GREEN CITIES: INTEGRATING ENVIRONMENT AND CLIMATE AMBITIONS IN URBAN DEVELOPMENT

The United Nations projects that by 2050 the urban population will increase by more than 2 billion people; 90% of this increase will happen in sub-Saharan Africa and developing Asia. In Africa, 70% of the urban infrastructure estimated to be in place by 2050 is yet to be built.

Opportunities. Cities concentrate people, power, wealth, and productivity; they are drivers of economic prosperity and hubs for human development, innovation and creativity. The concentration of business and population can provide the basis for sustainable and circular economy models and play a key role in shaping consumption and production patterns. Dense urbanisation patterns also hold potential for cost effective provision of networked services such as wastewater collection, public transport and through that also mitigate pollution pressure and enhance environmental sustainability. And greener cities can minimise urban impact on their surrounding areas.

Risks. Rapid expansion of urban populations, pressure on land and lack of adequate infrastructure leads to congestion, environmental degradation and unhealthy living conditions (sanitation, air quality!), conducive to diseases. Growth often occurs in unplanned informal settlements (presently comprising about one third of the urban population), without adequate housing, service provision and protective infrastructures. Those inhabitants are especially vulnerable to natural hazards, climate change and/or human-induced accidents. The Covid-19 pandemic has hit hardest in slums where washing of hands, access to sanitation and social distancing are virtually impossible.

Way forward. Urban planning will be at the core of efforts to harness the opportunities of cities in advancing sustainable development while reducing negative externalities. There is an urgency to this agenda. Once urban areas have been established it will be much more costly to alter urban forms and integrate more resilient solutions. It is thus crucial to 'get urbanisation right' and avoid locking cities into unsustainable patterns of infrastructure. To harness the transformative potential of cities, urban development programmes need to move away from sector-based policies towards a broader urban vision with a comprehensive, integrated planning approach. This requires planning, financing, and implementation to be aligned, with local government at the fore. Urban sustainability integrates environmental and socio-economic aspects. This note provides quick, practical tips on applying an environmental and climate lens to such integrated and risk-informed urban development which should guide the type of interventions the EU wants to support.

The approach: integrated, place-based and participatory

While urban investment has often been managed from a sectoral perspective, it is essential to move towards a more comprehensive approach anchoring investment planning and prioritisation within the context of spatial planning (or territorial).

- **From national to local.** While local authorities are at the heart of this agenda, it involves multiple levels of governance. Ensure national environmental policies are reflected in urban plans, but also apply an 'urban lens' to national strategies. National Urban Policies are key instruments for defining responsibilities across ministries, levels of government, and stakeholders and for integrating sustainability concerns and climate responses, including disaster risks, in approaches to urban development.

- **Cities and their surroundings.** Addressing environmental and climate challenges depends on more orderly planned city expansion/renewal patterns. Seek to improve planning of urban expansion, address barriers for upgrading slum areas and take surrounding areas into account (urban, peri-urban and rural); cities depend on supply of food, energy, and water from outside, while outside communities may also depend on city suppliers.
- **Neighbourhoods** can be laboratories for innovation in, for example, low-emission manufacturing, urban agriculture, or new forms of mixed-use neighbourhoods. Encourage new forms of participation such as co-creation and co-design, with active involvement of local people, community organisations and the private sector.
- **Foster open dialogue and information sharing** among all levels of government to ensure that plans for sustainability and climate action are based on concrete information from cities and surrounding regions.

Use sustainable and resilient pathways for urban development

Low emission development to curb climate change and air pollution can create new economic opportunities and improve the health of people and ecosystems. Activities should seek to:

- Identify low-cost options for emission reductions of harmful pollutants including noise, light, radiation.
- Reduce GHG emissions, especially in transport, waste management to avoid landfills, the construction sector (see Infrastructure Quick Tips), and through energy efficiency (see Energy Quick Tips).
- Stimulate Transport-Oriented Development (TOD). Move away from accommodating vehicles and focus on moving people and goods by means of multi-modal and coordinated means of transportation. (See Green Mobility Quick Tips)

Give space to nature. Cities have large potential to provide green spaces, including vegetable gardens. Conservation or restoration of ecosystems in and around cities can reduce cities' vulnerabilities to shocks in a cost-effective manner (see also the Green City.EU) and enhance local biodiversity; ecosystem services underpin (local) economies, human well-being and resilience of communities. Encourage:

- Using nature-based solutions: Create green and blue areas to accommodate floods, store water, treat wastewater, preserve biodiversity, combat heat stress, filter air, capture carbon, provide recreational space and wind breaks, etc.
- Applying principles of hybrid engineering: Green where possible, grey where needed (see also Infrastructure Quick Tips).
- Involving the insurance industry as a stakeholder: The co-benefits of nature-based solutions can mitigate risks to public health and damages to insured properties.
- Avoiding gentrification: urban greening enhances the value of neighbourhoods, but must not increase inequality, social vulnerability and exclusion.

Apply circular economy principles. Support partners in promoting resource efficiency, designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.

- Encourage a change in attitude of urban dwellers to embrace these principles, notably to switch to sustainable consumption patterns, and promote innovative activities to raise awareness.
- Design long lasting, energy efficient and easy to repurpose buildings and infrastructure, using sustainable (including recycled) construction materials.
- Use procurement power: embed circularity and sustainability principles in tendering processes to create market push/pull.
- Build a resilient city-region food system (CRFA) linking urban, peri-urban, and rural areas. Include 'urban agriculture', e.g. vertical gardens, community gardens, etc.

Resilient development. Help countries plan in a participatory manner for increased adaptive capacity and an uncertain future by:

- Fostering urban development strategies that include disaster risk reduction (DRR) and climate change adaptation (principles), periodical risk assessments, and standards for risk levels and measures (see DRR Quick Tips).
- Supporting local provision of goods and services; recognising that reliance on distant sources poses sustainability and vulnerability challenges.
- Avoiding urban development in vulnerable areas such as natural ecosystems or flood-prone riverine, coastal and subsiding areas.
- Ensuring policies, strategies and programmes integrate 'build back better' principles into post-disaster recovery processes.

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Enhance the capacity of cities to finance their plans

- **Prioritise investments** in a multi-annual municipal investment plan, using sound planning for sustainability to select the best options, knowing that financial resources are always constrained.
- **Develop the city's fiscal sustainability** by securing cash flows through environmental taxes, lands value capture, and tap capital markets by issuing green bonds. Smaller cities may need to pool their credit requirements.
- **Quantify the benefits of adaptation** and risk reduction, such as avoided costs, insurance savings and increased property value, to make the business case for sustainability.

Apply tools for integrated planning and decision making

- **Recommend applying long-term spatial planning** (including water resources) to combat urban sprawl; create compact (build up, not out) polycentric settlements with optimal connections, reducing traffic and mobility needs and avoiding unnecessary loss of productive land or natural ecosystems.
- **Use Strategic Environmental Assessments** (SEA) in (participatory) planning processes and use it to compare alternative development options.
- **Apply climate and disaster risk assessments,** standalone or integrated in SEA for plans or Environmental & Social Impact Assessments (ESIA) for projects.
- **Assess environmental and climate performance** and track progress of plan implementation against its objectives through a comprehensive set of indicators.
- **Get inspiration** from Urban Low Emissions Development Strategies or the Covenant of Mayors under implementation in a number of countries
- **Use open-source satellite data,** such as the EU's earth observation programme Copernicus, to promote sustainable and risk-informed urban planning.

Policy dialogue

- **Ensure relevant environment and climate issues are on the agenda when engaging with the local authorities** of large cities in partner countries. **Local Authority Associations** may be important actors for engaging more widely on urban issues.
- **Create opportunities for dialogues** between levels of government (e.g. on the implementation of the Nationally Determined Contributions (NDCs), environment management plans or the development of National Adaptation Plans or DRR Strategies), public and private sector actors (e.g. insurance), representatives from different sectors (e.g. health and transport), and community members.

Contribute to international commitments

- Make sure that urban plans are included in, contribute to or interfere with NDCs/NAPS (Paris Agreement) and National and Local DRR Strategies (Sendai Framework) or National Biodiversity Strategies and Action Plans (Biodiversity Convention).
- Verify how the activities proposed contribute to the Rio Conventions (See Guidance on activities that qualify for Rio Markers for inspiration).

Further information and support:

Policy documents

- The New Leipzig Charter. Informal council of EU ministers on urban matters (2020).
- New Urban Agenda (2017).

Guidance documents

- UN Habitat: Enhancing Nationally Determined Contributions (NDCs) through urban climate action (2020)
- C40 Cities Climate Leadership Group. The C40 Knowledge Hub
- ICLEI: Green Climate Cities Handbook for Local Governments (2019); Low Carbon Solutions Gateway Sourcebook (2016)
- Global Platform for Sustainable Cities (2018). Urban Sustainability Framework. GEF / WorldBank
- World Organization of United Cities and Local Governments
- IFRC World Disasters Report 2010; focus on urban risk
- UNDRR Making Cities Resilient 2030 and How to make cities more resilient: a handbook for local government leaders
- Global Facility for Disaster Reduction and Recovery: Resilient Cities.
- weAdapt: Knowlegde base on climate change adaptation
- Urban Low Emissions Development Strategies
- Covenant of Mayors or Local Climate Adaptative Facility (LoCAL)
- Words into Action guidelines: Implementation guide for land use and urban planning https://www.preventionweb.net/publications/view/67430
- House, E., C. O'Connor, K. Wolf, J. Israel, & T. Reynolds. 2016. Outside our Doors: the benefits of cities where people and nature thrive. Seattle, WA: The Nature Conservancy, Washington State Chapter, 30 pp.

*All documents are available on capacity4dev (public group: Environment, Climate Change and Green Economy)

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