Climate Alliance
Digital Days

LOCAL SOLUTIONS
TOWARDS A GREEN
RECOVERY

online from 6–9 October | #CADigitalDays

Cities have to learn from and with the crisis

I. COVID & **Climate change and cities**
II. COVID & **City develoment**
III. COVID & **Societal cohesion**
IV. COVID & **Digitalisation**

BRATISLAVA

Ingrid Konrad
the Chief City Architect

BRATISLAVA
the Capital City of the Slovak Republic

- 367.6 km2
- cca 0.7 mil. inhabitants
- daily over million people in the City
- Borders with Austria and Hungary

1. COVID & Climate change and cities

Current status

- Strategies for the city's adaptation to climate change and mitigation measures **are in the state of development – which is slow and lengthy**.
- Slovakia has **centralized legislation and municipalities have little power to apply measures** really quickly and effectively across the full range of their legislative power;
- Bratislava has relevant strategic materials (policies) – **Strategy for Adaptation** and **Action plan for adaptation to negative impacts of climate change.**
- Bratislava applies these policies in **assessment of investment activities as well as the private sector**, but has to proceede according to the legislation at the national level / Building Act;

Photo: Marek Velček, Bratislava City.

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„Independent“ cities and local uniqueness of cities

- To withstand the crises and shocks, such as COVID but also climate change, **cities should become more self-reliant and self-sufficient.**

- We are used to living in cities, that have become **uniform** and more or less **globalised.**

- In order to be able to **build back stronger after crises**, cities should focus more on their local **uniqueness**, which is a **heritage** passed on from generation to generation and an expression of **local traditions and local culture.**

Photo: Marek Velček, Bratislava City.

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City development

COVID – Challenges:

- **Urban Planning -** Self-sufficient cities and local uniqueness of cities - districts

CITIES should become:

Self-sufficient cities - not everyone has to have everything (!) - creating an economy and identity based on the local possibilities of the given locality and community

Use and protection of local natural resources - use of locally specific raw materials, sustainable building materials and technologies

Liberalization of the energy market - Renewable energy sources are a prerequisite for the transition to a carbon-neutral economy. The EU's ambitious goals will not be met without carbon-neutral cities, neighbourhoods and buildings, which require green local energy from renewable sources.

Support for the construction of carbon-neutral neighbourhoods - preferably with local, centralized production of energy from renewable sources, carbon-neutral sources and the creation of conditions for the shared use of surplus energy - creating an e-community.

Urban districts with local centres must be attractive for living and have a **basic composition of social and medical facilities** - sufficient facilities of neighbourhoods have an impact on the integration of new residents, identity formation and social coexistence

- uniqueness, identity, use of superior equipment (culture, sports, administrative centers, self-government ...) use of o**It is necessary to specify the superior equipment of settlements and neighbourhoods** ´equipment

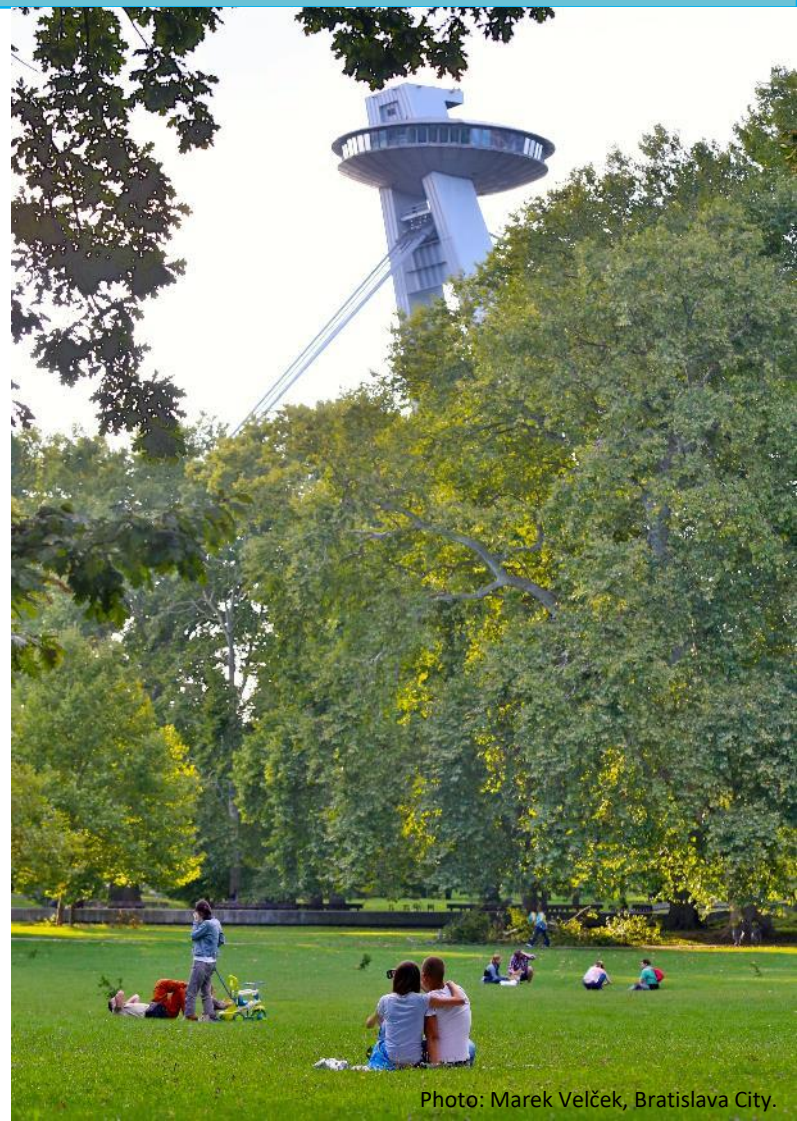

Photo: Marek Velček, Bratislava City.

Buildings

BUILDINGS

Renewable energy sources are a prerequisite for the transition to a carbon-neutral economy.

Buildings in class A0, which will be mandatory since 2021, cannot be realized without available local green energy.

Photo on the right: Roof of the retroffited panel house at Horova street in Bratislava, class A0. Supported by 7FP EU GUGLE Project. Photo: Arthur Lankester.

COVID and new paradigms in building & construction, urban design

BUILDINGS

- **Adaptation of appartments/residential houses to home-office mode of work** – creating ambient space for working and living

PUBLIC SPACE

- Need for more space for (social) distancing in public space is possible to create through:
  - greenery,
  - public furniture equipment and its positioning,
  - general planning issues for the sidewalks, places and entrances to the buildings – (especially) as the situation around the public transport,
  - waiting places,
  - walking connections...
- **We need social contacts, but we need more space too** in order to provide people with more necessary distance.

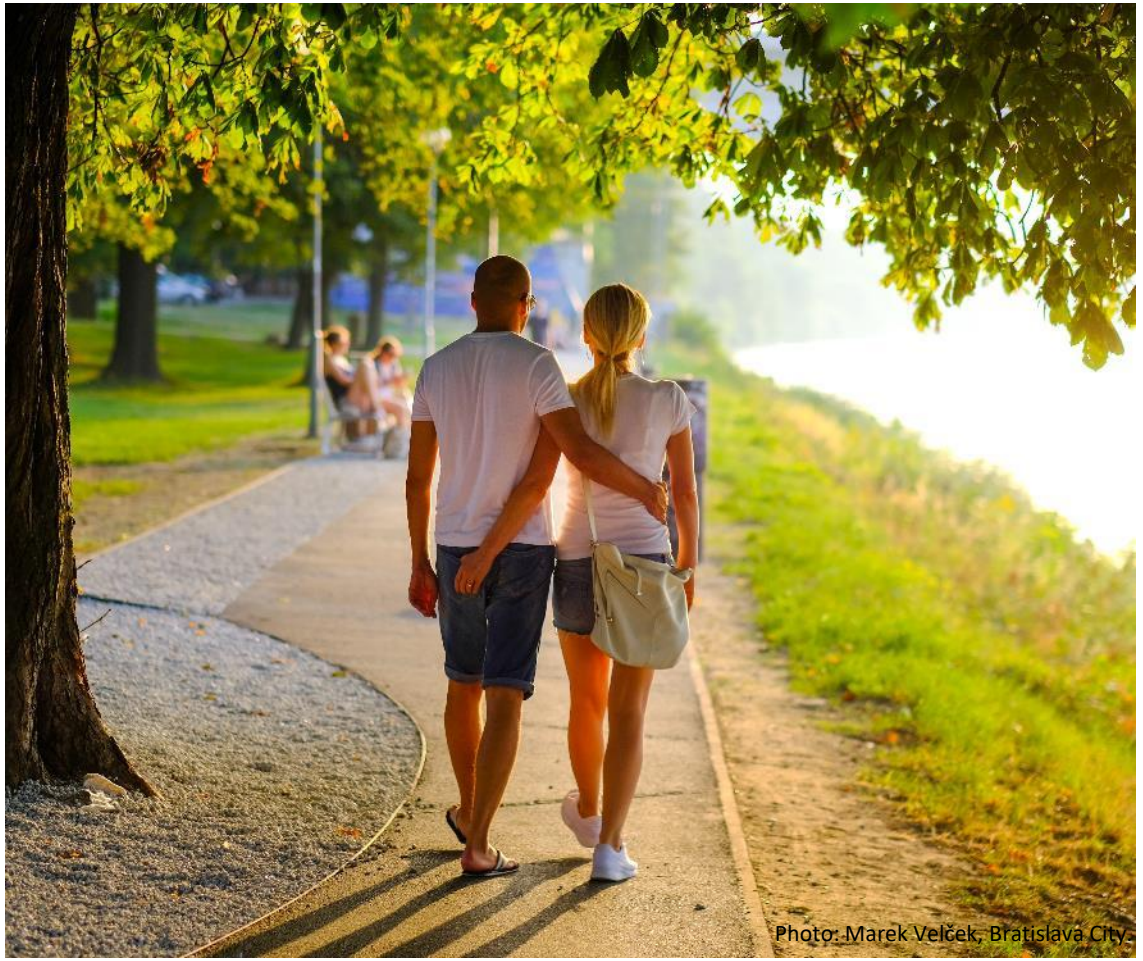

Photo: Marek Velček, Bratislava City

COVID and new paradigms in building & construction, urban design

PUBLIC SPACES

The concept of the possibility of **immediate closure of individual side streets** for traffic - the opening of new pedestrian zones, respectively.

More generous sharing of street space for **pedestrians** and other types of mobility (bikes, scooters ...) - set up the reconstruction of the **street space to be as much shared as possible** on one level with added green elements and have public space that has the ability to retain rainwater.

Areas available for greenery, recreation and sports in the radius of pedestrian movement - the scale is increasing according to research done in Vienna (up to 1 km)

Seniors in cities - barrier-free access to social and medical facilities, public transport goals, availability of taxis, etc., areas for short stops - increase in number of Dropp OFF locations in cities.

Photo: Marek Velček, Bratislava City.

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3. COVID & **societal cohesion**

We need social contacts, but we need more space in the public areas too in order to provide people with more necessary distance.

Adaptation of appartments/residential houses to home-office mode of work – **creating ambient space for working and living**

Very important – every appartment must be planned with balcony or terrasse or loggia – which provides ambivalemt connection to the public space

Districts – need spaces for community activities

Source: Reuters: Juan Medina, available at https://www.abc.net.au/news/2020-04-22/coronavirus-restrictions-starting-to-ease-in-europe-spain-italy/12171792

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COVID & digitalisation

Smart city information system, even about disasters ...

Streamlining planning, design and permitting processes through **digitization in construction** - better communication with the municipality and the building authority on building/construction of buildings, neighbourhoods and cities that will be much less harmful for the environment.

Standardization of environmental requirements for the processing of strategic documents of cities, proposals of spatial plans and project documentation of buildings

Creation of smart tools of **adaptation and resilience measures:**

- project **Horizon 2020 RESIN** (Climate Resilient cities and infrastructures) – Adaptation Library, IVAVIA tool (Atlas), eGuide,
- project **Horizon 2020 ARCH** (Advancing resilience of cultural heritage towards climate change and other natural hazards) – for example a DRR assesment tool.

Source: AFP/VNA, https://www.vir.com.vn/covid-19-to-force-millions-of-southeast-asian-labourers-to-lose-jobs-75364.html

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Climate change & disaster risk management

- Effective adaptation and mitigation planning in multiple sectors
- In worst cases – cities should be able to respond to with adequate **disaster risk management**
- Reducing disaster risk requires integrating **disaster risk reduction** (DRR) policies and **disaster risk management** (DRM) practice among other sustainable development goals of cities.
- **Bratislava** has therefore included **DRM as one** of its strategic goals for the **Action plan for adpatation 2020-2030.**

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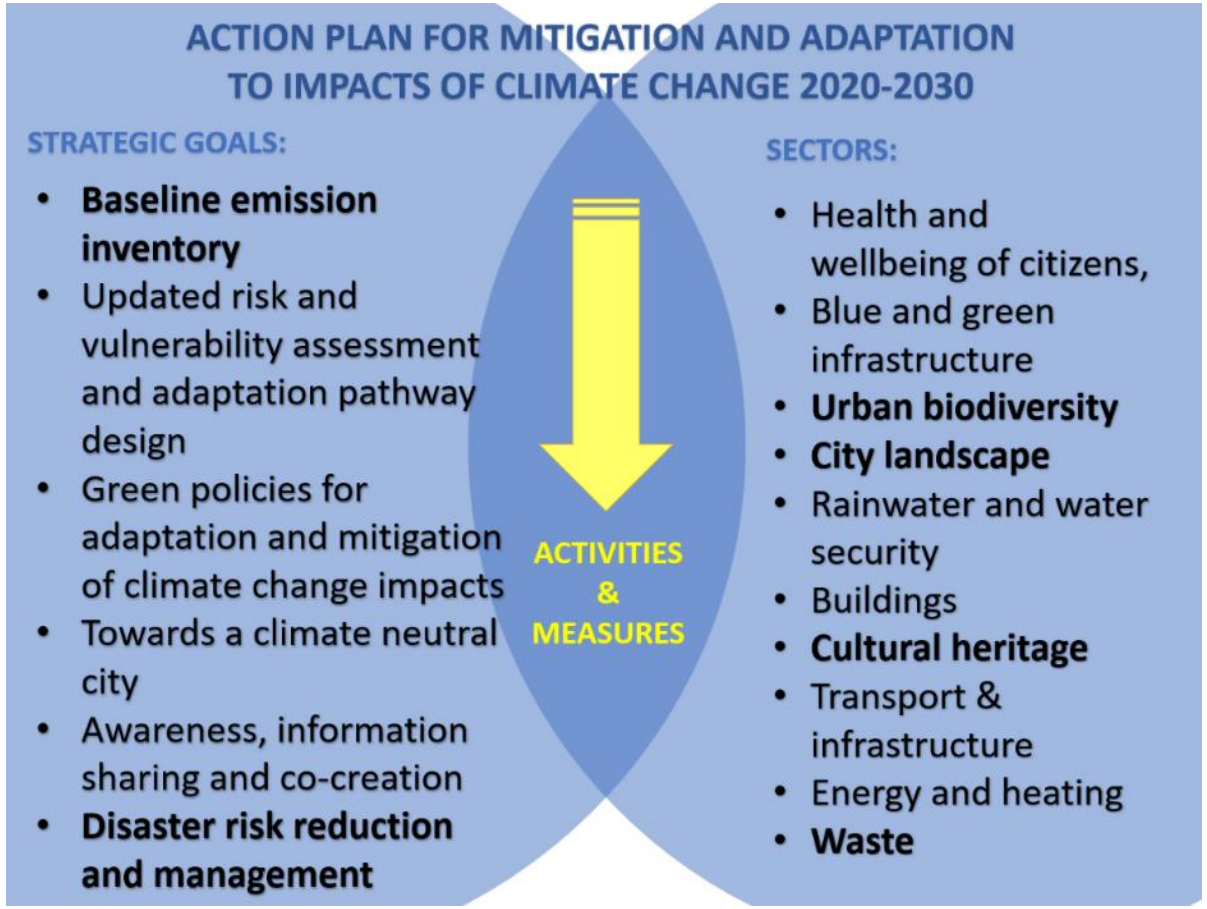
- **Other new sectors:** urban biodiversity, city landscape, cultural heritage, waste



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UN Disaster Resilience Scorecard for Cities

In project H2020 ARCH Bratislava has undergone disaster resilience assessment.

Ten different areas of resilience were assessed by the City and its research partners in the project - **Comenius University, Municipal monument preservation institute (MUOP)**

Preliminary results show that there is room for improvement (grey color): **resilient urban development, recovery management after disasters, safeguarding of natural buffers (natural areas) and social capacity for resilience**

Cities in Slovak Republic lack information about emergency responses in a more comprehensive way to about **disaster risk management for future climate change scenarios and evaluating cascading effects of climate change impacts.**

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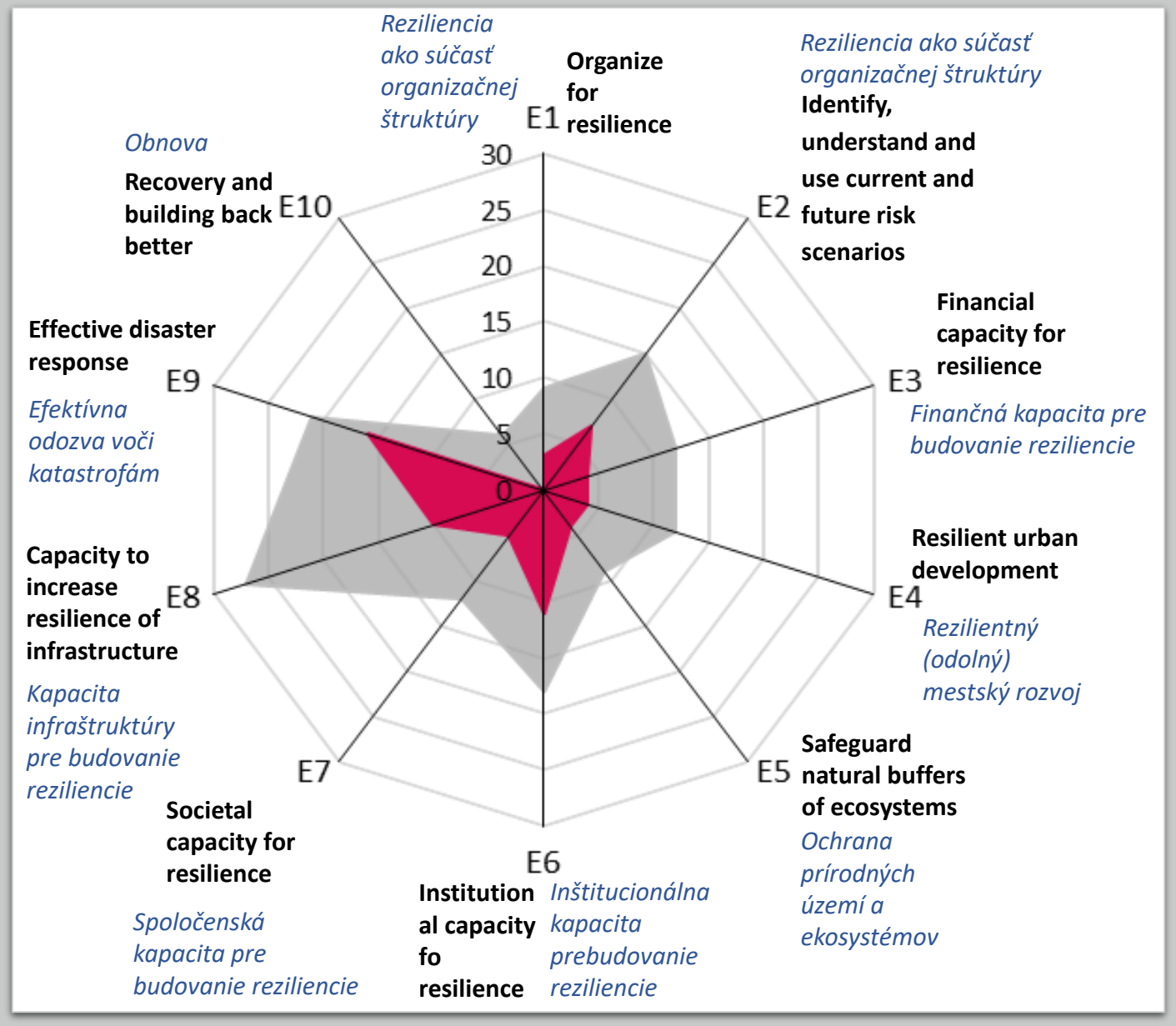
Pink color – actual score
Grey color – maximum score



UNDRR Disaster Resilience Scorecard for Bratislava – project H2020 ARCH

Thank you for your attention!

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