# EUROPEAN URBAN RESILIENCE FORUM

# 2022 REPORT

# INTRODUCTION

The 9<sup>th</sup> edition of the European Urban Resilience Forum (EURESFO) took place on 14 and 15 September in Athens, Greece. The event gathered once again city representatives, researchers and stakeholders from local and regional institutions to discuss strategies and actions for adapting to climate change, building urban resilience and managing climate-related disasters.

The forum has been co-organised by ICLEI – Local Governments for Sustainability and the European Environment Agency. Based on a "PowerPoint free" format, EURESFO kept its informative, open and interactive character. Through different formats of sessions and workshops, participants had the opportunity to exchange on the number of challenges by European cities and regions as well as the measures being implemented to address them. An interactive marketplace was also set-up, where participants had the opportunity to hear short project pitches, get their hands-on climate resilience assessments, and try decision support tools from different exhibitors, while having the chance to network and kick-start key collaborations.

In addition to that, two local study trips were organised (to the Lycabettus Hill and the National Garden) to learn first-hand about the projects that are being carried out in Athens. The city and its surroundings have suffered severely from the effects of climate change, especially when it comes to extreme heat and drought, but also intense flooding incidents over the winter period. Because of this, the fact that the event was held in the Greek capital served to raise awareness and inform about the challenges that must be faced to build resilient communities.

### EURESFO2022 IN NUMBERS



- **12** sessions and **3** workshops
- ${f 2}$  site visits to key resilience places in Athens
- **300+** participants
- 70+ speakers, moderators, and trainers
- **14** stands in the EURESFO marketplace
- **9** networking opportunities
- **20** organising and supporting partners



## A STRATEGIC PERSPECTIVE TOWARDS A CLIMATE RESILIENT AND INCLUSIVE FUTURE FOR EUROPEAN CITIES AND REGIONS



Climate change is a reality. In recent years, drought, fires, floods and heatwaves have become more frequent, causing impacts that are more complex to cope with. With the goal of helping European cities, regions and communities to be better prepared, the European Commission has launched the Mission for Adaptation and Societal Transformation. The opening plenary of the 9th edition of EURESFO gathered representatives of different European cities and regions to discuss about what can be done to turn the Mission's goals into practice.

The city of Athens has been heavily affected by heatwaves in recent years. In order to tackle this problem, organisations have been focusing on the reduction of emissions, which have been decreasing since 2014. However, the mayor of the Greek capital stated that the city must concentrate in urban resilience, due to the severe social inequalities that climate change can cause. The appointment of the first Chief Heat Officer in Europe and the design of a new climate action plan are clear indicators of the city's commitment. By investing in urban transformation and implementing nature-based solutions, adaptation and mitigation measures could be introduced in the city.

Kallithea is another region greatly impacted by the high temperatures. As in Athens, not all the citizens suffer the same consequences. Aiming not only to survive, but also to prosper, they work to strengthen local resilience and cooperation with subnational authorities. Action planning is not easy, but all members of the session confirmed that having references such as the European Green Deal, the European Climate Law or the Mission for Adaptation and Societal Transformation helps in choosing the ideal path in building resilience locally and regionally.

The Attica region has prepared the plan to set its immediate priorities and are based on three main goals: to promote adaptation action and projects in all policy areas, to create a monitoring and evaluation system for adaptation and to raise awareness in different social groups. Nevertheless, obtaining financing resources is complicated without doing a pilot research before implementation.

Information sharing between the regions, including the stumbles that have occurred along the way, is necessary because they all may be facing similar hurdles. The role of regions and communities is key to resilience-building: coordination and cooperation must be strenghtened to address key challenges such as water management. In Valencia, measures and policies are being put in place to make the city greener and to foster a societal transformation through this process.

Paris is also trying to find a solution to the many crises it is experiencing. The social challenge in the resilient trasformation is a major one. Therefore, the city is working to embrace diversity and include different urban communities to face the climate crisis together. As the word resilience is new, the coordination and communication between different departments and sectors will be necessary in order to pull in the same direction. The Covid-19 pandemic crisis has shown that milestones can be achieved that until recently seemed unattainable. Making cities resilient to climate change seems difficult, but with the work and cooperation of all parties involved, a future for all in which no one is left behind can be built.

- Regional Climate Change Adaptation Plan (ReCCAP) of the Attica Region
- Urban strategy Valencia 2030
- Athens' integrated Climate Action Plan
- O Mission for Adaptation and Societal Transformation

## STREAM A: EUROPE ADAPTING TO THE CHANGING CLIMATE: WHERE DO WE STAND?



Every year new records are set for different climatic variables, such as maximum temperatures, low rainfall or floods. Faced with this extremely grave scenario, European cities and regions are trying to adopt effective measures and strategies to be resilient to climate change. To this end, the guidelines and programs designed at the European level can be of great help and serve as a reference when it comes to implementing actions taking into account environmental, economic and social aspects. In the development of these plans, the opinion and participation of citizens must be very present, as they can be the key to the success of these approaches.

#### How is your city adapting? An open conversation on implementing and accelerating climate adaptation



The design of a climate adaptation plan is not an easy task, as several aspects must be considered before deciding what activities should be carried out. The upcoming European Environment Agency (EEA) Urban Adaptation Report 2024 aims to be a practical guide where city administrations can learn from other urban areas on how to implement their own climate adaptation strategies. Representatives from Linz, Athens, Rotterdam and Wageningen University & Research shared their thoughts and experiences in this area.

Even though cities are facing financial and institutional barriers, all speakers agreed that there is enough knowledge to develop effective approaches. Nevertheless, citizens do not see a real acceleration and transitioning happening. One of the keys to solving this problem may rest with the citizens themselves, as both speakers and the audience considered that citizen participation is necessary in the decision-making process.

According to the representative of Athens, residents of the city are aware, well informed and socially active. They want to have an active role since the beginning of the projects, the results of which are more satisfactory when citizens' points of view are encompassed. The urban development director of the city of Linz also highlighted the relevance of including most vulnerable people in their projects, so that all social classes' voices are heard, enhancing a constructive level of discussion. By communicating this information not only to politicians but also to the citizens, the representative of Linz said that politicians' attention level would remain high, leading them to implement systematic actions and projects related to climate adaptation. Related to this, Rotterdam's Chief Resilience Officer stated that each city has its own reality and needs, so adaptation and ecosystem services in urban areas must be planned for according to those necessities before implementing an action plan. He also emphasised the importance of having feasible short-term actions as well as evaluating and communicating their impacts in the long-term.

Therefore, there is a necessity of showing an integral vision for the futures, as expressed by the representative of Wageningen University & Research. According to him, a discussion around this topic should be carried out in order to increase people's involvement in these processes.

#### From seed to tree: tackling climate hazards with the European Policy Support Facility



As climate-related disasters are happening more often, the European Commission is working on making Europe a climate resilient continent by 2050. In this way, it has launched the Policy Support Facility (PSF) within the Covenant of Mayors-Europe, with the objective of being a frontrunner for cities to implement the goals of the European Mission of Adaptation to Climate Change. This session served to bring together international experts, national stakeholders and representatives from two European cities, Bologna and Thessaloniki, to share some insights on their expectations from joining the programme as well as on how they are planning to tackle the challenges ahead.

Both municipalities are in need of innovative and more holistic approaches as well as more knowledge and tools to adapt to climate change. Representatives from both cities agreed that technical assistance mechanisms such as the PSF would support cities to move from plans to action and accelerate adaptation.

The chief of Urban Resilience Research Network (URNet), one of the international experts that will work closely with the cities within the programme, also shared some reflections on how this work could help close the gap between research and practitioners. According to the Director of the Disruptive Events educational programs on (inter)national Disaster Resilience, Migration and Climate Change, in order to best support cities to develop effective adaptation pathways and demonstration projects, a thorough understanding of the city's context is required, so that the available resources can be tailored to its needs and structures.

As stated by the Head of Climate Adaptation & Resilience Unit - DG Clima, knowledge and tools have to be better used and cities need to embrace uncertainty so that it does not hold them back from taking the right steps.

#### Find out more:

How is your city adapting?

 EEA Report 2022 - Advancing towards climate resilience in Europe: Status of reported national adaptation actions in 2021

From seed to tree

- Policy Support Facility
- O DG Clima
- ClimateADAPT platform
- O Urban Resilience Research Network

#### Workshop: transformative pathways for a more resilient, regional development in Europe and beyond



The Mission for Adaptation to Climate Change launched by the European Commission represents a key instrument for regions and communities that will need to accelerate their actions and commitment to become resilient by 2050. This workshop displayed to a broad audience of European stakeholders how regions can benefit from the different ongoing projects' solutions and upcoming activities and how they can engage further with them.

In order to engage stakeholders adequately, it is necessary to prove that actions are being taken and that their voices are being heard. However, it is important to make a good choice of the type of stakeholders that should be involved. Trying to refuse destructive thoughts and bringing in constructive ones is crucial, even if this gathering of ideas can lead to a scenario of conflicts of interests. In order to avoid breaking the consensus between all stakeholders, it is fundamental to define these interests and be strategic in incorporating them into the design process. Identifying different profiles and concerns to then separate them into groups can be helpful for that. In this classification, most disadvantaged groups should also be engaged by proactively approaching them instead of waiting for them to approach, as it is being done in Greece.

The actions that are going to be developed have to be tracked by using indicators. All the necessary components when defining an indicator need to be examined in detail, which includes evaluating the impacts and side effects the adaptation actions. Data management is also an important element for that; how administrations interact and how work needs to be done in an integrated way depends directly on proper data management.

Replicating other projects' activities must also become a key component to build climate resilient regions. As problems that two different projects are being faced with might be quite similar, there is an opportunity to learn what works or not and generate new knowledge from it. In this way, the economic resources are better used and the qualitative assessment is improved upon. For that purpose, it is necessary to be immersed in the specificities of the place and its stakeholders' landscape and start from what did succeed.

- Water Europe WOLLs
- EU Adaptation Strategy
- EU Work Program 2021 RECAP
- Green Deal Mission
- O Horizon Europe
- EU Mission Adaptation to Climate Change
- ARSINOE
- TRANSFORMAR
- <u>CLIMATE IMPETUS</u>
- <u>REGILIENCE</u>

#### Focus on Athens: from dealing with heat and wildfires to regenerating the city centre



Uncontrolled human activity over the past decades has been fuelling a problem that until now has been silent. Now, however, this problem is raging in the wildest of ways. Heat and wildfires have burnt thousands of hectares, from forests to houses, by storm. The recent IPCC report has also shown that by 2050, temperatures could be as much as 2.5°C higher than today. In order to prepare for this unprecedented scenario, Southern European cities like Athens have taken a first step towards planning against these climate hazards.

The City of Athens, with the support from European Investment Bank (EIB), is addressing the challenge of urban heat by implementing a series of climate adaptation interventions. For this purpose, the Natural Capital Finance Facility (NCFF), a financial instrument set up by the European Commission and the EIB, offers both financing resources and technical assistance to support the preparation, design, implementation and monitoring of projects that use nature-based solution for adaptation to climate change. City's 2030 Resilience Strategy has been developed with the goal to cool down the capital of Greece, whose high density makes temperatures, floods and land erosion more severe. The NFCC framework loan will support the strategy with the objective to realise the implementation of nature-based solutions in the city.

This plan aims to combine mitigation and adaptation approaches into one strategy. According to the Global Chief Heat Officer of Arsht Rock Resilience Center, EIB's interest in funding the project is because it has a robust strategic plan. In addition to this, the success of its implementation also depends on cross-complementarities between experts and committed people with local knowledge.

Speakers agreed that it is important to have people who are engaged and committed to local adaptation: bringing consultants with knowledge to support, but also local people who know the processes and procedures, are essential when facing demanding challenges such as the protection of cultural heritage. Stakeholders need to be familiar with the projects and strategies to know how to operationalise the vision for the city. Using tools such as websites, explanation about the project need to be reached out to stakeholders, who can share their thoughts about the ongoing process. To upscale this communication, the city has set a monitoring process in motion that will serve to receive more actual and holistic data from the city.

- European Investment Bank
- Greece and the EIB
- Athens Resilience Strategy for 2030
- Natural Capital Financing Facility (NCFF)
- O <u>Climatica</u>

# STREAM B: A DATA-DRIVEN AND CITIZEN-CENTRED APPROACH TO TACKLE CLIMATE-RELATED THREATS



Cities increasingly recognise the importance of a data-driven approach to adaptation and resilience building. Indeed, data are crucial in informing decision-making and prioritising actions. The sessions in this stream addressed the opportunities and challenges of using data. Often the problem does not lie in the lack of data, rather there is an abundance of data from various sources, both public and private. The challenge is to manage data properly, to integrate it into processes and projects, and to engage in important conversations about data sources, the way data are used, and how citizens are involved.

#### Masterclass on urban heat: from analysis to action



Heat is the extreme weather phenomenon with the highest mortality rate. According to a 2018 C40 report, over 350 cities around the globe experience summer temperature highs of over 35°C and this number will nearly triple by 2050. In order to assist local governments in facing the increase of higher temperature and longer heat waves, a number of European Union funded projects and initiatives have been developed to provide access to tailored services

and sources of information. One of them is REACHOUT shaping climate resilient cities, which aims to advance user-oriented climate services to support the implementation of the Green Deal. To organize its tools and services, the project adopted the Triple-A Toolkit, which consist of three pillars: Analysis (understanding risk), Ambition (strategy and governance) and Action (intervention and cooling solutions). The analysis pillar revolves undoubtedly around data. In fact, it is important to combine different kinds of data into well-compiled databases in order to support prioritization of actions and inform decision-making processes. Data needs not only to be collected but also to be used correctly. Different types of modelling are available, including microscale modelling, which offers higher resolution for all scales of intervention and is useful to benchmark design alternatives. However, there are trade-offs to be considered between the needed financial and technological resources and the precision of the information provided.

Data is needed, for example to better understand the urban heat island (UHI) effect in cities, where the impact of artificialisation is most strongly recorded at night. In fact, when minimum temperatures remain high throughout the night, this correlates with higher mortality rates because the human body does not have the chance to cool down and recover during the night. This ends up disproportionately affecting the parts of the population that are already more vulnerable. For example, more than 80% of reported heat mortality in Athens concerns (old) people living alone.

Recognizing the urgency of this issue, Athens adopted a Heat Resilience Strategy, consisting of awareness, preparedness and redesign phases.

The city combined data about social vulnerability overlapping four layers of information: demographics, accessibility to fresh sites, income levels and land cover, which enabled the identification of the location of the people most exposed to heat within the city territory. This can allow the city to better identify priority areas to implement cooling actions.

In fact, cities are currently "heat traps" and profound redesign is needed. Green infrastructure is key to contribute to urban heat mitigation and human thermal comfort at different scales. For example, Milan has advanced a tree planting program called ForestaMi, aiming to plant 3 million trees by 2030, within the whole metropolitan area, which would represent a 5% increase of canopy cover and absorption of 5MI tons of  $CO_2$  per year. However, there is a trade-off with water availability to be considered, which could be ameliorated with the use grey water to irrigate green spaces.

In addition to green infrastructure, it is important to target individual behaviour in order to increase heat resilience, especially of most vulnerable groups like elderly people living alone. For example, nurses and personal assistants could be trained to teach them what to do during heatwaves. Furthermore, more awareness should be raised, for example through storytelling exercises like "Athens' Climate Story Maps", which aims at making information more accessible with the use narratives. Another useful tool is the "EXTREMA Global" app, a free dynamic platform that can be used by city residents to find information about the user's nearest cooling space, drinking water spots, fountains, parks, including the possibility to plan walking routes through shaded streets and via cooling and water spots. Additionally, the app can be used as a citizen science tool, collecting feedback from citizens that can inform the city's action.

- C40 Report: The Future We Don't Want
- REACHOUT Project
- Athens Resilience Strategy for 2030
- **EXTREMA** Global app
- ARSINOE Project
- GrowGreen Project
- Milan's ForestaMi project
- Athens' Climate Story Maps



#### Living with water: planning for coastal adaptation, smart cities and resilient territories



According to the IPCC's Sixth Assessment report, the Mediterranean basin is warming at a faster pace than the global average and is a hotspot for highly interconnected climate risks. For coastal communities who have "sea in their DNA" (City of Matosinhos), ensuring resilience to climate-related risks like sea level rise, floods and erosion is a key priority.

In this session, the EU-funded project Coastal Climate Core Services (CoCliCo) was introduced. The project aims at helping cities in the goal of improving decision-making on coastal risk management and adaptation, by providing an open-source web platform informing users on present-day and future coastal risks. Practitioners from the coastal cities of Cannes, Matosinhos and San Sebastian came together to share their experiences in coastal risk assessment and management. They all stressed the importance of putting in place effective early warning systems in order to inform citizens, but also to more closely involve communities in active risk management. Water management needs to be collaborative, as promoted by "Water Europe", a multi-stakeholder platform advocating for smart water management that puts stakeholder inclusion at the centre, for example through the establishment of Water-Oriented Living Labs.

Cannes, a pioneer city for disaster risk management, has developed a strategy to anticipate major risks, limit their impact and enable inhabitants to acquire a risk culture in order to learn how to protect themselves and adopt the right behaviour. This includes real-life exercises for various hazards, like the simulation of a tsunami that took place in November 2021, with the objective of alerting the inhabitants and test their reactivity to this threat. San Sebastian has worked with the Basque Country regional office and the national government to improve its warning system and assess the risk and the economic impacts of river flooding, to which it is particularly exposed. Modelling tools can help in assessing the socio-economic impacts of climate change and estimate the costs of inaction, assisting decision-makers in identifying priorities for action.

According to data presented by E3Modelling, a company working on empirical modelling of the energy-economyenvironment nexus since more than 30 years, tourism is expected to experience a significant decrease due to climate change, severely affecting cities where the blue economy is strongly based on tourism, like in Matosinhos. However, working alone as one city is not enough: the speakers agree on the importance of working together with similar cities and developing joint projects, including potential collaborations in the Mediterranean hub on shared concerns like migration and tourism.

- E3Modelling
- IPCC (2022) "Cross-Chapter Paper 4: Mediterranean Region"
- CoCliCo Project
- Water Europe

#### Using data for accelerated climate action and resilience



Cities are working intensively to advance data-driven mitigation and adaptation policies. One of the tools aiming at supporting local governments in this endeavour is the Google Environmental Insights Explorer (EIE), helping to analyse emissions across key sectoral areas. For example, through the Project Sunroof, 3D models from high-resolution aerial imagery are used to assess solar energy production potential on rooftops, considering weather, angle, and time of sun exposure. Cities can then complement this data with their own datasets and integrate it in their own processes.

However, the use of Google data also entails some challenges: for instance, relying on data that is not open to all, from private organisations such as Google, raises issues of privacy and democratisation of data. Moreover, contrary to common perception, the issue with data is how much it is integrated in local processes and projects, requiring more expertise at the local level to manage and use data.

In the words of the representative from Gartner Inc., "we are flooded with data, but we are starving for information". It is important to bring data into a close enough perspective to drive more personalised measures and insights for people. It is also crucial to involve and empower citizens to be part of the solution. As pointed out by the City of Madrid, data can serve social matters as well as technical ones. For example, the challenge in the realisation of energy communities is not on the technological level, but rather on how to connect people who have to share something as important as energy production. Data can also be used to educate citizens, like in the case of the AIREAL project in Nantes, aiming at giving real-time air quality information to citizens and encouraging behavioural change. In order to make information more accessible to the population, the project used digital means of communication, creating a mobile app called "naonair", as well as non-digital means likeconducting an experiment in the middle of the city to integrate the information into the urban landscape. This approach reinforces the idea that people should be at the centre and that, whereas data are a fundamental tool to accelerate adaptation action, it is indeed a tool and not the goal.

- Google Environmental Insights Explorer (EIE)
- Project Sunroof
- O AIREAL project (Air Pays de la Loire)
- 🗘 <u>"naonair" app</u>

#### Digital twins to future-proof Europe's buildings and neighbourhoods



Both at the local and EU level, digital twins are increasingly emerging as a way to "make cities not just resilient but also more responsive to what is needed from the citizens" (City of Athens). Digital twins are in fact creating the basis for more accurate data-driven decision-making and aim at developing 3D models that allow to simulate and better understand complex relationships among elements of socioenvironmental systems.

Digital twins can have wide applications at different scales, helping cities to adapt their built environment and wider urban systems. In Athens, for example, a tool was developed to digitally replicate traffic changes in the city's streets, considering different scenarios including the implementation of road closures and traffic reduction measures. A great quantity of data is needed to develop accurate digital twins that can effectively support decision-making: the City of Brno decided to combine data from the more than 100 open data sets available in the city, both public and private, in order to integrate as many digital data layers as possible that can be useful for different sectors.

Whereas the quantity of available data does not seem to be a significant issue, accessing the right data in the correct format remains a challenge, together with data validation. Political willingness is needed not only to create the dataset, but also to maintain and update it. Another challenge is to whom the data are available, raising issues of security and privacy of digital twins. Nevertheless, there have been positive developments with regards to data openness. The role of standardization is also crucial "to facilitate communication between different parties" (Future Insight).

Furthermore, in order to harness the potential of data through digital twinning, it is important to have trained personnel that is able to use this technology and ensure interoperability at all levels. Public-private partnerships should also be facilitated, which was one of the objectives of the EU funded RUGGEDISED project. One of the participating cities, Rotterdam, worked with private partners and knowledge institutions to design a 3D Digital Twin in order to integrate the smart solutions developed within the project to visualize their impact and allow stakeholders to more easily access and improve information.

- Srno data-base
- DUET tool (Digital Urban Twins)
- Future Insight
- RUGGEDISED project
- EXCESS project

# STREAM C: BUILDING RESILIENCE WITH NATURE-BASED SOLUTIONS



As the European population is growing, the urban areas need to be developed in order to be an adequate place to live for all the citizens. To give an answer to the challenges that this growth represents, different European cities and regions have gone for implementing nature-based solutions in their cities. Sessions within this stream will collect the initiatives and strategies that some communities have designed to build resilient cities and the different aspects that need to be taken into account when following them.

#### A post-industrial revolution with nature



In this session, representatives from Zagreb (Croatia) and Cascais (Portugal), as well as urban restoration experts, met to discuss about how post-industrial districts can be revitalised using nature-based solutions (NBS), making cities not only more sustainable, but also more attractive, healthy and inclusive.

The post-industrial development of an area depends on the city's specific needs. In Zagreb, the implementation of green solutions made the areas accessible to the citizens, who showed great dedication in developing the project. Small changes, such as creating therapeutic gardens or designing zones to socialise and enjoy, generated numerous benefits for children, parents and the whole society. In Cascais, the implementation of community gardens brought an opportunity of integration for different social groups, e.g. immigrants and young people in school or university.

In addition to citizens' involvement, it is also necessary to have the means to finance the project so that it can be maintained and upscaled. As said from the Cascais representative, it is key to show the need for the renovation of this type of area: citizens made their voices heard for converting a new urban park into a vegetable garden, which convinced the municipality to finance the project. As the representative of Zagreb then said, if the cities start demanding these NBS, the municipalities have to respond. Hence, raising awareness among the citizens is essential.

Nevertheless, some issues need to be properly managed: on the one hand, is not easy to obtain land where NBS like gardens can be implemented. Since abandoned land is mostly not suitable for agriculture, money has to be invested in adequate land acquisition, which are not available for free; on the other hand, the quality of land and water must be guaranteed at all times. Zagreb and Cascais test the area used frequently in order to avoid any sanitary disorder. Greywater used for irrigation, which can be sometimes contaminated, must also be treated. After all, there is no green without blue and the reutilisation of greywater and wastewater can be a solution for water scarcity.

#### Utilising NBS for an equitable transition towards urban resilience



Europe's and the world's fast growing population has forced more land to be encroached upon in order to build houses and dwellings to live in. This workshop focused on the challenges of how to integrate NBS for a more sustainable urban development.

Representative from the Regional Agency for Biodiversity in Île de France, explained that the French region adopted a zero net land uptake strategy to foster urban renewal and renovation. To this end, they identify urban spaces that can be renatured, while at the same time the geographical expansion of the city is reduced

For the development of NBS in urban planning, different tools and approaches have to be applied. In the Danish city of Aarhus, floor maps have been tested in the internal municipality and with different audiences, from politicians and city officers to students. The fact that they can be used for storytelling and for engaging different stakeholders to generate and complement data shown in the map, makes them very practical for education, political dialogues, decision-making processes and urban planning.

The application of walkable floor maps for educational purposes could be advantageous for students; not only because their knowledge about this topic increases, but also because they gain the experience of participating in the design and implementation processes. The engagement of young people, as well as the involvement of other social groups, could help to push political decision in regards of the implementation of NBS. From the Hebrew University of Jerusalem, it was argued that culture and mind-set are as important as environmental laws and policies when designing, so that the social component should be taken into account. According to Alchemia-Nova GmbH, economic benefits must be set aside and efforts need to be made to attract members of the private sector to raise more funds to finance such projects.

#### Find out more:

A post industrial revolution with nature

- Cascais Ambiente
- Zagreb proGlreg project
- IRIDRA
- O <u>KEAN</u>
- NICE project

#### Utilising NBS

- <u>REGREEN project</u>
- Walkable floor maps REGREEN
- My building is green" project
- MULTISOURCE Alchemia Nova

# STREAM D: GOVERNANCE FOR RESILIENCE: FROM DISASTER RISK MANAGEMENT TO SUSTAINABLE TRANSFORMATION



In order to ensure that the upcoming risks do not have a radical impact on the current economic, societal and environmental situation, it will be essential to manage the tools at our disposal and design successful strategies to avoid reaching a scenario where risks are impossible to control. Cities need a sectoral change and a systemic and lost-lasting evolution at the same time. The sessions within this stream will analyse how to build resilient governance structures to address the challenges of the future.

#### Resilient governance: Chief Resilience Officers' roundtable



Building resilience requires engaging a wide range of stakeholders to identify holistic and cross-cutting strategies across departments and agendas. In order to achieve this, cities need to change their internal governance structures and how they work. Within this context, the role of the Chief Resilience Officer (CRO) and its Resilience Office within a city administration is key to bridge that gap between achieving sectoral change and ensuring systemic and long-lasting change. This roundtable brought together CROs from various municipalities to exchange perspectives and increase the understanding of their role in resilience governance.

For many cities, COVID was a learning experience. For example, Ramallah was exemplary in developing a green recovery plan. Cape Town's CRO explained that the city has faced a number of crises, which brought resilience to be viewed from a response perspective, focusing on how to communicate with citizens in a fast and effective manner. The Resilience Office provided opportunities to leverage resources and change the way resilience is perceived in the city. One major accomplishment was to develop a strong planning strategy that embeds resilience, hoping to further the mainstreaming of resilience in the wider governance structure. Manchester reported a similar situation, emphasising how the term resilience in the UK is strictly linked to crisis management and response: the challenge has been to expand this notion and integrate resilience into disaster risk reduction. With Manchester having been hit by several emergencies of different kinds in the past years, ranging from wildfires, flood warnings and the COVID-19 pandemic, the importance of response flexibility is evident. Supporting communities is a priority, which requires organisational leadership.

Cities have adopted different approaches to resilience governance. For example, the City of Rotterdam adopted a resilient neighbourhood approach, while Paris emphasised the importance of monitoring and integrating learning in the design of new policies, highlighting the need for a new narrative for the city's future through a citizenbased approach. When asked what keeps them from sleeping at night, the speakers voiced the challenges of their work: among them, the difficulty of acting in a context of multiple and continuous crises as well as the struggle in pushing climate resilience at the top of political agendas. For example, in the face of accelerating sea level rise: "city staff no longer know how to show how catastrophic what we are facing is". Lagos' CRO raised the issue of funding, for example, to address the urgent problem of inadequate social and physical infrastructure for the rapidly growing population.

These difficulties emphasise the need for joint efforts and bold actions to meet the challenges ahead. In this sense, the Global Assessment Report on Disaster Risk Reduction 2022 is a great call to action, to act faster and on a larger scale.







#### Making cities resilient 2030: Resilience Hubs: from expectation to reality



Almost two years since the Making Cities Resilient 2030 initiative kicked off and a lot has already been done. Seven European cities have been designated with the role of Resilience Hubs already, thanks to their longstanding experience in building resilience while facing a number of urban challenges. This edition of EURESFO was the perfect floor to welcome the City of Wroclaw in joining this group, as it was officially announced as a Hub during the event.

Resilience Hubs are cities with innovative and integrated governance systems, allowing them to embrace holistic Disaster Risk Reduction (DRR) strategies and embedding resilience in other planning mechanisms. Governance structure and organisation is very much cultural and context dependent, but good practices are useful to be adapted and adopted in any city. This session brought together the cities of Barcelona, Greater Manchester, Malmö and Matosinhos to explore these contextual features, understanding which are their main differences, but also points in common.

Greater Manchester shared the main barriers faced along the resilience journey, in effectively demonstrating its capacity to work across organisational and administrative boundaries as one Greater Manchester system. Experiences from Barcelona and Matosinhos presented key crossdepartmental instruments established in their local context to foster interdisciplinary collaborative mechanisms. Moving beyond the internal public administration boundaries, we could hear from Malmö the policy mechanism that led the city collaborating locally with a broad range of stakeholders, not only the private sector and academia, but also with NGOs such as Resilient Regions Association, Green Roof Institute and Swedish Water Research Institute, to name a few.

Being recognised as a Hub comes with specific commitments to catalyse resources and creating spaces where resilience practitioners from other territories can learn and get support, through peer to peer learning, leveraging the power of the network in their region. The city representatives had the chance to showcase their plans to support peer cities in building resilience and take the lead to address the climate emergency, inspiring and bringing cities on board. The way forward is still paved with many challenges that can only be addressed when knowledge is shared widely, and the right cooperation spaces are available.

- 2022 Global Assessment Report on Disaster Risk <u>Reduction (GAR)</u>
- <u>Making Cities Resilient 2030</u>
- Expanding our network of leaders with Matosinhos
- <u>City of Malmö joins 'Making Cities Resilient 2030'</u> initiative to strengthen fight against climate change
- Barcelona's top tips for tackling disaster risk: Inclusion and participation at the heart of resilience building

# UKRAINE CITIES ON THE PATH OF RESILIENT & SUSTAINABLE POST WAR RECOVERY



This workshop, co-organised by UNDP Ukraine, the City of Malmö, and the Nordic Urban Resilience Institute, addressed the challenges of handling immediate needs of war-torn Ukrainian cities, while simultaneously creating strategies and plans for a sustainable and resilient post-war recovery.

The perspectives and latest updates on the situation in Ukraine were brought from representatives of three cities, Irpin, Vinnytsia and Rvine. It was made clear how Ukrainian cities' pre-war ambitions to reach sustainability levels of the greenest European cities are still present. In the words of the Deputy State Secretary of the Government of Ukraine, the new reality of the war is posing devastating challenges, but also providing the opportunity to re-design cities entirely. The war has given a new meaning to the term "resilience", putting sustainability at the centre of new development and reconstruction strategies, especially for big cities. For this, both financial resources and technical knowledge are needed. The session represented a first step to exchange knowledge, with the objective of pursuing partnerships with European cities to exchange ideas and best practices.

The challenges faced by Ukrainian cities are many: providing housing for internally displaced people (IDPs), together with medical aid, jobs creation and integration opportunities; sustaining economic recovery and resilience, through business relocation. Addressing the pressing needs for energy and water, building back key living and social infrastructure is also of high priority, together with ensuring safety by providing bomb shelters in school buildings, preparing civil infrastructure for winter temperatures and securing the funding needed for reconstruction. Participants exchanged ideas with experts from the research, academia, private sector and local governments to support Ukrainian cities' sustainable recovery and resilience plans. In a World Café format, they explored how to respond to those complex challenges while pursuing SDGs and adapting to a changing climate. Opportunities were identified to adopt circular economy principles, such as recycling construction materials from demolished buildings and using them to build bike lanes and other infrastructure. The importance of helping the next generation not to think about the drama and pain of the war, not to abandon IDPs and to help them return to their places of origin was one of the key takeaways, offering psychological support and helping them think about a new future. This requires cities' transformation vision to be accessible for citizens to take part in. At the same time, it is important to pursue shortterm and long-term goals side-by-side. Tackle the immediate emergencies, enabling fast recovery, and at the same time plan a long-term strategy to prepare for the shocks to come and build resilience along the way.

- Ukraine Rapid and Damage Needs Assessment, World Bank
- Platform <u>"Cities on the path of resilient and sustainable post-war recovery</u>", collecting information and case studies
- O Irpin Help Platform

The European Green Deal offers in fact an opportunity for Ukraine cities to join European cities in their progress. Vinnytsia's Local Green Deal was a good example of how Ukrainian cities' existing strategies can be used to build partnerships with European cities, not only to help with shortterm recovery, but also with long-term strategy, developing Mutual Green Deals partnerships.

Funding opportunities for fast recovery should also be explored, taking into account the drawback of European Commission-funded projects in terms of the long timeframe needed for project proposal, development and implementation, which is not fit for the urgency that Ukrainian cities are facing.

One of the session's key outcomes was the formulation of the **Ukraine Task Group**, coming together to help support Ukrainian cities in their journey towards integrated, resilient,

green post-war recovery and sustainable development. The Task Group will start mapping the existing displacement challenges faced and the impact of damage and loss as well as key initiatives and actors providing impact on the ground, and defining key technical expertise that can be provided from existing EU projects in different sectors, such as Building and Housing (EU Bauhaus), Urban energy (Coal Regions in Transition in Western Balkans and Ukraine) and Nature Based Solutions (NetworkNature NBS Ukraine Hub/European NBS partnership). The ICLEI Ukraine Task Group so far engaged with key partners from the public and private sector to establish opportunities for collaboration, with the aim to empower local self-government and multilevel decision making: by providing cities with demanddriven advisory services, while helping coordinate existing efforts to best align with Ukrainian cities' strategic vision, and by facilitaing a City-to-City Knowledge Platform to help exchange good practices between Ukrainian and EU cities.



# FINANCING A RESILIENCE PARTNERSHIP IN EUROPE AND BEYOND



In order to accelerate action, local governments are leveraging innovative financing mechanisms like emissions trading systems, green bonds and climate funds to pay for necessary infrastructure upgrades and climate mitigation and adaptation initiatives. Stronger synergies are needed to support cities in finding the resources they need to achieve their climate adaptation targets and implement their action plans.

About 80.000 cities, towns and regions in Europe are currently covered and supported by various organisations and institutions. This shows that a wide community of practice already exists, including all the people gathered at EURESF022. To support local governments more effectively, their demands must be followed up through an integrated approach, in the form of a European Resilience Partnership, involving a community of responsibility as well as of practice. "We need to better understand what the (limited) capacity of local authorities is and decide how we can, as a partnership, step in to support them" (Global Covenant of Mayors for Climate and Energy).

# What is a European Resilience Partnership and why is it needed?

Cities need resources to advance their adaptation actions and a European Resilience Partnership can support a wise and coordinated use of the existing assets, helping cities in their resilience journey by providing access to partners, knowledge and support, in different ways. For example, providing necessary knowledge to access funding, investment capital and financing data for climate resilience projects, building institutional capacity for adaptation cobenefit measurements, and strengthening collaboration and coordination between local, regional and international actors. This would be achieved, for example, through the establishment of a learning platform to exchange knowledge, leverage funds and existing tools to monitor, evaluate, compare, and report cities' contributions to adaptation financing.

#### What is needed to establish this partnership? How can it be formed? What are the roles and responsibilities of different partners?

Horizon Europe's Mission Adaptation is currently one of the main accelerators for action to kick-start the systemic transformation that is needed. It is within this framework that a Community of Practice can really take shape, through networking, partnership and contacts. In fact, more financing opportunities are opening up at the European level, within the Mission for Adaptation to Climate Change and Societal Transformation. Starting conversations with insurance companies as potential investors in adaptation action is key. All the speakers stressed the need to engage with national authorities and organisations, as they have financing opportunities that local governments could tap into. Small and mediumsized cities need particular support as they face greater constraints in securing funding. Above all, it is essential to join efforts to bring adaptation to the top of the political agenda. Common standards and principles of partnership financing for resilience building are also needed, calling for addressing fundamental questions like "*Resilience of What?*" and "Resilience to What?".

A Resilience Partnership could also accelerate the impact of climate finance provided by Multilateral Development Banks, like the Council of Europe Development Bank (CEB). The challenge in terms of financing is to mobilise finance for multisectoral solutions and at the same time making sure that the most vulnerable are not left behind. For this, it is important to link finance for resilience to social impact and to empower communities, as highlighted in the CEB technical brief (2022), where sustainable financing solutions - including the diversification and optimal use of their financial resources - are included as one of the critical enabling actions to strengthen resilience at the neighbourhood level, and explicitly address vulnerability factors within communities.

The call for establishing a strong European Resilience Partnership and to advance joint programmatic work, in collaboration with the European Commission, is summarised in the words of Holger Robrecht (Deputy Regional Director at ICLEI Europe):

"In light of the war in Ukraine we need collaboration – let's respond as resilience experts! We can have the capacity to do so if we are a partnership. We have limited means, but with the will to break silos, a lot can be done, such as building common standards for financing. We need to ease access to financing and in order to scale-up – we need to promote these great solutions that we have seen at the Forum."



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