

Third meeting of the Technical Dialogue (TD1.3) Inputs to Inform the Subsidiary Body for Scientific and Technological Advice

Global Stocktake



The Local Governments and Municipal Authorities (LGMA) Constituency thanks the UNFCCC for allowing the participation of non-Party stakeholders in the Technical Dialogues of the Global Stocktake, held in 2022 at the Bonn Climate Change Conference, and at COP27 in Sharm el-Sheikh, Egypt. The LGMA welcomes the decision of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), to design the GST in the spirit of inclusive Talanoa dialogues, which responds to the urgent need for multilevel and cooperative action recognised by the Glasgow Climate Pact and the Sharm el-Sheikh Implementation Plan.

Context: local and regional progress on adaptation

The [UNEP Adaptation Gap Report 2022](#) concluded that current adaptation practice falls woefully short of what is required. It highlights, as one of the main reasons for these shortcomings, the "inadequate genuine local participation in adaptation design and implementation" and calls for "investment in local capabilities, capacity-building and democratic governance structures in support of climate risk management and empowerment for long-term sustainability".

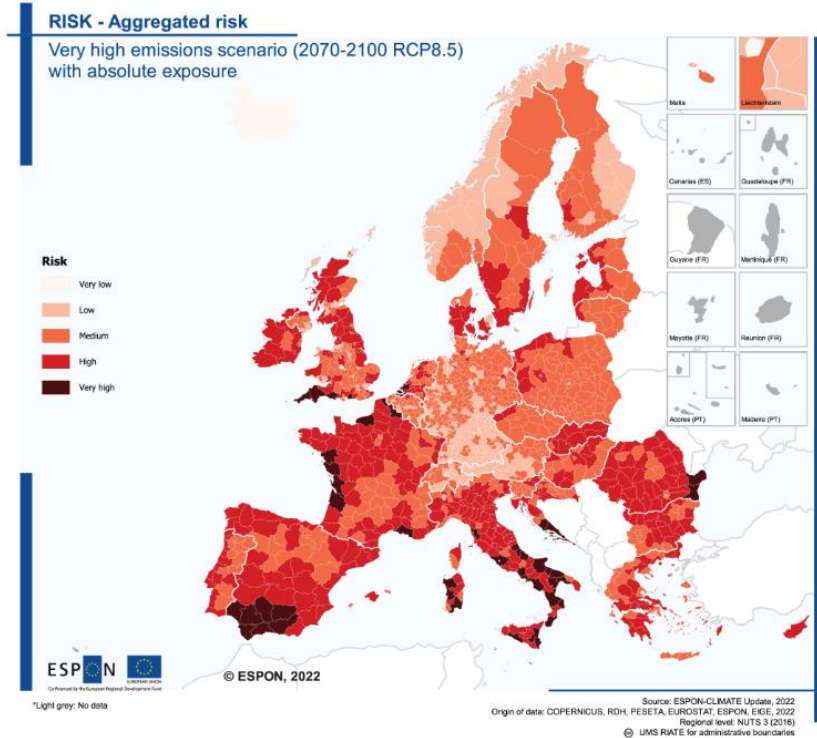
Cities and local and regional governments are the first to be impacted by climate change. In fact, 108 reporting regions, representing more than 543 million people, and reporting to the [2022 CDP states and regions summary report](#), said that they face increased climate risks, including hotter days and more frequent heatwaves, rainfall, droughts, coastal erosion and sea level rise.

In the EU, natural disasters affected nearly 50 million people between 1980 and 2020 and caused, on average, an economic loss of €12 billion per year. Over 80% of losses and 95% of fatalities can be attributed to natural disasters caused by weather and climate-related extremes, while the economic damage from climate-related events amounted to at least €419 billion within the same period¹. The effects of these losses are further exacerbated by being distributed unevenly, harming cities and regions that may already face challenges like low growth or high youth

¹ Joint Research Centre, [Economic analysis of selected climate impacts](#), 2020.

unemployment.

Figure 1: Spatial distribution of risk in Europe associated with climate change



Leadership of cities and local and regional governments

The Working Group II contribution to the IPCC Sixth Assessment Report provides evidence that adaptation is taking place in all regions and sectors and that the vast majority of these responses are taking place at local level. Cities and regions have become natural leaders in advancing climate action, particularly due to their direct connection with their inhabitants and capacity to mobilise and engage with all local stakeholders.

As the [RegionsAdapt 2021 – 2022 progress report](#) underlines, regional governments have a better understanding of the risks; 93% of disclosing regions in 2021 reported an increased number of socio-economic risks due to climate change, which reflects the widespread impact and awareness of current climate change on the society and economy.

Within the EU, over 200 municipalities from 21 Member States have commitments on adaptation actions under the [Covenant of Mayors for Climate and Energy Europe](#), an EU initiative that brings together local governments committed to going beyond the EU climate and energy targets and that currently represent nearly 31 % of the EU's total population.

However, an important gap still exists in terms of allowing effective multilevel governance and coordination in the implementation of climate strategies, including the Nationally Determined Contributions (NDCs), and National Adaptation Plans (NAPs) or National Adaptation Strategies (NAS). The RegionsAdapt 2022-2021 progress report states that out of the 32 reporting regions,

43% of disclosing regions indicated working on climate adaptation with cities and local governments in 2021, while only 33% collaborated with the national government.

In Europe, most NAS recognise the role of local and regional authorities in developing and implementing adaptation actions. For instance, local adaptation planning is mandatory in Croatia, Denmark, Ireland, Sweden and larger communities in France. In other cases, local authorities are required to prepare risk and vulnerabilities or damage assessments (the Netherlands and Sweden) or consider adaptation in the urban and spatial planning legislation (Slovakia and Slovenia). In Greece, the NAS encourages adaptation planning at regional and local levels with priorities set through regional adaptation strategies².

As discussed in the GST technical dialogues (1.1) and (1.2), currently, many countries are focusing on adaptation planning through policy instruments such as NAPs or NAS, which is encouraging. However, not enough of these plans are being translated fast enough into implementation and address the significant gap between ambition and action.

Cross River (Nigeria)

The government of Cross River State in Nigeria has developed the [sustainable forest management project](#) which has allowed for cooperation between the federal government, three regional governments, two funding agencies and other stakeholders (including the private sector, civil society, academia and the forestry community) to improve climate resilience, energy, food security and water availability through forest restoration and reforestation.

Athens (Greece)

In 2022, the Municipality of Athens updated its [2022 Climate Action Plan](#). The Plan contains an objective on 'prevention and response to climate risks', which includes measures on flood protection, fire protection, public health and an action plan to address urban overheating. During its planning, the municipality offered stakeholders the opportunity to be involved, sharing a first draft and adjusting it based on relevant comments. The funding sources identified include EU funding, as well as funding from the Ministry of the Interior, Green Fund and Public-Private Partnerships. The Plan recognises the need for regular re-evaluations to monitor and assess the effectiveness of actions on the goals set. For this purpose, monitoring teams have been established in the city.

Québec (Canada)

Through its [2030 Plan for a Green Economy](#), the Government of Québec is focusing its adaptation efforts on major risks to Québec's population, infrastructure, ecosystems and economy, especially the risks associated with flooding, erosion, coastal submersion and landslides, extreme heat, torrential rains and thawing permafrost. For instance, in response to potential changes in water regimes, Québec is implementing various adaptation measures, such as updating flood mapping in a large part of southern Québec. The government also established a land use government action plan to ensure the safety of people and the protection of property in Québec's flood-prone areas. In addition, the government launched a Biodiversity Monitoring Network to establish a robust system for collecting data and monitoring habitats. The project aims to identify the ecological and socio-economic issues arising from the impact of climate

² European Environment Agency, 2020b, [Urban adaptation in Europe](#) — how cities and towns respond to climate change, EEA Report No 12/2020.

change on the functioning of ecosystems by using indicators selected for this purpose.

Flanders (Belgium)

In October 2022, a new version of the [Flemish adaptation plan](#) was adopted for the period 2021-2030. The plan is driven by risks and includes six objectives and 14 action points for climate adaptation, including on the development of green-blue infrastructure, reduction of water use, water management, restoration and climate-resilient management of nature, management of public health impacts and collaboration and coordination. The main differences between the previous plan and the current plan are:

- The addition of funding from the Flemish government and the establishment of an investment plan; whereas the previous plan was fully reliant on budget provided by the authorities responsible for implementation of specific measures.
- The development of a more robust evaluation system, not only measuring progress, but also the impact of measures, including by using indicators.

Closing the finance gap

The implementation of adaptation strategies or action plans is conditional upon the availability and access to sufficient financing. The main barriers encountered by local and regional governments when accessing funds include:

- Budgetary and regulatory constraints that can limit the availability of own resources for climate investments;
- Lack of awareness about the different climate finance options available;
- Insufficient administrative capacity and technical knowledge to prepare successful applications;
- Challenges in meeting the requirements of funds, for instance in relation to co-financing from other sources;
- Political constraints and other policy priorities limiting climate investments.

The EU Mission for Adaptation to climate change

Within the EU, the Horizon [Mission for Adaptation to climate change](#) is a good example of ways to bring solutions to adaptation challenges at subnational level. The Mission was launched in 2022 and will support EU urban and rural regions to strive towards climate resilience by 2030, by providing direct and targeted funding for research and innovation actions. The Mission will establish an "Implementation Platform" to provide participants with support and technical assistance to implement the Mission and monitor progress. In January 2023, the Mission's Community of Practice was launched and will allow [Mission Charter Signatories](#), national authorities and relevant stakeholders to share lessons learnt from experience and collaborate with other regions, provide knowledge on designing and implementing projects to adapt to climate change, and support the demonstration and the deployment of novel climate adaptation solutions. To this date, the total number of signatories stands at 215 from 24 EU countries, with 13 more regions coming from countries associated with Horizon Europe. For the period 2021 – 2023, the Mission will receive €370 million in Horizon Europe funding.



The Basque Country (Spain)

The Basque Country has been selected as a developed region for the Mission for Adaptation to climate change of EU, as well as Vitoria Gasteiz municipality, that is the capital of the Basque region which has been selected by both the Mission for adaptation to climate change and the Climate-Neutral and Smart Cities. Connected to the Mission, the Basque Government, with other technological stakeholders, will participate as a partner in the project Regions4Climate (HORIZON-MISS-2021-CLIMA-02-04) that is a large scale demonstrators of climate resilience creating cross-border value. The funding for the Basque Region is around 3.5 M € for 5 years to implement nature-based solutions to increase the climate resilience in coastal areas and for the design and deployment of the adaptation Mission in the Basque Country taking into account every stakeholder involved mainly, SMEs.

Québec (Canada)

The government of Québec is developing innovative financial mechanisms for generating financing to fund their own adaptation and mitigation activities. Since 2013 in Québec, more than 3.9 billion dollars from revenue generated by the [Québec carbon market](#) have been used to finance measures helping businesses, municipalities and individuals to mitigate emissions and adapt to the impacts of climate change. Local and regional authorities can also generate tailored funding solutions to address specific issues.

Scotland

In Scotland, in 2022, the Scottish Government funded [Adaptation Scotland Programme](#) published an [Adaptation Finance Guide](#) and accompanying resources including business case studies to support organisations understand and access adaptation financing. The Finance Guide is a starting point for any organisation looking to assess financing options for adaptation projects in Scotland, exploring challenges, opportunities and practical actions. The three case studies explore the opportunities to apply a wider range of financing mechanisms to on the ground adaptation projects. These resources were developed over two years through the Adaptation Scotland Climate Finance Working Group which has been working with local authorities, public bodies and the private sector to increase knowledge and awareness of options for adaptation finance and funding.

Closing the data and knowledge gap

Finding the right data, metrics, indicators, and methodologies for tracking progress in adaptation continues to be a significant barrier. Knowledge of local impacts of climate change needs to be developed and supported in order to help regional and local governments plan and manage climate risks, as well as knowledge on solutions, mobilisation of and access to adequate financial and technical resources, stakeholder mapping and engagement.

In order to fill this gap, local and regional policy makers have been developing multiple guidelines and tools to allow knowledge sharing and create networks where local stakeholders can find

project partners, minimise their internal knowledge gaps and actively seek support for their own initiatives from dedicated experts. These efforts should be supported by national governments.

At a EU level, notable examples are the European Committee of the Region's [Green Deal Going Local Handbook](#), the Covenant of Mayor's [Urban Adaptation Support Tool](#) and guide on [Adapting to climate change in European cities: Towards smarter, swifter & more systemic action](#), and the decision support tools for adaptation of the European project RESIN.

The [ADEPT guidance for local government](#), the [U.S. Climate Resilience Toolkit](#) and the [Notre Dame Global Adaptation Initiative](#) are examples that could be replicated in other regions. At a global level, the United Nations Office for Disaster Risk Reduction (UNDRR) has developed the [Ten Essentials for Making Cities Resilient](#) and a [Handbook for Local Government Leaders](#).

The Basque Country (Spain)

The Basque Country has generated multiple sets of climate data and indicators including regionalized climate data, sea level rise scenarios, vulnerability and risk assessment analysis for different climate hazards at municipality level, fluvial and pluvial flooding maps, among other. This publicly available data and developed tools support local authorities in the decision-making process and the elaboration of evidence-based Local Adaptation plans.

In addition, the Basque Government has launched the project “ERREMINTA-GIDA” that provides the necessary support to local authorities to establish a roadmap to design energy and climate policies and deliver visibility of their commitment and leadership in their area.

Citizen support and engagement

Awareness raising is crucial to ensure that a resilient transition is socially accepted and sustained. Cities and local and regional governments are leading actions on adaptation, notably concerning community engagement and education, flood mapping, incorporating climate change issues into long-term planning documents and strategies, crisis management (including early warning and evacuation systems) and real time risk monitoring.

State of Maharashtra (India)

The state of Maharashtra has developed [The Majhi Vasundhara initiative](#) (my Earth Mission in English) intending to achieve climate resilience in the state through six flagship initiatives that bring together local administrations, businesses, NGOs and people of all age groups to enable climate action amongst all stakeholders. The six initiatives seek to raise climate literacy, awareness and capacity building in the state, supporting new and innovative technologies for climate adaptation and mitigation and imparting green values to future generations.

Jalisco (Mexico)

The Jalisco State Government signed a [Collaboration Agreement with the Tequila Regulatory Council \(CRT\)](#) to establish the basis for the formulation and implementation of an institutional cooperation scheme that would contribute to the sustainability of the sector. The initiative includes the design and implementation of the protocol and certification “Environmental Responsible Agave (ARA)” brand, the promotion of responsible production processes and the guarantee of forest conservation, with the aim of halting the deforestation of natural forests associated with tequila production by 2027. To accelerate this, technical roundtables were established to help innovate, develop technological solutions and promote better production practices for the conservation of biodiversity and forest restoration – all with the aim of improving the environmental footprint.

Łódź (Poland)

The Polish city of Łódź has transformed from a textile industry centre into the greenest city in Poland by active cooperation with producers, civil society and the general public alike. Their comprehensive strategy, labelled as an "[eco pact](#)", has five strategic goals that can be summarised as:

- Greenery: protection of greenery and extension of green areas;
- Air: protection and improvement of atmospheric air quality through thermo-modernisation and replacement of heat sources with ecological alternatives;
- Water: rationalisation of water management, including wastewater, maintenance of water quality;
- Waste: improved waste management efficiency, reduction of garbage produced;
- Education: shaping new pro-ecological attitudes, from children to seniors.

These five topics are connected with a scope of specific activities, ways for their implementation and financing, as well as indicators and parameters that the city wants to achieve in the next decade. They require effective cooperation between the City of Łódź and other institutions, business, universities, NGOs, neighbouring municipalities, the media and all residents.

Flanders (Belgium)

The Belgian region of Flanders has launched a [Local Energy and Climate Pact \(LEKP\)](#) focusing on four areas (greening, participatory energy, sustainable mobility and rainwater). The LEKP sets concrete objectives for its signatories (nearly 300 local governments) to tackle the global climate challenge at local level. The Flemish Climate Pact holds a stakeholders' climate dialogue every two years inclusive of cities, local governments, and citizens' organisations to co-design climate objectives and actions – facilitating broad inclusivity at a grassroots level. The Pact is aiming for one tree per inhabitant, 50 collective renovations per 1000 housing units, one charging point per 100 inhabitants, 1m of extra cycle lane per inhabitant and 1m³ of additional rainwater collection or infiltration capacity per inhabitant.

Scotland

The Scottish Government in collaboration with Public Health Scotland, Sniffer, Architecture and Design Scotland and the Sustainable Scotland Network has developed an engagement and planning tool '[Place Standard with a Climate Lens](#)'. These resources have been piloted in 10 real-life projects (including Scotland's Climate Action Towns initiative). Building on the widely used [Place Standard Tool](#), the materials support place-based conversations to go into further depth around climate issues. They are designed to help people to understand how climate change might play out in a local area, enabling them to consider adaptation, the move to net zero, and just transition in relation to their place.

LGMA recommendations on adaptation

As per Decision 19/CMA.1, paragraph 36, the sources of input for the Global Stocktake will consider information on the state of adaptation efforts, support, experience and priorities, including the information referred to in Article 7, paragraphs 2, 10, 11 and 14, of the Paris Agreement, and the reports referred to in Article 13, paragraph 8, of the Paris Agreement. Sub-national data and experiences are vital to deliver on the objectives of the Global Stocktake, as outlined in paragraph 34.

In order to achieve the goal defined in Articles 2.1(b) and 7.1 of the Paris Agreement, the LGMA makes the following recommendations on the priority thematic area of adaptation, for the third technical dialogue of the GST, outcome report and recommendations:

- ***The third technical dialogue of the GST and the GST outcome report should include a recommendation for Parties to systematically step up their efforts towards effective multilevel climate governance***, and allow for effective and long-term coordination mechanisms for the implementation of the Paris Agreement at regional and local levels with national governments.
- The third TD of the GST and outcome report of the GST should mention the ***importance of multilevel governance in the fulfilment of the NDCs and NAPs***. It should include a recommendation for Parties to include climate commitments, actions and achievements undertaken by subnational governments as a complement to NDCs and NAPs.
- Actions taken by cities and regions through the ***Race to Resilience and Race to Zero campaigns need to be included and recognised in the outcome report*** to allow them to take into account the role and support that non-state actors provide to fight against climate change and to become resilient.
- As the synthesis report for the technical assessment component of the first global stocktake highlights, ***strengthening multilevel finance, technology and institutional capacities is crucial and should be addressed in the review and implementation of the NDCs and NAPs***, as well as part of ***the new framework for defining the Global Adaptation Goal***. The importance of decentralizing climate finance should be mentioned as a critical area of action in the outcome report of the GST.
- ***National governments must provide credible targets and plans for deploying capital to developing countries and at regional and local level***. Mechanisms to allow local and regional governments to directly access climate finance opportunities still need to be reinforced and made more transparent and accessible at decentralised level. In this sense, the EU's Mission on adaptation is a model that could be replicated by other regional development banks, in other regions of the world.
- ***National governments should support the capacity of local and regional governments in accessing such funds by*** enhancing advisory services on available



financing options; supporting the capacity building of subnational governments with the available funds; providing targeted training and advisory services on the use of financial instruments; and facilitating the use of different funds and financing options for investing in climate action.

- As agreed at COP27, there is a need to develop specific mechanisms to deliver the **agreement to provide loss and damage funding for vulnerable countries and populations** hit hard by climate disasters as well as to address the impacts on communities whose lives and livelihoods have been ruined by the very worst impacts of climate change. Regional and local authorities have a key role in diagnosing, assessing and acting based on the best available data facing climate risks and impact on population and territories. Data and indicators registered at regional and local level should be used for validation within decision-making processes at the supra-regional and international level.
- **In order to build the capacity of those most affected, we need inclusive capacity building of governments at all levels, the private sector and civil society.** Cities and regions play a major role in funding education and developing skills-related policies, which is a crucial component in ensuring a workforce ready to adapt to extreme climate and environmental conditions.
- **The third TD and outcome report of the GST should make reference to the importance of adaptation efforts through nature-based solutions** (for example, water resources management; forestry, protected areas, and biodiversity; agriculture and zootechnics). These support ecosystem resilience, particularly by preventing soil erosion and greenhouse gas emissions, while also helping to reduce the impacts of climate change, resulting in combined benefits at an environmental, societal, and economic level.
- Measuring progress on adaptation remains a key challenge for all actors, and regional and local governments can bring their expertise and methodologies to inform the global debate and stocktake on this issue. **The outcome report should call for the Adaptation Goal to allow for a common framework of analysis to determine whether adaptation policies have been effective**, as well as research, methods and good practices that can be applied at or/and adapted to decentralised levels of governments.