Resilient Cities 2017

Open European Day

4th Open European Day 2017

Conference Report

Introduction

On May 3rd 2017, around 120 representatives from cities and local authorities, research institutions, and other public and private stakeholders gathered in Bonn for the fourth edition of the Open European Day (OED 2017), back-to-back with the global Resilient Cities Conference, organized by ICLEI Local Governments for Sustainability. European cities and key adaptation actors from different organizations had, once again, a unique chance to exchange opinions and experiences on climate adaptation and to define urban resilience.

As in previous years, the fourth Open European Day focused on city-to-city exchange on urban adaptation, but this last edition's format facilitated interactive discussion and sharing of experiences even more than ever before. The "no presentations allowed" format facilitated interactive discussion and sharing of experiences among the participants. The event also included interactive workshops structured around key themes, in each of which one city presented a real-life adaptation challenge. During the workshops, participants explored the solutions already implemented, and discussed potential plans for future responses to these challenges. As all panels and workshops during the event involved local or regional authorities, the discussions dealt with pragmatic challenges and touched upon drivers and barriers for city action on adaptation. The event's marketplace and extended coffee breaks encouraged networking among practitioners, researchers and other experts.

The Deputy Mayor of Bonn, Reinhard Limbach, opened the fourth Open European Day by emphasizing the importance of climate change adaptation and the need to strengthen relationships across municipal and national boundaries in Europe to find solutions to the effects of the climate change. What used to happen once in 100 years now happens once a year; In the case of Bonn, due to the increasing damage to the city´s infrastructure caused by extreme weather events, 8.5 million Euros have been invested for adaptation; "Our challenges may be different than the ones in the Global South, but there are still many and rather pressing".

The event connected cities with relevant institutions, projects and networks working on climate adaptation and offered, once again, a closer look at existing good practices and experiences that

can potentially be adapted to other local or regional contexts. The event promoted and encouraged the progression and expansion of a peer-to-peer network of community leaders who continue to share their work, successes and challenges.

Urban adaptation in Europe – what has changed since last year?

Globally, climate change continues to intensify existing challenges and create new ones. The vulnerability of cities to a changing climate is of particular concern, given that human populations and activity are concentrated in them. There is growing recognition that cities will need to

> "The city of Vejle and its stakeholders have been more motivated to work on climate adaptation projects following extreme rainfalls that took place in 2016. Vejle is also transferring the results of the Smart Mature Resilience project to update its adaptation and resilience strategy."
>
> Anne Charlotte Petersen, City of Vejle

proactively adapt to reduce such vulnerabilities and build capacity to accommodate future shocks and stresses – a complex process that requires dealing with multiple uncertainties as well as exploring flexible and innovative forms of governance.

But what has really changed since 2016?

For a start, the work of the European Environment Agency and ICLEI Local Governments for Sustainability has intensified – bringing cities together and bridging the gaps between researchers, institutions and city-level practitioners. Sandro Nieto Silleras, Policy Officer, DG CLIMA pointed out: Cities have been doing extensive work in the field, without labeling it as urban adaptation. What they need to do from now on, and the Open European Day provides an ideal platform in this respect, is to start communicating experiences and ideas and advertising their success stories with the aim to be replicated by other cities. European cities need to be encouraged to adopt a holistic and multi-disciplinary approach in identifying strategies for adaptation challenges. The European Commission has launched a public consultation on the evaluation of the 2013 EU Adaptation Strategy, and the results will be public and shared with cities.

> "Obviously Europe needs to suffer from a big disaster to move adaptation in cities further."
>
> Peter Massini, City of London

According to the European Commission, a quick look over last year's work showed that the European Environment Agency's Urban Adaptation 2016 report (launched at last year's OED) has been very useful to cities in respect to local up-scaling of adaptation planning efforts. Cities that aim to discover how to test new and unproven solutions to address urban challenges can do so through the Urban Innovative Actions program: **www.uia-initiative.eu**

This report takes stock of the exchange of experiences at the 4th Open European Day and synthesizes the main points of the many lively discussions, highlighting emerging themes and arising challenges. It offers some policy recommendations on actions and activities that may advance local city action for adaptation and resilience.

STREAM 1:
Innovation for climate adaptation

In the Innovation stream, best practices were defined as innovative initiatives aimed at increasing resilience, while also identifying challenges and constraints or other unique conditions that determine how transferable a practice is from one city to another.

It is beginning to be widely understood that innovation for climate change adaptation needs to be based on integrated solutions. Such solutions have potential to create jobs and growth in the interest of building a climate-resilient society. Joint action on innovation from business, academia and public institutions in Europe may accelerate the development of appropriate climate adaptation solutions and their deployment, with the potential to scale up EU innovation to the global level. In this context, projects were presented from Berlin, Bologna, Valladolid, Guimarães and Potenza.

The City of Berlin introduced the Smart Sustainable District Berlin Moabit (SSD) project, which is a European initiative aimed at implementing integrated urban solutions within districts. The overarching goal is to create high-quality urban public spaces that are also well equipped to meet the future challenges presented by climate change, using a co-creation methodology at district level and a crowd-mapping platform. Researchers have worked together with the municipality, building upon an existing municipal plan. On the other hand, and in a totally different climatic and urban context, the City of Valladolid presented an initiative that aims to address the excessive drought problem in the area. The municipality dedicated 30 ha of land for the planting of 30,000 water retaining plants and trees. As a result, the newly-created park does not need irrigation.

A variety of innovative solutions for integrated urban adaptation were discussed throughout the day and many cities had the chance to present their efforts in this field. The use of GIS technologies and existing standards for adaptation and resilience make the exchange of data easier, while virtual reality and visualization techniques can make difficult concepts more accessible for non-expert stakeholders. Such communication strategies are important to engage non-experts in a process of co-creation with researchers – where both groups contribute valuable knowledge. Other innovative solutions for adaptation include: tracking heat stress through 3D analysis (including monitoring of shading, evapotranspiration and wind speed) and the effective use of urban trees and plants against heat stress and the urban heat island effect. For the latter, species selection in the first instance is key, while sensors can be used to monitor heat stress. Technology helps to collect and develop evidence for vulnerability and risk assessment and for the creation of adaptation action plans, yet it may not be directly transferrable to every local context, and assessing its cost-effectiveness before investment is essential.

The City of Bologna makes use of a private-public partnership to fund the development of green spaces and in general city greening initiatives; in this respect a crowd-funding campaign has been started to promote tree-planting. Crowd-funding is useful for small projects, but more ambitious projects would need more sustainable resourcing: e.g. ongoing arrangements with university researchers who can provide useful data, or loans to pay for technical support from experts and other costs. Cities engaged in an interactive discussion and highlighted that practitioners should be innovative and not afraid of challenges. Several potential sources of funding were identified: e.g. Eco-budget, Gaia or URBACT, however proper planning and

integrated management is necessary to access, assess and evaluate these programs. On the other hand, among the identified barriers and challenges there is the difficulty to create the management and financial instrument required to promote the transformative adaptation and the need to include financial engineering in order to make projects move forward in an effective way.

Raffaella Gueze, from the City of Bologna, highlighted that adaptation is not a requirement of the cities, but an indirect requirement of delivering good quality of life. Elsewhere in Italy, the Province of Potenza is running an ongoing project that tries to engage its citizens in a coordinated approach against floods. Alessandro Attolico from the Province of Potenza mentioned that: "There is a significant lack of resources in smaller cities and towns around Europe". Conversely, Jorge Cristino, City of Guimarães presented a different perspective. The city is implementing the Mais Verde Project, which focuses on the ecological restoration of the Couros River, combining green and grey infrastructure. As Cristino said: "We have reached not only social benefits, but also economic ones; in four years we will have received back the investment for the recovery of the Couros River, something that is very comforting when considering the losses we used to have with extreme floods every year. It is a win-win project, integrating blue and green infrastructure in the city centre, and improving biodiversity".

Many cities agreed that is difficult to convince policy makers to invest in disaster management, as it is not a permanent problem yet. In the cases that this actually happened, the land values always increased in the recovered areas; the gentrification risk needs to be always considered though. It is important to engage both citizens and private sector for innovation projects while bearing in mind those tailor-made, local solutions would help to gain effectiveness.

STREAM 2: Co-creation for urban adaptation and resilience

In the Co-Creation stream, cities discussed processes they have used to involve citizens in actively shaping their urban environment, being part of urban renovation planning and evaluating the feasibility and benefits of each adaptation action for the local community. This stream recognized the wide range of different voices, including artists and cultural institutions, which are needed to contribute to local adaptation planning.

Raymond van den Broek introduced the ZoHo initiative, a community-driven action changing urban planning approaches, where activists have transformed a vacant business area close to the city into a vibrant working and living area, using a cooperative step-by-step approach ("slow urbanism"). All users are involved in the decisions. They hope to succeed in engaging the land owner and the city of Rotterdam in the future. The project has been incorporated into city-led project Climate Proof ZoHo, as part of Rotterdam's Climate Adaptation Strategy. ZoHo will be an urban laboratory, where promising climate measures, such as smart water barrels and green public spaces that can hold water by infiltration and local storage are combined with other local initiatives of the district. The city's Benthemplein water square has already become a renowned example of a similar approach, combining water management and public space improvements. For more information: **www.urbanisten.nl**

The City of Athens has developed a City Adaptation plan, supported by the Rockefeller Foundation's 100 Resilient Cities, by following an extensive citizen participation and co-creation process. The city decided to target elderly people who are particularly vulnerable to the urban heat island effect during summer, and carried out a series of activities to raise awareness about their vulnerability while offering specific support and care activities.

The success of a co-creation process for climate adaptation requires a shared long term vision, set of criteria and a development strategy which does not follow a defined blueprint, but rather a step by step approach, which pays attention to short and long term results in the process and integrates collective feedback from relevant stakeholders and engaged citizens. Talking to citizens should highlight the

opportunities generated by adaptation (making the city more livable) as much as the potential losses from climate change impacts. Target groups that already have experience with climate change impacts could be used as multipliers/ambassadors. The cities of Athens and Rotterdam agreed that for ensured and continuous success in adaptation and resilience ventures, it is important to not only to create continuous actions and but to try to avoid one-offs. City-to-city collaboration and twinning-on-project activities can be a means to pass on this message.

The Greater London Authority (GLA), introduced by Peter Massini, is also engaging citizens, as part of an integrated approach to environment and climate policies. Citizen engagement in London is primarily done by the boroughs, but the GLA has also created new approaches, such as online forums – with social inclusion as its most major challenge. Massini says: "London has a Strategic Authority and a high-profile Mayor with an important

> "The real success factor for effective community engagement and citizen participation for the co-creation of a local adaptation strategy is the feeling of ownership for a specific neighborhood."
>
> Reimund Schwarze, Professor for Environmental and Climate Economics, Helmholtz-Centre for Environmental Research and Viadrina University

message and influence, but he can't engage with eight million people. Boroughs and organizations are doing that (e.g. through housing associations). It is important to allow a dynamic conversation between the municipality and social groups, similar to what is happening at the moment regarding in social housing policies in London, with the city is investing in a 100-year commitment to continuously engage with the residents."

The city of Ghent created a crowd-funding platform and invited citizens to present initiatives for the improvement of their neighborhood, with the promise that the initiative that managed to raise the most funds through the platform would receive an additional public subsidy, support and advice for realization. The projects are being proposed by citizens (approximately 260 projects presented so far), with the most popular focusing on greening initiatives that provide multiple co-benefits including environmental, climate and social benefits. Maaike Breugelmans, Project manager, at the Environment department of the City of Ghent says: "The city does awareness raising and stakeholder engagement; citizens are very much involved and interested. Participation also has to drift away from the traditional group that participates, i.e. group of 30 to 40 year olds". Breugelmans, City of Ghent, on ensuring inclusion: "A city council should be open and willing to engage with citizens, to build a direct relation between city and citizens. The city council should dare to experiment and see how things go". Massini, referring to the success of co-creation participatory approaches and processes: "not just highlighting nature conservation benefits but also air quality, resilience etc. Citizens would feel more interested

In the City of Sheffield, a green commission was created with the intention to gather input from people of many backgrounds to a new city-wide strategy. In addition to the co-chairs (a local politician holding the portfolio for the environment and the director of a wildlife trust), 15 green commissioners were recruited, who ranged from private sector representatives to academics, and members of local pressure groups and activists. As invitees, there were also experts from across the UK, private sector and academics to give evidence on green issues. The commission had to synthesize the issues raised and create priorities and a strategy for Sheffield, which arose after a 12-18 month process to arrive at co-ownership and shared agreement.

What is needed is strong consortiums and organizations behind the proposals for funding, while it is necessary for people to meet in person, through organized meetings and workshops, and not only online. City representatives should ask easy-to-answer questions to the community, for example: What do you want to change? Or find one issue in which you can have a dialogue rather than an argument with people. Finally it is important to reach out to adaptation pioneers if this is possible.

> "Cities and regions need the support of researchers and universities to assess their climate risks and vulnerability."
>
> Sirpa Hertell, Committee of the Regions

Long-term projects cause more engagement, and this engagement is important, as opposition can come from lack of communication.

The City of Vagos collaborated with researchers for the design of their coastal adaptation plan, to protect the waterfront and the lagoon from a rising sea level. As a result, they developed an adaptive policy process and redesigned the waterfront. The input from scientists helped inform decision-making, using adaptive and dynamic planning approaches (adaptation pathways). The project led to scientific investigation by the Portuguese environmental agency on an artificial reef protecting the coastal stretch front of the city. The scientific input has to consider adaptation measures which were not possible before.

The LIFE DERRIS project is collaboration with the city of Turin to support small and medium enterprises (SMEs) in designing action plans for climate resilience. The project helped to make sure the goals of the municipal adaptation strategy and the individual action plans of the SMEs were aligned. A major challenge was "translating" the data collected from several technical grounds into a form where it was meaningful for adaptation. The city of Valka is a partner in a LIFE LOCAL ADAPT project which strives to improve the capacities of local administration to cope with climate change impacts. Valka is cooperating closely with Dresden University to develop their adaptation strategy. The Valka municipality had to engage a private company for the vulnerability and risk assessments as they had no internal capacity. This procedure provided the city with an unbiased, external view and a qualified opinion on climate change impacts.

The city of Exeter has used (downscaled) climate models provided by partner research organizations. Risk was assessed referring to a 50th percentile of projected impact levels as a measure which balances the costs of protection measures with the robustness of information on future impacts. In Exeter, the challenge consisted in transmitting the information about climate data to decision makers, since scientists are not always able to provide directly usable "consultation inputs". Exeter brought decision makers to Germany to show them how the local climate might be in Exeter in 2050.

The City of Lisbon shared its experience with a programme involving the University of Lisbon

in training staff in Portuguese municipalities in vulnerability assessment and climate adaptation strategy development. A small number of staff in each administration were trained and then tasked with introducing the necessary knowledge. Using scientific knowledge for design of adaptation measures and decision making about adaptation projects requires a common language which is not easy to find: Scientists need to communicate in a way that can be understood and is useful for decision making processes. The consultancy Fresh Thoughts suggests to include communication specialists/ consultants in project teams as 'translators' or 'mediators' between science and policies or practical implementation to help smoothing the path from knowledge to action. Several speakers pointed out that the collaboration between municipalities and research institutions works best, if they are considered partners contributing equally to the process. Uncertainties are part of everyday decision making in municipalities in every sector, we should not be too much preoccupied with

> "We have to be consistent and transparent in stakeholder involvement and make sure that the vulnerable groups are involved, focusing on substance and objectives. We also need new approaches rather than new instruments (i.e. slow urbanism, bottom-up approaches."
>
> Margaretha Breil,
> International Center for Climate Governance

STREAM 3: Transformative adaptation

In the Transformation stream, best practices and ideas were shared among participants on how their cities can transform existing structures and systems, reshape infrastructure and further invest in green space development and upgrading, and other cost-effective adaptation options.

The theme of this session was taken from the title of the EEA report launched at OED 2016. Transformative adaptation is fundamentally about addressing climate change impacts in a deep-rooted and systematic way – rather than taking superficial measures that enable incremental change or just coping. Part of this approach is influencing widespread human behavior and social norms, and so reaching a wide audience with a meaningful and compelling message is essential. Bilbao, Copenhagen and Almada were among the cities to share their experiences with transformation. In this regard, artists are potential communicators of transformative actions, connecting areas and sectors, communicating evidence with a positive narrative, creating community through performances/actions, provoking thought and helping people to defeat the fear of change In a different way, a climate change induced disasters send a powerful message and present an opportunity to act.

In Bilbao, for instance, work on adaptation started as a result of being hit by a natural disaster, mainly flooding, and an economic crisis. Nevertheless, mainstreaming adaptation is still difficult. Getting involved in larger projects also offers cities an opportunity to undertake transformative actions. The City of Almada is facing droughts, flooding, heat waves, landslides and many other challenges. All municipal services have been advised to participate in the bigger picture project of mainstreaming adaptation in the city – here, the EU cities Adapt project was a major trigger.

Nuno Lopes, City of Almada reinforced the need to be creative and try to have some collective efforts on integrating adaptation planning into sustainability and urban transformation measures. Lykke Leonardsen from the City of Copenhagen added that: "Cities have spent a lot of time in collecting mountains of data, but without implementing. Many people are not sure if climate projections are even real. Sometimes you have to just say - let's just

start moving and let's communicate our actions, communicate the insecurities and admit that we do not have all the answers". Piero Pelizzaro, CLIMALIA, addressed the fact that we need to regard climate adaptation and resilience as something that would improve social inclusion. Pelizzaro added: "We need indicators and numbers and climate projections that would prove that we can improve in social problems. In Italy everyone talks about PV panels and renewable energy but no one talks about climate change. In order to overcome political lack of commitment, you need to increase awareness of the media and the administration staff and then we can reach the political commitment and we can become an example like Denmark where no one questions climate change".

Marjorie Breyton, City of Turin, DERRIS project: "Speaking the same language, for example knowing what transformative adaptation means, facilitates a potential collaboration between the public and the private sector on relevant projects, plans and activities". Holger Robrecht, ICLEI European Secretariat, pointed out that changes regarding transformative adaptation could be promoted through ICLEI'S transformative action awards. For more information, please look at:
www.sustainablecities.eu/transformative-action-award

PARALLEL CROSS-CUTTING STREAMS

Mainstreaming adaptation

City-to-city and across-silos collaboration is needed to mainstream and scale up adaptation action. The European Commission is at the forefront of mainstreaming adaptation for Europe, through the new Global Covenant of Mayors for Climate and Energy, by providing political leverage and technical guidance, by fostering dialogue and exchange between cities, as well as financing research and innovation projects and creating tools and data for adaptation and resilience planning. By adopting an open attitude towards sharing and learning, cities can raise awareness among different stakeholders on the necessity for integrated adaptation measures. According to Efrén Feliu, TECNALIA, cities are permanently changing and evolving. The climate change topic is not in the centre of city transformations; adaptation needs to be integrated into other narratives and strategies.

Financing mechanisms for adaptation

Stefanie Lindenberg, coordinator of the National Capital Financing Facility of the European Investment Bank, highlighted that in order to attain success, different stakeholders should be involved to develop projects collectively; the true innovation for adaptation depends on the collaboration and mutual support between stakeholders and cities. The National Capital Financing Facility is inviting cities with projects that support biodiversity or use nature-based-solutions to adapt to climate change, to apply for funding. The European Commission has partnered with the European Investment Bank on this venture; a partnership that is proved by their collective sponsorship of the Open European Day. Nicolas Faivre, Policy Officer at DG Research and Innovation, says: "knowledge gaps should be addressed when applying for funding or developing an action plan for adaptation. The European Commission needs to know what the limitations that cities are facing are; what works well

> "We still do not have the most appropriate answers with regard to managing uncertainty or on how to operationalise flexible management of resources. Most cities also lack instruments for private funding."
>
> Efrén Feliu, TECNALIA

> "The EIB's and the European Commission's Natural Capital Financing Facility provides loans and investments to cities for the implementation of climate adaptation projects. For cities that will be seeking financing from us though, it would help if you already have an adaptation strategy in place."
>
> Stefanie Lindenberg, European Investment Bank

and what not". For cities to be successful in applying for funds, projects must have well-defined parameters, including stakeholders, capacity and lessons from past mistakes. In most of the cases, the presence of an early City Adaptation Strategy to influence a Master Plan appears to be rather important.

> "Cities and regions should be helped to find the right combination of public and private funding for adapting to climate change."
>
> Anne Charlotte Petersen, City of Vejle

Engagement with the private sector, establishment of partnerships and finding the best combination of private and public funding, while reinforcing citizen engagement in this process, can lead to the co-creation and co-development of ideas. According to Sirpa Hertell, Espoo Municipality and member of the Committee of the Regions, working with a horizontal approach and within a devoted group for sustainable development inside the municipalities would be helpful; it is important to consult with the private sector and to bring citizens into the discussion. Cities need to avoid the same mistakes by analysing what didn't work and extracting lessons learnt. Some of the challenges and barriers to adaptation projects mentioned in this stream of discussion were difficulties for researchers in delivering accessible information to

practitioners and citizens, and that the most cost-effective short-term solution is not always the best. According to Peter Massini from the City of London, the biggest challenges relate to the differences experienced between working at local level and working with the EU institutions. Anthi Christou, who is the Communications Officer at the Resilient

> "Cities need support by the EU institutions in order to get access to financing for climate change adaptation, as most of the times, guidance is missing at municipal or regional level."
>
> Rafaela Gueze, City of Bologna

Athens team adds that the biggest problem cities face is the lack of political support and disruptions in its continuity because of election cycles and consequently changing priorities and agendas.

> "Political commitment to adaptation comes for different reasons and it is up to policy officers to make the most of the co-benefits."
>
> Birgit Georgi, Strong Cities in a changing climate

CITIES IN THE SPOTLIGHT

The representatives of some of the Cities that attended the fourth Open European Day provided feedback on the event (reasons to attend, expectations and outcomes) in a series of interviews conducted by ICLEI.

CITY OF COPENHAGEN

Lykke Leonardsen, Head of the program for Resilient and Sustainable city Solutions at the City of Copenhagen, has regularly participated in the Open European Day in the past several years working for the City of Copenhagen. According to

Leonardsen, the event is a great platform not only to showcase Copenhagen's efforts and share local knowledge on urban adaptation but also to exchange with and learn from other cities of different sizes and in various geographical regions that may be facing similar challenges to theirs. The City of Copenhagen, through its participation in the EEA, ICLEI and OED communities/networks, has developed a deeper understanding of the political side of climate negotiations for urban adaptation and resilience, while it has also actively participated in shaping the climate future of Europe. Copenhagen has a strong voice for the integration of adaptation into local planning processes. The "Copenhagen Climate Resilient Neighborhood" project provides a study area in which the city is implementing a series of cloudburst management plans. At the same time, a series of real life simulation activities enable residents and visitors in the inner city to actually experience climate adaptation and estimate the added value of the city's green and blue infrastructure. Leonardsen would like to see, if not many drastic changes in the future of the city, at least the political will to live up to the high ambitions the city has set for climate adaptation, without setting aside the overall and strategic political agenda of the city. In her words: "we need to integrate innovation and technology in adaptive urban planning with the ambition of sharing the co-benefits and co-creating a greater city."

NEWSBIT: What we learned during the OED...

Climate Resilient Neighborhood Copenhagen

St. Kjeld's Neighborhood has been chosen as an exhibition area for climate adaptation in the City of Copenhagen. The project started in 2012, focusing on the St. Kjeld's Square, the Tåsinge Square and the Bryggervangen area. The first redeveloped squares officially opened in 2015/2016, aiming to showcase climate adaptation solutions to inspire greener streets and improved urban space around the world. For more information please check: **www.klimakvarter.dk**

CITY OF ALMADA

Nuno Lopes, Environment and Energy Officer at the Almada City Council is a regular participant in the Open European Day and considers it a fantastic opportunity to meet and mingle with other city representatives. We can discuss and exchange

about challenges and difficulties experienced in other European cities, and set, with fellow city practitioners, the basis for potential cooperation that will result in replication or transfer of successful case studies and activities to our local or regional context". The City of Almada has found great added value in working with scientists and participating in projects in recent years. A significant number of partnerships with regional and national universities in Portugal have been established: research institutions provide baseline data to the city, which is then used to assess vulnerability and help select cost-effective adaptation options.

Almada has worked in a variety of projects with ICLEI Local Governments for Sustainability (EU Cities Adapt, NACLIM, Blue Action Plan, and RESIN), through which the city has made use of the tools, guidelines and methodologies produced. For example, the city has extensively used a high resolution model for the urban heat island effect that was developed in the NACLIM project. The Open European Day offers the additional opportunity to stay informed about current policies and regulations for climate adaptation. Lopes says: "the next 15-20 years will be very challenging for the City of Almada; we will try to integrate Nature Based Solutions for city planning and address the most pressing climate hazards, such as coastal erosion, flooding, soil erosion, landslides and mudflows. Through participation in these projects we aim to support transformative adaptation, make use of green and blue infrastructure at the very city centre, increase the amount of green spaces and introduce innovative technologies."

CITY OF GHENT

Maaike Breugelmans, Policy Worker on Climate Adaptation at the Environmental and Climate Service from the city of Ghent, sees the Open European Day as a ''safe environment for cities to exchange on real practices and applications that respond to shared challenges and arising issues, learn from each other and make the first steps for establishing partnerships for collective adaptation action. Unlike big conferences, the Open European Day provides us with a unique opportunity to meet practitioners that trigger your interest during the sessions and further elaborate in the extended breaks of the marketplace''. During the event, the city of Ghent discovered common ground with Nijmegen, The Netherlands, which has been selected as the European Green Capital 2018 and, like many other Dutch cities, is a pioneer of adaptation planning. The cities of Almada and Bilbao also had the chance to share, following-up Ghent´s feedback, very interesting projects and experiences. Both have undergone major urban transformations, which were triggered by economic factors, but resulted in extensive consideration of environmental and climatic factors.

The City of Ghent is participating in the RESIN project and aims to use the resulting tools at the city level or in the wider Flemish region. Working with Flemish universities and research institutes on the co-creation of heat maps and election of adaptation options has, on the one hand, enabled an extended bilateral discussion on the topic and,

on the other, led to concrete research projects and tailor-made applications for the local context. The city administration aims to transform the densely built-up and populated urban fabric into a greener place that balances ongoing construction and development with an increased quality of life, resulting from the creation of open green space, equally distributed between the city centre and the surrounding districts.

CITY OF GUIMARAES

Jorge Cristino, Aid of Deputy Mayor of the Municipality of Guimarães, representing the City of Guimarães (a new member of ICLEI's city network), following the Sustainable Cities and Town conference in Bilbao in 2016, highlighted that: " the city-to-city

exchange the event is offering reinforces our goal to create a sustainable and resilient city for the future, to learn about recent policy development and get recommendations on how to attract funding for the implementation of adaptation projects. The OED Marketplace provides a unique opportunity to exchange experiences, network and learn from other cities. Guimarães has combined Nature Based Solutions with flood management in a recent project that aims to prevent fluvial flooding in the historic city centre of the city. The river running through this area floods on average every 4-5 years, resulting in a sequence of negative socio-economic impacts. The project managed to limit flooding events through the

construction of three retention basins within the river line and by integrating NBS with grey infrastructure, creating new green spaces alongside the river and improving biodiversity. The resulting ''ecological zone'' has improved quality of life for citizens and led to other positive socio-economic impacts.

The city of Guimarães is improving in terms of mobility, green space development and air quality, and planning to implement a series of measures in the next years, combining adaptation with energy-saving and climate change mitigation goals. As Cristino says: ''decreasing carbon emissions is fundamental for Guimarães in order to be able to implement structural and integrated larger-scale projects''. The city will apply to become the European Green Capital 2019 and continue working in this respect within 12 indicator areas (including climate change, biodiversity, air quality and water), while also developing an integrated vision for the future. "Apart from re-developing the former industrial part of the city, we have done a lot of work in capacity building and citizen engagement, in promoting sustainable behavior and a mindset change towards a low-carbon and resilient economy and society. We strongly believe in citizen participation and we try to engage with all relevant stakeholders that are active at city level", Cristino concluded.

PARTNERS OF THE RESIN PROJECT - CLIMATE RESILIENT CITIES AND INFRASTRUCTURES

For the second year in a row, the project RESIN supported the Open European Day. RESIN is an interdisciplinary, practice-based research project investigating climate resilience in European cities. Through co-creation and knowledge brokerage between cities and researchers, the project is working on developing practical and applicable tools to support cities in designing and implementing climate adaptation strategies for their local contexts, with a focus on boosting the resilience of infrastructure. RESIN researchers are comparing and evaluating the methods that can be used to plan for climate adaptation in order to move towards formal standardisation of adaptation strategies. Project coordinator Peter Bosch (TNO) highlighted that urban resilience is often understood only broadly and lacks practical strategies for implementation at the local level. Consistent with current trends and recent incidents, the project has expanded its resilience spectrum to social issues, such as to terrorist threats or cyber attacks. As Bosch says: ''The RESIN project aims to support cities and stakeholders managing their local infrastructures to increase operational resilience. We are very happy in

> "This year we have gone much deeper into the details of adaptation implementation; especially with regard to innovation for adaptation, we can use innovation for: a) monitoring techniques, b) use of technologies for stakeholder involvement and c) technological innovations for adaptation measures."
>
> Peter Bosch, TNO

the project consortium to be collaborating closely with a number of cities in Europe – Bilbao, Bratislava, Paris and Manchester, - in order to co-create the tools that are produced during the project''. Indeed, as Alfonso Gil, Bilbao's Deputy Mayor and Councillor for Mobility, Housing, Environment and Health, mentioned in one of the sessions: ''Through its participation in the RESIN project, the city of Bilbao will be able to further use and advance tools tailor-made to our needs, challenges and opportunities''.

Efrén Feliu from research partner TECNALIA, responsible for developing a library of adaptation options, highlighted that the library helps cities to identify and select measures for responding to climatic hazards based on their effectiveness. RESIN is also developing a new vulnerability and risk assessment methodology, integrated with traditional risk management and risk assessment approaches, to help cities understand and quantify their climate vulnerability. The project will contribute to informing the mid-term revision of the EU Adaptation Strategy and other relevant EU-level policy processes. The RESIN project intends to bring city-collected knowledge together in a decision support framework that will be called the RESIN E-guide and will be soon available on the RESIN website (**www.resin-cities.eu**).

CONCLUSION

The fourth Open European Day provided additional valuable insights, across all three main themes, as well as on mainstreaming and financing adaptation and resilience. The participating cities discussed these issues with the European Investment Bank and the European Commission and consensus was reached on the fact that cooperation between the public and private sector can help steer urban design towards multi-functionality and urban resilience, while a creative mix of funding instruments, such as green bonds or crowd-funding, can help finance adaptation, especially in cities that are not very advanced in the field.

The fifth Open European Day will return on April 25th 2018, with another day full of city-to-city exchange on urban adaptation and resilience, and will additionally offer tailor-made training sessions on key themes like adaptive water management, risk and vulnerability assessment and financing methods. This year's participants can look forward to panel discussions on topics like critical infrastructure protection, cultural heritage and arts in adaptation, socially just adaptation and citizen involvement in resilience planning, financing and insurance, engaging of the public sector and utilities, and nature-based solutions for urban adaptation.

Aiming once again to provide a platform where cities will discuss urban resilience, this year the event will focus even more on city-to-city exchange on local adaptation planning and will invite European cities of all sizes and regions to discuss their current adaptation and resilience efforts and participate in a variety of interactive panel discussions. Experienced front-runners and newcomer cities will present their challenges, while representatives of EU institutions, researchers and practitioners will collectively explore solutions and arising opportunities for collaboration and debate.

> "[The OED 2017 was an] opportunity to see what's happening in Europe, and to think of what we could use for our situation. I gathered a lot of ideas and different perspectives. It would be great if we could start talking about 'resilient cities' in Latin America."
>
> Jorge Mariano Rossi, City of Buenos Aires

Acknowledgements

The Open European Day 2017 was jointly organized by ICLEI Europe and the European Environment Agency, with support from the European Investment Bank, from the European Commission (DG CLIMA and DG Research) and from the RAMSES, RESIN and PLACARD projects. A special thank goes to all the participants who contributed to the lively discussions of the day, thus giving great input to this report.

Author of the report: Vasileios Latinos

Organizing team: Birgit Georgi, Margaretha Breil, Linda Romanovska, Peter Bosch, Mario Pulquerio, Alberto Terenzi, Holger Robrecht, Aleksandra Kazmierczak

ORGANISED BY

European Environment Agency

ICLEI Local Governments for Sustainability

CO-ORGANISED BY

PLACARD

RESIN SUPPORTING DECISION–MAKING FOR RESILIENT CITIES

RAMSES Science for cities in transition

SUPPORTED BY

European Commission

European Investment Bank

The EU bank

Front and back cover image: Pixabay - all other images: Stephan Köhler (ICLEI)