

## **CLIMATE METROPOLE+ Initiative**

	<p><b>Workshop and final conference ‘Climate Change Adaptation: Strategies, Actions and Challenges’, 17-18 November 2016, Barcelona</b></p> <p><b>INTRODUCTION</b> <b>PARTICIPANTS</b> <b>AGENDA</b></p>
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## INTRODUCTION

Climate Metropole+ is an initiative of Barcelona Metropolitan Area (AMB) 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 finishes in December 2016. It involves four workshops in each of the partner cities (Berlin, Lyon, Liverpool and Barcelona).

The final workshop of the Climate Metropole+ initiative was held in Barcelona on 17 November 2016 and was restricted to Climate Metropole + members. A final conference was organised the day after the workshop, on 18 November 2016, to present the results of conclusions of the Climate Metropole + initiative to a wider audience.

On 17 November, Mr. Octavi de la Varga, executive director of Metropolis, presented the main characteristics of urban areas and the initiatives launched by Metropolis. Ana Romero from AMB presented the Environmental Sustainability Plan and the Climate change strategies, focusing on adaptation actions, for the Metropolitan Area of Barcelona. Then, the experts from the Metropolitan Observatory on Climate Change of the Metropolitan Area of Barcelona (METROBS) presented the studies carried out regarding future climate: 1) study on downscaling by the representatives of the Meteorological Service of Catalonia, 2) study on urban heat island by Javier Martín-Vide and 3) study on water resources by Josep Mas-Pla. In the afternoon, the field trip involved a visit to a school where a project of nearly zero emissions will be implemented in the coming months and an urban park designed to be resilient.

The final conference of Climate Metropole + was held at AMB on 18 November 2016. The Vice-president for Environment of AMB; Mr. Eloi Badia, welcomed the participants at the conference. Then, a round table chaired by Mr. Octavi de la Varga and with the participation of Mr. Malcolm Kennedy, Deputy Lord Mayor and Cabinet Member of Regeneration, Transport and Climate Change of Liverpool local council and Mr. Salvador Milà, Director Presidency Area at AMB, presented the main priorities on climate change in the areas of Liverpool and the Metropolitan Area of Barcelona respectively.

Ms. Katrin Jurisch, from Climate Alliance, presented the Covenant of Mayors Initiative on adaptation to Climate Change. Then, Marc Montlleó, project coordinator of Barcelona Regional provided an overview of the state of the art on climate change adaptation in Europe, including the main aspects addressed in Copenhagen, Rotterdam, London, Paris and Barcelona. Mr. Salvador Samitier, Director of the Catalan Office for Climate Change, explained the Catalan Strategy for adapting to climate change and the different projects on climate change in which the Office is involved. A final panel was held where the main participants of Climate Metropole + from Liverpool, Lyon and Barcelona presented the main lessons learned from the exchange of experiences.

## PARTICIPANTS

The conference was attended by 40 participants, whose name, affiliation and position is listed below.

<b>Affiliation</b>	<b>Name and position</b>
Aigües de Barcelona	Carme Santacana Rico, responsible for quality and environmental management
AMB	Eloi Badia, Vice-President for Environment
AMB	Salvador Milà, Director Presidency Area
AMB	Ana Romero Head of the Section on Sustainability and Environmental Education, Environmental Services Direction
AMB	Carlota Rosés, International Relations and Cooperation
AMB	Gil Lladó, Energy Transition Expert, Environmental Services Section
AMB	Elena Lacort, Sustainability and Climate Change
AMB	Josep Altayó Morral
AMB	Bet Marrugat
AMB	Eduard Ramia Gallen, advisor
AMB	Konstantia Nikopoulou
AMB	Emili Mas, economist
AMB	Marta Borrat Vallvé, advisor
Aquatec	Montse Martinez Puentes, R&D&I coordinator
Barcelona City Council	Irma Ventayol, Coordinator Sustainability Office
Barcelona Regional	Marc Montlleó, Project coordinator
Barcelona + Sostenible	Maria Làzaro Mullor, specialist
Berlin	David Meuresch, Masters student University of Postdam
Castelldefels Local Council	Marian Sardà, Manager of Environment and Urban services
Catalan Office of Climate Change	Salvador Samitier, Director
Catalan Office of Climate Change	Gabriel Borràs, responsible for the adaptation area
Catalan Office of Climate Change	Ester Agell Ma
CCCB	Teresa Navas Ferrer
CETAQUA	Salvador Vela Rodríguez, project manager
Ecoparc Barcelona	Francisco Javier Quintieri Fernández, manager
Estudi Ramon Folch	Ivan Capdevila, Director
Gavà local council	Fidel Vázquez Alarcón, Director
Grand Lyon	Luce Ponsar, Climate Plan Manager
La Palma de Cervelló	Xavier González, Mayor
Liverpool City Region	Vicki O'Kelly, Green Blue Skies Limited, Consultant

Liverpool City Council	Malcolm Kennedy, Deputy Lord Mayor and Cabinet Member – Regeneration, Transport and Climate Change
Lleida Provincial Council	Gemma Sanvisens de la Torre
Merience	Merixell Martell, director, consultant to AMB for Climate Metropole+ initiative
Metropolis	Octavi de la Varga, Executive Director
Metropolis	Xavier Borrell, Project Manager
Red de ciudades por la bicicleta	Montserrat Pallarès Parellada, coordinator
Sant Boi de Llobregat local council	Elena Amat Serrano, mobility city councillor
Sant Feliu de Llobregat local council	Jordi Pedrol Martínez, environment specialist
Santa Coloma de Gramenet local council	Francesc Bernet Viñas, Director of the Environmental Service

## AGENDA

### Thursday November 17

9:30	Official welcome	Mr. Joan PINYOL, Director of Environment Department, Barcelona Metropolitan Area (BMA)
9:45	Metropolis initiatives	Mr. Octavi de la Varga, Executive Director, Metropolis
10:00	Presentation of the Environmental Sustainability Plan of AMB	Mr. Gil Lladó, Energy Transition Expert, Environmental Services Section, Barcelona Metropolitan Area (AMB)
10:30	Climate change strategies at AMB: adaptation actions	Ms. Ana ROMERO, Manager of the Section on Sustainability and Environmental Education, Environmental Services Section, AMB
11:00	<i>Coffee Break</i>	
11:30	Generation of knowledge related to future climate: downscaling by the Meteorological Service of Catalonia	Ms. Jessica AMARO, Meteorological Service of Catalonia
12:30	Generation of knowledge related to future climate: Urban Heat Islands	Mr. Javier MARTÍN VIDE, Group of Climatology, University of Barcelona
13:30	<i>Lunch and visit to AMB nearby garden: climate adaptation strategies</i>	
14:30	Generation of knowledge related to future climate: water resources	Mr. Josep MAS-PLA, Catalan Institute of Water Research (ICRA)
15:30	Field Trip with local Experts: Climate Change Adaptation - Implementation Measures in Barcelona Metropolitan area <ul style="list-style-type: none"> <li>- Designing resilient parks (Dina Alsawi)</li> <li>- Nearly Zero Emissions school (Viladecans)</li> </ul>	
18:00	<i>End of the session</i>	

## Friday November 18

9:30	Welcome address	Mr. Eloi BADIA, Vice-President for Environment, Barcelona Metropolitan Area (AMB)
09:45	Climate Change Adaptation strategies in Metropolitan Areas	Mr. Salvador Milà, Director Presidency Area, Barcelona Metropolitan Area (AMB) Mr. Malcolm KENNEDY, Deputy Lord Mayor & Cabinet Member – Regeneration, Transport and Climate Change, Liverpool local council <i>Mr. Octavi de la Varga (Metropolis), Chair</i>
10:30	Mayor's Adapt: The Covenant of Mayors Initiative on Adaptation to Climate Change	Ms. Katrin Jurisch, Climate Alliance European secretariat
11:00	<i>Coffee Break</i>	
11:30	State of the art of Climate Change adaptation in Europe	Mr. Marc MONTLLLEÓ, Project coordinator Barcelona Regional
12:00	Climate Change Impact Adaptation Measurement Indicators	Mr. Salvador SAMITIER, Director Catalan Office for Climate Change
12:30	Climate Metropole + Project: lessons learned	Ms. Ana ROMERO, Director of the Section on Sustainability and Environmental Education, Barcelona Metropolitan Area (AMB) Ms. Luce PONSAR, Climate Plan Manager, Lyon Métropole Ms. Vicki O'KELLY, consultant to Liverpool City Region <i>Ms. Meritxell MARTELL (Merience), Chair</i>
13:00	Questions & answers	
13:30	<i>End of the Session</i>	

## MAIN POINTS RAISED ON DAY 1

- All members of Metropolis should take advantage of the results of the exchange undertaken as part of Climate Metropole + initiative. Metropolis is currently working on metropolitan governance, to assess how to manage the new challenges for urban areas, which are the best structures to face the different problems of the cities, etc.
- AMB is planning to review its climate change adaptation plan (2015-2020) to have a more operational and more practical plan for the next years. The last years have been devoted to generate knowledge through METROBS and the intention now is to get into action implementing adaptation actions.
- The Meteorological Service of Catalonia has undertaken a pioneering project where the downscaling technique is applied from a 1 km resolution observational data grid, considering the most recent emission scenarios. The project shows the projected variations in 3 scenarios (2011-2040; 2041-2071 and 2071-2100) for temperatures and precipitation. Some of the projections are: increase of extreme hot events; decrease of annual total precipitation; increase of warm days, torrid days and torrid nights;
- The configuration of the Barcelona Urban Heat Island (UHI) was under study through the establishment of different transects, including municipalities in the metropolitan area. The intensity or maximum difference of Barcelona metropolitan area UHI can reach 7,5 °C.
- AMB water supply comes from river Ter (55%) and Llobregat (45%). Major vulnerability is shown at Ter headwaters, yet even larger at the overall Llobregat basin. It is important to consider other basins when planning supply.

## FIELD TRIP

A first field trip was organised on 16<sup>th</sup> November around Barcelona with Ms. Irma Ventayol, Sustainability Office coordinator of Urban Ecology in Barcelona City Council and Mr. Jaume Barnada, architect of the Sustainability office of Urban Ecology Barcelona City Council. The two sites visited were:

- Poblenou superblock “superilla”: a redesigned public space of 8,000 m<sup>2</sup> generating four new squares which is practically traffic-free. This is a pilot project to reduce traffic, pollution and noise, use public space more efficiently for citizens and increase their quality of life.
- Passeig de Sant Joan (St. James promenade): the pavement has been widened and vegetation changed and increased. This allows to create a green corridor which goes to Ciutadella Park. This promenade has recovered its social value as an urban space for pedestrians and citizens, with more biodiversity.

A field trip was organised on 17<sup>th</sup> November with local experts to visit the following facilities:

- Metropolitan NZEB School model in Viladecans: conversion of the existing school El Garrofer to a nearly zero-energy building. This project will be implemented in the next years within the framework of energy efficiency measures undertaken by this municipality.
- Urban Park in Viladecans: design of an urban park to be resilient, changing its vegetation, keeping the park open 24hours a day and increasing biodiversity.

## **MAIN POINTS RAISED ON DAY 2**

- The leadership of cities and local governments is crucial to fight against climate change, as they are the closest administration to citizens and are those that suffer mostly the consequences of climate change. Local authorities can also propose solutions. Social cohesion and more equality are essential elements in the future urban agenda.
- The New Integrated Covenant of Mayors defines a reference framework for action. Local authorities have to submit a Sustainable Energy and Climate Action Plan (including mitigation) based on a Climate Risk and Vulnerability Assessment and the Baseline Emission Inventory within 2 years after signature.
- The Covenant of Mayors and Compact of Mayors merged officially last year, but it is not yet clear the future changes regarding these initiatives.
- Climate change adaptation is still a novel item on the agendas of cities. 650 European cities have started to assess their vulnerability to climate change over the last couple of years and have developed plans and strategies. Some of the most advanced cities are Paris, Rotterdam, London and Copenhagen.
- The analysis of the No Regrets Charter showed that in the Climate Metropole + metropolis, the economic and cultural dimensions are weakly considered, compared with the environmental dimension. The Charter served to consider the social and economic dimensions in the climate adaptation strategies.

## WAY FORWARD

- The final report was presented and distributed in paper to the participants at the final conference. This is available at the Metropolis website: [http://www.metropolis.org/sites/default/files/media\\_root/publications/climate\\_metropole.pdf](http://www.metropolis.org/sites/default/files/media_root/publications/climate_metropole.pdf)
- There is an interest from the participants at Climate Metropole + to continue working together at European or even international level. Different options will be investigated to ensure funding for a follow up project. Metropolis could provide support to ensure further networking and to promote the initiative at different events, like the next assembly to be held in Montreal in June 2017.