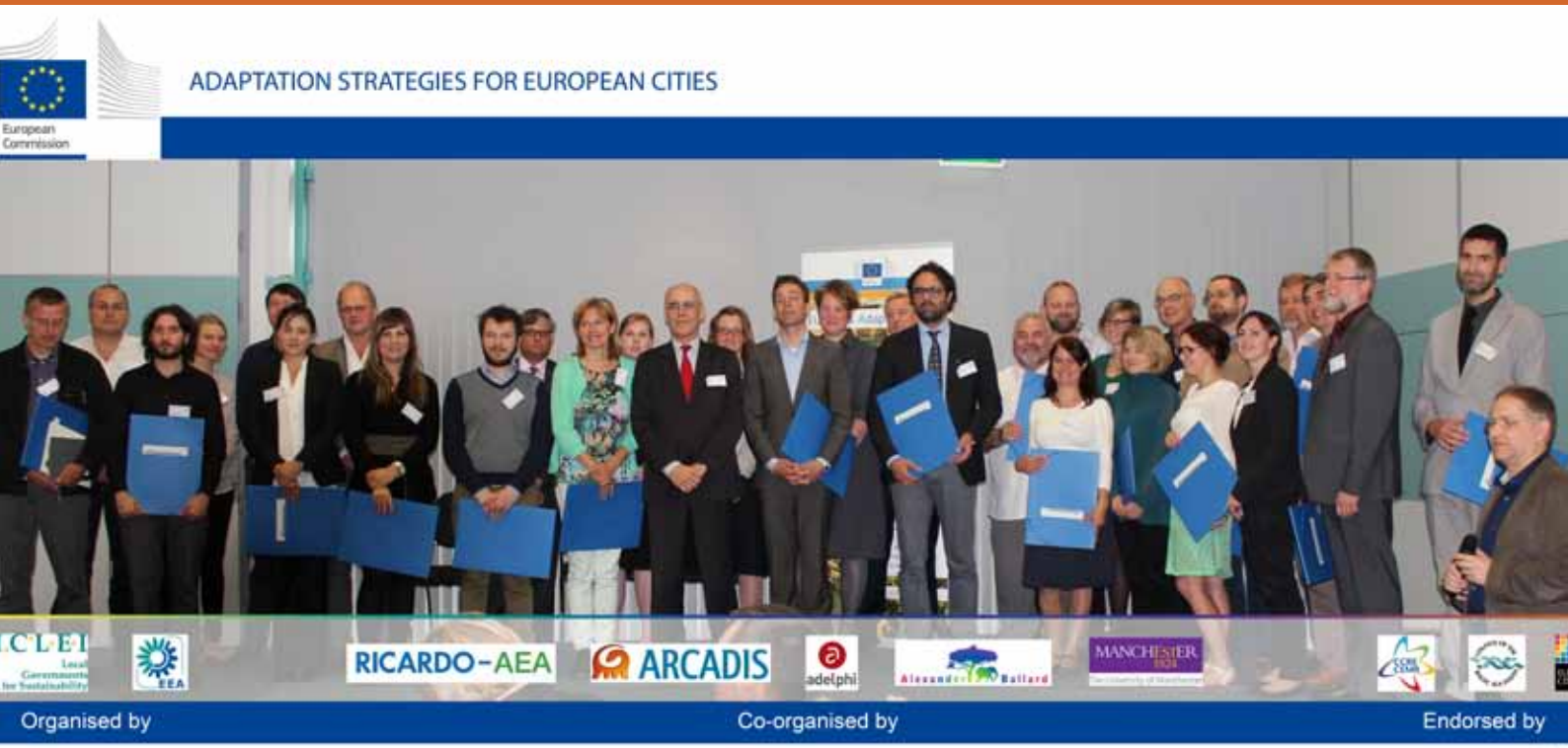
Resilient Cities 2013

European cities adapt to climate change - cities learning from cities

Key messages from the first Open European Day at the Resilient Cities Conference, Bonn, 3 June 2013



1. A conference for cities - by cities

The European OpenDay was dedicated to capacity building for urban authorities and focused on city-to-city learning. This interactive event brought together 120 representatives of city administrations, as well as scientists and other stakeholders.The participants were encouraged to not only learn from good examples presented by the contributing cities and experts, but also to actively share the challenges they faced and the solutions they had found. The event is planned to become a regular platform for European cities to exchange experiences on practical challenges and adaptation solutions towards local climate resilience.

This short document draws conclusions from the event, which was jointly organised by ICLEI- Europe, the European Environment Agency and the European Commission following the global Resilient Cities conference - the 4th Global Forum on Urban Resilience and Adaptation. The Open European Day also coincided with the final conference of EU Cities Adapt, a key project on urban adaptation in Europe, financed by the European Commission (Directorate-General for Climate Action – DG Clima). In this project 21 European cities – at different levels of progress in adaptation - have worked together towards well-informed and sustainable actions on climate change adaptation.

2. Where we are - cities and the European Adaptation Strategy

Cities are considered by the European Commission's DG Clima as major players in the adaptation process, due to the high concentration of people, infrastructure and value of assets in urban areas. In the opening session, Humberto Delgado-Rosa, the Director of Directorate General Climate Action, European Commission observed that if the European cities address the adaptation challenge, it will help to adapt the whole Europe.

In this regard, the EU strategy on adaptation to climate change (2013)supports action at city level,for example through facilitating the exchange of information and experience between cities by further developing the Climate ADAPT platform, promoting urban adaptation strategies and providing funding.The Commission, on the basis of the model of the Covenant of Mayors initiative, plans to launch a voluntary commitment to adopt local adaptation strategies and awareness –raising activities.

The cities participating in the Open European Day ranged from those advanced in climate change adaptation planning (for example Copenhagen or Rotterdam) to those that described themselves as beginners (e.g. Zadar or Vilnius). Many cities accross Europe have initiated the adaptation plannning process. However, the cities

found progressing from the action plans to selecting and implementing adaptation actions difficult due to the complexity of assessing cities' vulnerability and evaluating the financial feasibility of adaptation; limited worked examples of implementation of adaptive actions and uncertainty what a 'successful' adaptation looks like.

This document summarises the challenges for cities, the key messages and the way forward in planning and implementing successful adaptation, based on the discussions between cities during the Open European Day.

3. Key messages from the Open European Day

3.1 Data, information and evidence base

Collecting information about climate change impacts and vulnerability in the local area is crucial to enable decision making. Good evidence base also allows presenting politicians and stakeholders with firm facts and gaining their support.

The challenge:
Local climatic data is frequently not available to cities; the majority of this data is produced at the European or national level.

> *"There will be multiple generations of solutions - we need to get on with the first."*
>
> Lykke Leonardsen, Head of Strategy, Technical and Environmental Administration
> City of Copenhagen, Denmark

For some cities, the data on socio-economic characteristics of the population is difficult to obtain and this is a challenge in understanding the vulnerability of cities. Developing a good evidence base is time-consuming and may involve working with stakeholders to collect and analyse data.

The message:
The information that cities have or want to collect will never be 'perfect' but cities cannot wait until the data or technology to analyse it is in place. Cities need to accept that their knowledge about climate change, the understanding of the local conditions and the technology in place is not complete, and may never be, but is usually sufficient to start action. Knowledge gaps should not be an excuse for inaction. The cities need to start acting now, as developing information databases takes time. It is important that data and information are collected at the scale of local planning and decision making.

How to do this?
One way of developing the local evidence base is by looking at the past weather events and assesing which the most frequent and which cause the most disruption; such events are likely to continue in the future and may get worse. For example, cities can use the UK Local Climate Impacts Profile procedure, recommended by the UK Climate Impacts Programme, whereby the extreme events that are the most urgent to address are identified through reviews of local media reports. The use of Geographical Information Systems (GIS) is recommended as it allows for a comprehensive analysis of multiple layers of environmental, social and economic information. Effective modelling and visualisation of data is also a powerful tool for communicating risks and engaging stakeholders and local communities.

3.2 Guidance and regulation

The presence of relevant guidance can be a make-or-break factor for successful adaptation.Preferably the guidelines should be available in national languages. In particular, the support from the national government was recognised as very important. The national legislation and regulations can provide a framework for local authorities to work in.The National Adaptation Strategies (NAS) are envisaged by the European Commission as the main regulating mechanisms at the national level.

The challenge:
Where there are no national adaptation strategies or other relevant frameworks, cities are working in a regulatory void. This may mean that cities follow a 'trial and error' approach and there is no coordination of the activities of different cities. The existing National Adaptation Strategies tend to focus on broad problems at the national level, rather than local issues; they are not specifically tailored to urban areas and their relation to regional and local adaptation strategies is unclear. There is a need for more support and guidance on implementation of adaptation actions coming from national governments.

How to do this?
The EU directives can be used by cities for guidance in absence of national strategies. European resources such as the ClimateADAPT information platform are good sources of informationsupporting development of the adaptation plans. The use of worked examples from other countries and cities was common among the participants, and particularly beneficial for cities that described themselves as beginners in the adaptation process. The cities wanting to develop their adaptation action plans are advised to:

- Use the Climate ADAPT platform or national platforms as the knowledge hub, which allows gaining an overview of the ongoing adaptation and best practices in other European cities and to access information on EU policy and national level actions.

- Participate in knowledge exchange events, such as the Open European Day and the Resilient Cities conferences, and in knowledge exchange projects such as EU Cities Adapt. Such projects and events allow information sharing between cities, particularly effective if they face the same climate risks or havesimilar geographical conditions or socio-economic situation. Exchanging good practice on collection and interpretation of data, working with GIS, and visualisation of risks and vulnerabilities is very valuable. Many of the participating cities started working on adaptation as a result of their participation in European projects, such as EU Cities Adapt; Green and Blue Space Adaptation for Urban Areas and Eco Towns or Life+ projects. Working on a project with other cities can encourage and maintain the progress on adaptation, for example through healthy competition between cities or friendly peer pressure.

3.3 Funding adaptive actions

The challenge:
Adaptation is generally underfunded; often,if adaptation is considered in the legislative framework at the national level, it may mean extra requirements for the local authorities but little or no additional funding. The main difficulty lies in the fact that there is a considerable time lag on the return on the investment into adaptive actions, estimated by some as 20-30 years. This means that justi-fying spending on adaptation is difficult in the

current economic climate and in the context of short political timeframes. What makes it even more challenging is the absence of worked, credible financial assessment frameworks which would allow cost and benefit analysis of adaptation measures; there is no framework for calculation of avoided cost.

The message:
In the long term, the economic losses associated with loss of life and health implications and damage to infrastructure and property in urban areas will be very significant. Over the medium to long term, the cost of inaction will be greater than the cost of action.

> *"Adaptation is not a cost; it is an investment"*
>
> João Dinis, Technical Department
> City of Cascais, Portugal

How to do this?
European funding such as Life+,theInterreg programme, Framework Programmes for Research and Innovation and Cohesion Fundsprovides an extremely valuable contribution to cities' adaptation budgets. However, this funding is largely project-based and adaptation needs continuous support. Cities are encouraged to apply for EU funding, including JESSICA (Joint European Support for Sustainable Investment in City Areas) and JASPER (Joint Assistance to Support Projects in European Regions).

Small actions can contribute to achieving the ultimate aim of a well-adapted city. To avoid extra costs, adaptive actions shouldbeintegratedintothedevelopmentandimprovement of urban infrastructure, such as for example drainage system, when maintenance takes place. Implementation of some adaptation measures is likely to increase city's income from taxes: for example, the investment in green infrastructure can increase property value, and in turn the municipal tax returns. Engaging private sector, e.g. water management companies, can help to leverage funding.

3.4 Gaining political commitment

Political buy-in can be even more important to successful planning and implementation of adaptive actions than funding. The decision-makers need to consider adaptation as an important issue on the local agenda, which they want to support.

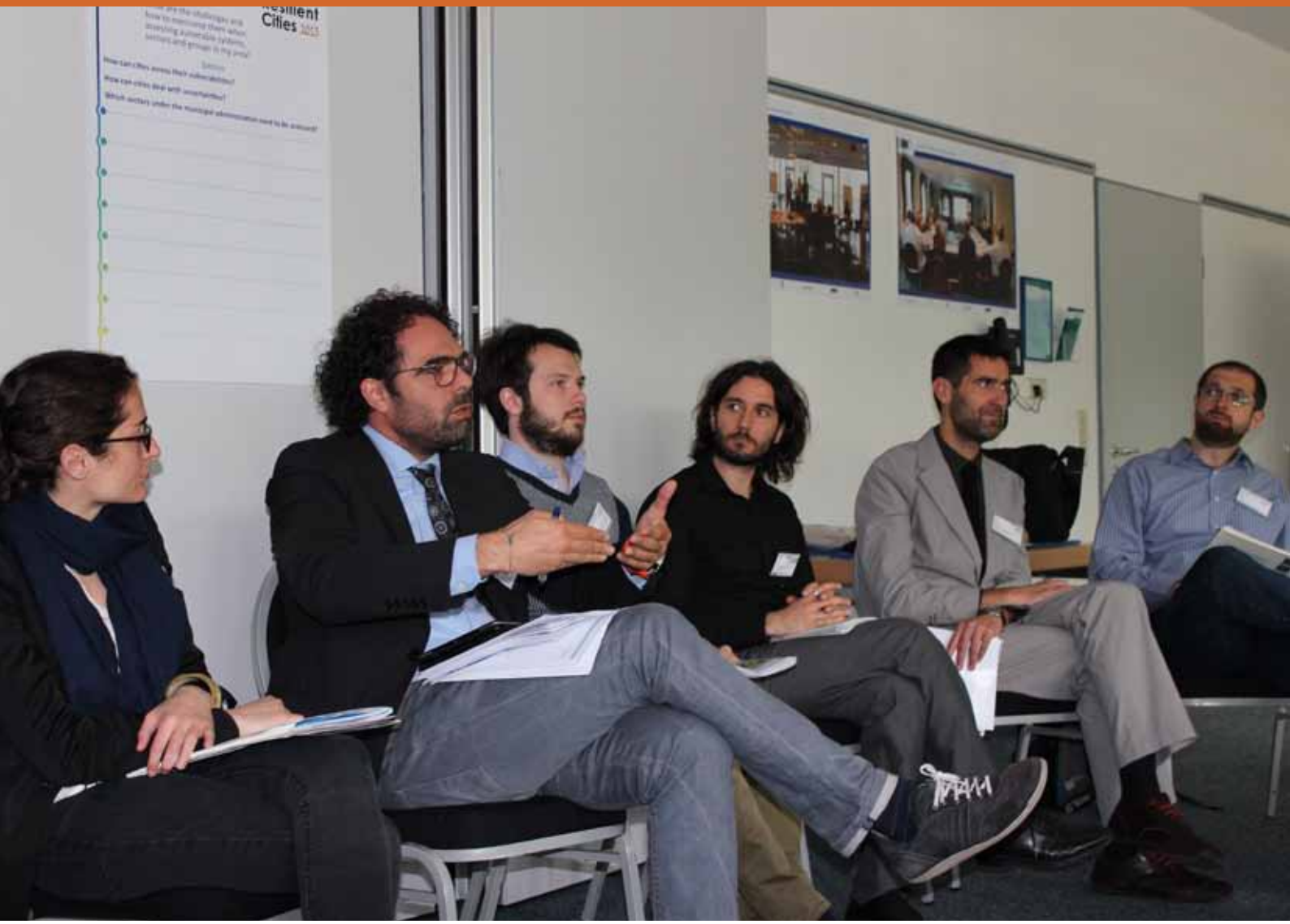
The challenge:
The main difficulty in persuading the decision-makers to get on board is to convince them about the severity of the future climate change-related risks and the financial feasibility of the adaptation measures. The short term political cycles mean that decision-makers are less motivated to act on long-term issues and they are gambling on disasters not occurring.

> *"Adaptation is a hard selling job"*
>
> Bernd Hoermann, Sustainable Development Officer
> City of Sheffield, United Kingdom

The message:
To communicate the need of adaptation to local decision makers, adaptation can be presented as a contribution to hot political issues such as resilience to strategic risks (whereby climate change is treated with a similar gravity as threats associated with terrorism or pandemics) or improving public health. Itis also effective to present adaptation as an opportunity for the city to provide a liveable, attractive environment for its residents, visitors and investors, consequently raising the economic competitiveness of the city.

> *"Adaptation is an opportunity not a cost"*
>
> Lykke Leonardsen, Head of Strategy, Technical and Environmental Administration
> City of Copenhagen, Denmark

How to do this?
The use of experts from outside the city council can help to communicate the importance of climate change risks and the necessity to adapt. Peer pressure from other cities, for example through involvement in EU-funded projects focused in climate change



adaptation, can appeal to a competitive nature of those in charge and promote adaptive action. Presenting adaptation as means to protect important cultural heritage could be persuasive. Branding the already ongoing activities (e.g. increasing or maintaining green spaces; investing in flood protection; maintenance of drainage systems etc) as adaptation actions can help to convince the decision makers and other stakeholders that adaptation is relatively easy to implement and may only require small changes in business as usual rather than additional extra work.

3.5 Working with others

Climate change adaptation is very complex as it spans environmental, social and economic issues. Adaptation cannot be effectively tackled by one department in a city council and engagement with other stakeholders may be crucial for effective adaptation.

The challenge:
Adaptation is seen sometimes as an environmental issue, and thus a remit of environmental departments rather than those responsible for public health or infrastructure. It is often unclear, which department is responsible for adaptation actions, or how the financing of adaptation is split between the city council and other stakeholders.

The message:
Engaging all relevant departments within the city council on adaptation is crucial, in particular the spatial planning departments. Other stakeholders need to be involved: as financial partners, due to being major landowners in the city or because of their knowledge and access to information.

How to do this?
The early and frequent engagement with the private sector was seen as one of the means to ensure successful collaborations increasing the potential to leverage funding. Further, private sector may be able to provide the funding missing from the public sector. It was also recognised that private sector companies are important landowners in cities, and this land may need to be utilised for e.g. sustainable urban drainage systems. Water management and drainage companies were particularly important stakeholders in the context of flood risk, especially as the water management plans were recognised as one potential trigger for starting the adaptation process. An important type of stakeholder was academia and research institutes, which can help

with development of the evidence base or its analysis with the use of GIS.

The representatives of the regional and national institutions with an interest in adaptation can be brought into the adaptation working group at the city level in order to improve communication and gain support and guidance.

3.6 Conclusions

The last years have seen a great leap from the European cities in adaptation planning and implementation. Many cities across Europe are advanced in planning their adaptation activities. However, there are still those that lag behind, and even the most advanced ones are only starting to implement actions. Cities bring in the willingness to act and local expertise and they are creative in developing approaches and framing adaptation in a way that works for them. However, they need a helping hand in terms of information, guidance and support from higher levels (regional, national and EU). These needs are summarised below.

Based on what was discussed during the First Open European Day, the participants call on the national governments to:

- Work towards developing the National Adaptation Strategies or other comprehensive frameworks of regulations and guidance, including performance indicators, focused on climate change adaptation. However, if extra requirements are placed on local authorities' budgets or staff, additional funding should follow the regulations. In addition, the national adaptation strategies should be effectively translated at regional and local levels.
- Develop climate change projectionsand information on the predominant climate-related risks (such as flooding). Where this data exists, work towards downscaling it to regional and local levels to enable locally-specific adaptation.
- Cooperate with other countries in the same geographical region in order to develop consistent approaches to preventing floods (for example, if river systems cross several countries), and to exchange the experiences to date on climate change adaptation.

The participants call on the European Union to:

- Provide more funding for knowledge exchange projects, considering the unanimous consensus on their value for the participating cities. In particular, projects matching adaptation leaders and followers were appreciated by the cities at the beginning of the adaptation planning process.
- For more advanced cities, provide funding for projects focussed on implementation and monitoring of the adaptation actions.
- Develop or promote indicators and benchmarking mechanisms that could be used by cities to monitor their progress on adaptation.
- Further develop the ClimateADAPT platform to become the one-stop shop on adaptation for the EU cities, supporting adaptation planning and decision-making.

The participants call on the research institutes to „bridge the gap between knowledge institutes and practice" and to:

- Share the existing knowledge with cities in order to develop scaled-down climate change data relevant to local decision making and to comprehensively analyse the environmental, economic and social data.
- Developing straightforward (but not simplistic) approaches to assessment of vulnerability and risk.
- Develop financial assessment methods and mechanisms helping to carry out a cost-benefit analysis of adaptation measures, in particular considering the long terms effects, and factoring in the uncertainty of climate change; the costs avoided; and the distribution of costs and benefits among different entities.
- Develop indicator frameworks for assessment the progress towards adaptation and monitoring the change.

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