

8th Global Forum on Urban Resilience and adaptation *Reviewing local progress on the resilience targets of SDG 11* 4 - 6 May 2017 | Bonn, Germany

Resilient Cities 2017 will take place over three days from May 4th to 6th including high-level plenaries, trainings, Reality Check Workshops and parallel thematic panel sessions which will feature discussions on a range of new and recurring themes related to urban resilience and urban adaptation to climate change.

These themes will cover a variety of key resilience topics including: ecosystem-based adaptation; governance and collaboration; urban risk data and indicators; adaptation and Disaster Risk Reduction planning and policy. Additionally, this call for contributions would like to particularly encourage submissions for the following themes:

- **Hot topics: Urban resilience challenges in focus** (theme 1)
 - Local implementation of SDG11 and the Sendai Framework for Disaster Risk Reduction;
 - How cities prepare and respond to disease outbreaks or other climate-related health risks;
 - Forced migration in urban areas;
 - Risk transfer and insurance; and
 - Data security and management.
- **Long term investments: Financing resilience** (theme 7) - with a special focus on direct access funding mechanisms for cities; and
- **Preparing for the worst: Minimizing and managing loss and damage** (theme 4) - providing an overview of the current challenges on climate disaster risk management and the implications of loss and damage for cities and Small Island States.

Contributions for our parallel sessions are also welcome under the new and recurring themes listed below (themes 2, 3, 5, 6 and 8).

Please read on for the overview and detailed descriptions of the suggested Resilient Cities 2017 congress themes.

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Summary overview of congress themes:

- 1. Hot topics: Urban resilience challenges in focus**
 - 1.1. Local implementation of SDG 11 and the Sendai Framework for Disaster Risk Reduction
 - 1.2. Managing climate-related health risks
 - 1.3. Risk transfer and insurance
 - 1.4. Forced migration in urban areas
 - 1.5. Data security and management
- 2. Resilience in action: Local case studies and examples**
 - 2.1. Risk assessment and adaptation planning
 - 2.2. Implementing adaptation policies and actions
 - 2.3. Integrated climate action linking adaptation and mitigation
 - 2.4. Integrated resilience planning (e.g. social, economic, environmental, disaster risk)
- 3. Standards of excellence: Informing and mainstreaming good practice**
 - 3.1. Improving data collection and knowledge sharing for evidence-based adaptation planning
 - 3.2. Resilience indicators and standards
 - 3.3. Monitoring and evaluating implementation (measurable, reportable, verifiable, accountable)
- 4. Preparing for the worst: Minimizing and managing loss and damage**
 - 4.1. Climate and Disaster Risk Management
 - 4.2. Loss and damage implications for cities and Small Island States
- 5. Resilience for all & all for resilience: Governance and collaboration**
 - 5.1. Multi-level governance: vertical policy integration and international-national-local cooperation
 - 5.2. Horizontal integration: Strengthening city-region linkages and cities-to-cities partnerships
 - 5.3. Multi-stakeholder collaboration and community-based adaptation
 - 5.4. Inclusive resilience-building with informal settlements and the informal sector
- 6. Support systems: Resilient infrastructure and resource management**
 - 6.1. Ecosystem-based adaptation, including blue/green infrastructure and biodiversity
 - 6.2. Waste and water management strategies to reduce climate risks
 - 6.3. Strengthening energy systems including through enhanced efficiency and security
 - 6.4. Resilient and adaptive building and construction
 - 6.5. Resilient urban food systems
- 7. Long term investments: Financing resilience**
 - 7.1. International, regional, and national funding for local action
 - 7.2. Enabling direct access funding mechanisms for cities
 - 7.3. Locally sourced and own-funding mechanisms
 - 7.4. City-business collaboration and attracting private investment
- 8. Other**

Resilient Cities 2017 calls for contributions themes and subthemes:

Theme	Description
<p>1. Hot topics: Urban resilience challenges in focus</p> <p><i>This category includes a collection of current and pressing issues for urban resilience in 2017. Some issues such as climate related-health risks and forced migration are not new, but represent serious challenges where further attention and support is needed - as demonstrated by recent events including the Zika virus outbreak and the Syrian refugee crisis. These issues are testing cities preparedness and resilience capacity demonstrating that there is much more to be done. The remaining issues under this category address emerging opportunities and questions in how resilience plans are implemented at the local level: As data systems become increasingly sophisticated and centralized, what resources should cities put toward risk data collection, management, and security? As cities implement city-wide resilience strategies, how can they utilize risk-transfer mechanisms and partner with the insurance industry to reduce risks as well as costs? Finally, how is the implementation of SDG 11 and the Sendai Framework impacting local adaptation and resilience efforts?</i></p>	
<p>1.1 Local implementation of SDG 11 and the Sendai Framework for Disaster Risk Reduction</p> <p>1.2 Managing climate-related health risks</p> <p>1.3 Risk transfer and insurance</p>	<p>This category welcomes contributions on the progress of local-level implementation of Sustainable Development Goal 11 (resilience targets) and the Sendai Framework including examples of local-national-international cooperation and policy integration. The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) includes several targets and priorities for strengthening DRR including through the empowerment of local authorities and communities. Activities are currently underway to support the implementation of the new framework at the local level (e.g. key indicators, “New” Ten Essentials and Making Cities Resilience Campaign, Public-private partnerships). These activities are aligned with Sustainable Development Goal 11 “Make cities inclusive, safe, resilient and sustainable.” Targets 11.5, 11.b, 11.c of SDG 11 focus on specific steps to achieve urban resilience. Initial processes are underway to develop indicators to define national baselines and roadmaps for SDG implementation. The New Urban Agenda (Habitat III) may also provide an implementing framework for these targets.</p> <p>While climate change is anticipated to have profound implications for public health and well-being, the relationship between health and climate change is currently underexplored. Cities ought to integrate health considerations into their adaptation planning and prepare for the increasing risk of vector-borne diseases (e.g. malaria and dengue fever) on their territory, as well as for the imminent heat-related risks and neglected Water and Sanitation (WASH) management consequences. Examples of how cities prepare and respond to disease outbreaks or other health risks (dehydration, cardiovascular, respiratory, stomach and intestinal illness due to heat waves, poor air quality and heavy precipitation) will be showcased, while policy-making and approaches for integrating health into urban planning and resilience strategies (e.g. improving WASH infrastructure and promoting behavioral change) will also be shared.</p> <p>The insurance industry is a key stakeholder to engage throughout the resilience planning process due to its extensive experience in risk assessment, modelling and management. Disaster risk financing in the form</p>

of insurance and other risk transfer techniques is also an essential tool to consider when designing and funding resilience strategies. This category welcomes examples of public-private partnerships with insurance partners aiming to increase urban resilience. It also seeks examples of risk transfer strategies applied by local governments and (re)insurance companies, including international risk transfer instruments (catastrophe risk insurance), local risk transfer mechanisms (e.g. through municipal budget reserves for disasters), and community-based disaster risk transfer (e.g. micro-insurance and social safety nets, esp. for urban poor communities). Innovative reinsurance schemes (e.g. Flood Re) will also be discussed.

1.4 Forced migration in urban areas

In 2015, many cities witnessed an unprecedented humanitarian crisis due to the inflow of forced migrants. Lessons learned from these experiences have broad implications on resilient urban management, urban planning, infrastructure adjustment and social policy implementation. This category will feature local experiences with managing the influx of individuals forced to migrate, internally displaced people and refugees. Contributions may include examples of cities accommodating climate refugees, as well as disaster and conflict-induced migrants, with applicable and replicable lessons learned for urban climate adaptation and resilience planning.

1.5 Data security and management

Cities' services are increasingly dependent on centralized, highly complex and interconnected Information and Communication Technology (ICT) systems which generate and store significant amounts of data, including for risk assessment, management, and disaster response. Challenges related to data security and reliability are inevitable. How can cities ensure the security and integrity of their data? When are hi-tech ICT solutions preferable to low-tech solutions and when can they lead to mal-adaptation or overburden resources? How can cities guarantee the continuity of essential ICT support systems (e.g. for transport, healthcare, public safety and security) in the face of climate related shocks and stresses? This theme welcomes contributions that will advance the debate on data security and management in cities. This may include examples of innovative data management solutions that leverage digital information efficiently while protecting it against malicious violations, unintentional damage and natural disasters.

2. Resilience in action: Local case studies and examples

This category welcomes examples of different types of plans from comprehensive adaptation plans, climate-related disaster risk management strategies, climate adaptation and mitigation plans, and integrated resilience planning approaches among others. Contributions under this theme will also share local governments' experience in implementing such adaptation policies and actions discussing challenges and opportunities that can lead to failure or success.

2.1 Risk assessment and adaptation planning

This category will feature case studies of completed risk and vulnerability assessments. These examples may include specific tools, methods, frameworks and/or resources for technical assistance. In addition, it will also feature examples and case studies of cities and Small Island States at all stages of adaptation planning. Cities in the process of developing their climate change adaptation plans and policies will share their experience and present useful tools, planning concepts and approaches to assist other local governments to start their resilience path. Cities with completed adaptation

<p>2.2. Implementing adaptation policies and actions</p> <p>2.3 Integrated climate action linking adaptation and mitigation</p> <p>2.4. Integrated resilience planning (e.g. social, economic, environmental, disaster risk)</p>	<p>plans and implemented projects, will share lessons learned and details on the planning process, including challenges and solutions for replication elsewhere in the world.</p> <p>This category will feature examples and case studies of cities and Small Island States implementing adaptation policies and actions. Cities will share lessons learned throughout the process advising other local governments on how to improve their procedures based on common challenges leading to failures or success. Contributions may also discuss the level of political leadership and autonomy necessary to ensure implementation. This might include cooperating with different stakeholders and partners, as well as responding to community positive or negative reactions.</p> <p>Instead of considering climate change adaptation and mitigation as separate, competing topics, cities can pursue an integrated, complementary approach. There is a need to further explore the conceptual and practical relationship between adaptation and mitigation, including synergies and conflicts, and investigate the role of urban spatial planning in facilitating integrated climate action. Examples and lessons learned from cities developing and implementing integrated climate action plans and strategies will be shared. Contributions shall also discuss the synergies and trade-offs between these two areas and focus on institutional barriers and solutions.</p> <p>This category will feature examples and case studies of cities, regions, and Small Island States with integrated resilience strategies that simultaneously consider social, economic, environmental and/or disaster risk concerns. Contributions may highlight cross-sectorial approaches that address interdependencies between sectors (e.g. business, health, resources, housing, infrastructure, energy, resources, land use management, etc.) and city systems to increase efficiency, institutional performance, and quality of life.</p>
<p>3. Standards of excellence: Informing and mainstreaming good practice</p> <p><i>Contributions under this theme showcase examples of how local government practitioners and stakeholders manage information for evidence-based adaptation and resilience action. This includes strategies for data collection, analysis, and information sharing between public and private institutions. It also relates to the creation and application of standardized indicators and measurements as well as individual approaches to monitoring and evaluating implementation in a measurable, reportable and verifiable manner.</i></p>	
<p>3.1 Improving data collection and knowledge sharing for evidence-based adaptation planning</p>	<p>High quality data and information on climate change impacts at the local level, as well as cities' vulnerability and "readiness" to adapt are needed to provide a basis for informed decision-making. Tools and strategies for improving data collection, as well as accessing and sharing data between agencies and stakeholders will be presented. This can include strategies for bridging the researcher-practitioner divide, making data publicly available (e.g. open data), or establishing institutional frameworks for sharing information. This category also welcomes examples of how spatial data and analysis tools, including Geographic Information Systems (GIS) can be used throughout all phases of adaptation planning, from risk assessment to disaster response, to increase urban resilience.</p>

<p>3.2 Resilience indicators and standards</p>	<p>Creating more resilient cities and communities has been established as a core goal of international agreements including the Sustainable Development Goals, The Paris Agreement (UNFCCC), and the Sendai Framework for Disaster Risk Reduction (UNISDR). Resilience to disasters and climate risks is also an important consideration for public and private development strategies and investment decisions. To advance, there is a need for standardized indicators and risk data to measure and monitor resilience. This category welcomes contributions related to the development of international indicators and standards (general or sector-specific) on resilience (e.g. ISO 31721, indicators for UN targets, resilient infrastructure standards, etc).</p>
<p>3.3 Monitoring and evaluating implementation (measurable, reportable, verifiable, accountable)</p>	<p>MRV approaches increase visibility of local resilience actions while supporting transparency, accountability, and results-based planning. This category will feature examples of Monitoring and Evaluation (M&E) systems used by cities that track resilience in a way that is measurable, reportable and verifiable (MRV) (an example of measurable target is: “halve the number of residents at risk from landslides by 2030”). Cities’ experiences in designing their own M&E systems using MRV thinking may also be shared.</p>

4. Preparing for the worst: Minimizing and managing loss and damage

Cities must prepare for when disasters happen and be ready to appropriately respond and recover. Disaster response not only requires preparedness of government and emergency services, but also of citizens themselves. Resilient recovery and reconstruction examples will be showcased and methodologies to avoid and prepare for the expected damages from climate change impacts will be shared. In addition, this category will explore responses to unavoidable loss and damage (L&D) from climate change by nations and communities.

<p>4.1. Climate and Disaster Risk Management</p>	<p>Climate-related risk management aims at minimizing the expected losses from climate change and maximizing the expected benefits in terms of taking advantage of climate trends, e.g. economic and livelihoods diversification. This category will feature examples of early warning, improved forecasting, and Disaster Risk Reduction (DRR) measures and tools, planning methodologies, as well as implemented disaster response strategies.</p>
<p>4.2 Loss and damage implications for cities and Small Island States</p>	<p>As sea levels rise and landscapes transform due to climate change, certain impacts will be unavoidable, requiring cities to cope rather than adapt through measures such as relocation. Contributions under this theme will explore emerging mechanisms for dealing with inevitable and unavoidable loss and damages (L&D) incurred as a result of climate change. As the Warsaw International Mechanism for Loss and Damage (L&D) is subject to review at the twenty-second Conference of the Parties (COP 22), taking place in Marrakesh in November 2016, contributions may also discuss its current mandate and challenges regarding action and support for its implementation at the local level.</p>

5. Resilience for all & all for resilience: Governance and collaboration

Effective urban resilience strategies depend on the capacity of local governments and institutions to implement evidence-based actions, in cooperation with multiple stakeholders and levels of government. In this matter, good

governance is essential to support the proliferation of successful practices and provide the basis for sustainable and equitable climate policies. This includes inclusive governance structures that engage the urban poor and the informal sector as well as other socially marginalized and disaster-vulnerable populations. Questions of governance and obstacles to promote vertical and horizontal integration will be part of this category. In addition, strategies to include marginalized groups through participatory approaches for achieving inclusive and resilient urban development will be discussed.

5.1 Multi-level governance: vertical policy integration and international-national-local cooperation

Support from higher levels of governance is needed for effective local resilience implementation. Those frameworks can take many forms, such as laws, financial incentives linked to performance indicators, advisory panels to monitor progress, funding programs by national or regional governments and pilot projects. Furthermore, local governments' input on local needs and realities should be incorporated into national and international decisions and policies. Examples of local-national-international cooperation and policy integration will be showcased.

5.2 Horizontal integration: Strengthening city-region linkages and cities-to-cities partnerships

In an effort to improve the effectiveness of local public services delivery and the implementation of development strategies, horizontal integration between regions (city region networks) or between municipalities and its agencies is important to ensure the health of regional systems (e.g. water catchments, transportation, electricity grids, food supply). These systems are complexly interdependent, sometimes sharing several different functions and reaching beyond the city boundaries to the wider region. Accordingly, its exposure to climate change shocks poses a risk to the system and the region as a whole. Thus, cities need resilient, integrated infrastructure, designed and managed at the city-region scale. In addition, international cities-to-cities partnerships on resilience provide a valuable opportunity for shared learning and exchange between cities facing similar risks. Examples for city-region and cities-to-cities partnerships will be shared.

5.3 Multi-stakeholder collaboration and community-based adaptation

Due to its complexity and interdependencies, resilience building depends on knowledge, ownership and support from various stakeholders. Collaboration is a key element for reducing uncertainties and building trust through effective measures based on transparency. Representatives from all sectors (local government/public, private including small businesses and enterprises, academic, research, civil society, non-government organizations, including faith-based organizations) can share experiences and best practices for effective collaboration. Examples of community-based solutions for urban resilience will also be shared. These include bottom-up approaches to risk and vulnerability assessment as well as planning and policy development and implementation. Contributions under this theme might also explore advances in participatory approaches considering gender-sensitive aspects, fostering youth participation and promoting the inclusion of marginalized groups such as the urban poor, informal workers, LGBT, elderly, disabled, indigenous, refugees and internally displaced populations.

5.4 Inclusive governance structures and policies for informal settlements and the informal sector

The rapid rate of urban growth and proliferation of informal settlements in highly vulnerable locations adds to the complexity of urban resilience and adaptation, especially in cities struggling to reduce poverty and increase economic growth. Examples and lessons learned will be shared on working with the informal economy, informal institutions, and residents of informal settlements as full citizens in land-use and resource management decisions to reduce their vulnerability. Inclusive governance structures and policy

approaches will be explored. These may address obstacles and solutions related to slum upgrading, legal rights and legislative mechanisms (e.g. land tenure), gentrification and relocation, and collaboration with representative associations of informal workers and residents in official resilience efforts.

6. Support systems: Resilient infrastructure and resource management

Urban economies and societies depend on built infrastructure and the efficient management of natural resources for the delivery of goods and services. Urban growth combined with climate change threatens food, water, and energy supplies; interferes with delivery and management systems; and can lead to damage or severe strain on built infrastructure. This category welcomes examples of disaster-proof, smart, adaptive, and integrated infrastructure. This includes green building design and construction; intelligent, multi-purpose architecture; and blue/green infrastructure that utilizes ecosystem services provided by biodiverse environments for ecosystem-based adaptation. This category also calls for contributions related to the resilient management of water, food, energy, and waste. It is important to consider the multiple dimensions of each system, including formal and informal systems. Cities and experts will share innovative approaches and strategies for ensuring resource efficiency and security that contributes to more resilient, adaptive cities.

6.1 Ecosystem-based adaptation, including blue/green infrastructure and biodiversity

This category features examples of ecosystem-based adaptation strategies, including projects utilizing green and blue (water) spaces and local biodiversity with the aim of preserving valuable ecosystem services and building resilience. Blue-green infrastructure can be used to integrate ecosystem based adaptation into spatial planning and urban design. Approaches for achieving ecosystem-based adaptation and examples of implemented projects will be discussed.

6.2 Waste and water management strategies to reduce climate risks

Strategies focused on managing floodwaters during wet seasons, maintaining water security during droughts, and tackling salinity intrusion - which contaminates potable sources and peri-urban agricultural areas that service the cities - will be shared in this category. Contributions related to water and solid waste management will also be accepted, as poor solid waste management can exacerbate flooding by blocking drainage systems, for example. Cities and experts will share innovative integrated approaches and strategies for ensuring water resource efficiency, and discuss institutional and technical challenges and solutions for improving water and solid waste management. Perspectives on collaboration among cities for dealing collectively with transboundary water issues in a comprehensive way at a regional level are also welcome.

6.3 Strengthening energy systems including through enhanced efficiency and security

Rapid and disperse urbanization and population growth increase demand for resources, overstressing existing infrastructure. In addition, extreme weather events, disasters and accidents endanger energy supply systems. The result is system failures during extreme events and, for many cities, regular power cuts during peak hours. Both disrupt daily activities and lead to failures in other vital urban systems such as transportation, public health, and emergency services. Contributions under this theme may discuss energy efficiency and security measures as relevant aspects of urban resilience.

6.4 Resilient and adaptive building and construction

This category welcomes contributions focusing on adaptive, resilient, and green building and construction methods; strategies and approaches for combining mitigation with adaptation measures (e.g. green roofs); and innovative architectural and engineering solutions (e.g. raising the floor height, floatable foundations). Strategies for utilizing urban design and public

<p>6.5 Resilient urban food systems</p>	<p>space to reduce disaster risk and combat the Heat Island Effect will also be shared.</p> <p>Urbanization, dependency on external food production, inadequate distribution networks, inefficient markets, and threats to global supplies put urban food systems and the food and nutritional security of citizens at risk. Cities must design and develop food systems to suit their own geographical, climatic, and socio-economic conditions. This may involve redesigning distribution, strengthening city-region linkages, establishing urban food networks, introducing local and national policies to institutionalize and encourage urban and peri-urban agriculture, and implementing ecosystem-based solutions. Technology and innovation is vital in this process. Examples from around the world illustrating resilient urban food systems will be showcased. Session(s) on this theme will be organized in support to the new Urban Food Policy Pact.</p>
<p>7. Long term investments: Financing resilience</p> <p><i>Contributions in this category focus on how to realize local governments' adaptation plans and initiatives by leveraging funding from international, national, regional and local sources. Ways to promote direct access to funding, mobilize innovative mechanisms, and steer private investment for urban resilience will also be discussed.</i></p>	
<p>7.1 International, national, and regional funding for local action</p>	<p>There is work to be done to align funding agendas to local needs and assist cities in accessing climate financing from international, regional, and national sources. This encompasses overcoming possible language barriers between the local governments and investors while defining a shared value approach towards funding climate compatible development. Therefore, this category calls for contributions from international financing institutions, as well as local governments for approaches on how to better align their agendas. Examples of programs and initiatives supporting local governments in accessing funds are also welcome.</p>
<p>7.2 Enabling direct access funding mechanisms for cities</p>	<p>Without direct access to funding, local governments are less able to control spending on resilience and pursue integrated strategies. This theme welcomes examples of how local governments, intermediary organizations, and funders are addressing these challenges by questioning and re-imagining conventional financial mechanisms, institutional structures, policy frameworks, and public-private partnerships. It will also include examples of initiatives promoting direct access to funding, especially for small and intermediate sized cities, which are still highly dependent on national level and government budget approval and control and unable to meet rigid fiduciary requirements set by international funders.</p>
<p>7.3 Locally sourced and innovative own-funding mechanisms</p>	<p>Locally-controlled funding, supported by good governance, can allow cities to create financing mechanisms that are shaped by their needs and not the other way around. Local governments can apply a range of measures to locally source funding for resilience measures (e.g. through taxes, fees, subsidies and incentives). This may also include green bonds, community-driven finance mechanisms (e.g. locally managed funds), or bundling projects within or between cities. This category welcomes contributions illustrating creative and innovative approaches and mechanisms for financing climate compatible development both in the Global North and the Global South.</p>

7.4 City-business collaboration and attracting private investment

Private sector investment is crucial for achieving the funding volumes necessary for climate adaptation. However, lack of municipal credit ratings or policy barriers can hinder the flow of private capital for adaptation into cities. Contributions from investors, developers as well as local governments demonstrating efforts to stimulate an enabling environment for investment are welcome under this theme. Ways of sharing, measuring and marketing the added value of resilience shall be explored, as well as ways to reduce the risks of long term resilience investments. Finally, examples of shifting towards green economy, ecotourism and other actions to simultaneously address environmental and economic concerns within the city may also be covered.

8. Other themes

This category provides an opportunity for contributions addressing aspects of resilience and climate change adaptation which are not yet covered by themes 1-7 for the Resilient Cities Program Committee to consider for inclusion. Potential issues not raised above may include mal-adaptation, climate change and human security, and the psycho-social aspects of resilience. Other examples could focus on positive innovations and trends, e.g. online “marketplaces” for resilience solutions and innovative technology used for adaptation planning and implementation of resilience strategies. Contributions in this category may also follow up on initiatives, research, or case studies featured at previous Resilient Cities congresses.