 February 2016 (starting early in the morning and finishing at mid-day). It will address topics such as heat islands, heavy rains, and awareness-raising concerning the need to respond to climate change.
- The presentations will be shared with all participants through *circlesofsustainability* website: <http://www.circlesofsustainability.org/>
- All participants considered that the workshop had been very valuable. They considered the format of the workshop very well suited to reaching the goals of the Initiative. They are looking forward to continue their mutual exchange of experiences and to focus on a few topics that are especially relevant for the participating cities.
- A representative from Berlin working on climate adaptation matters would be an added value for future workshops.