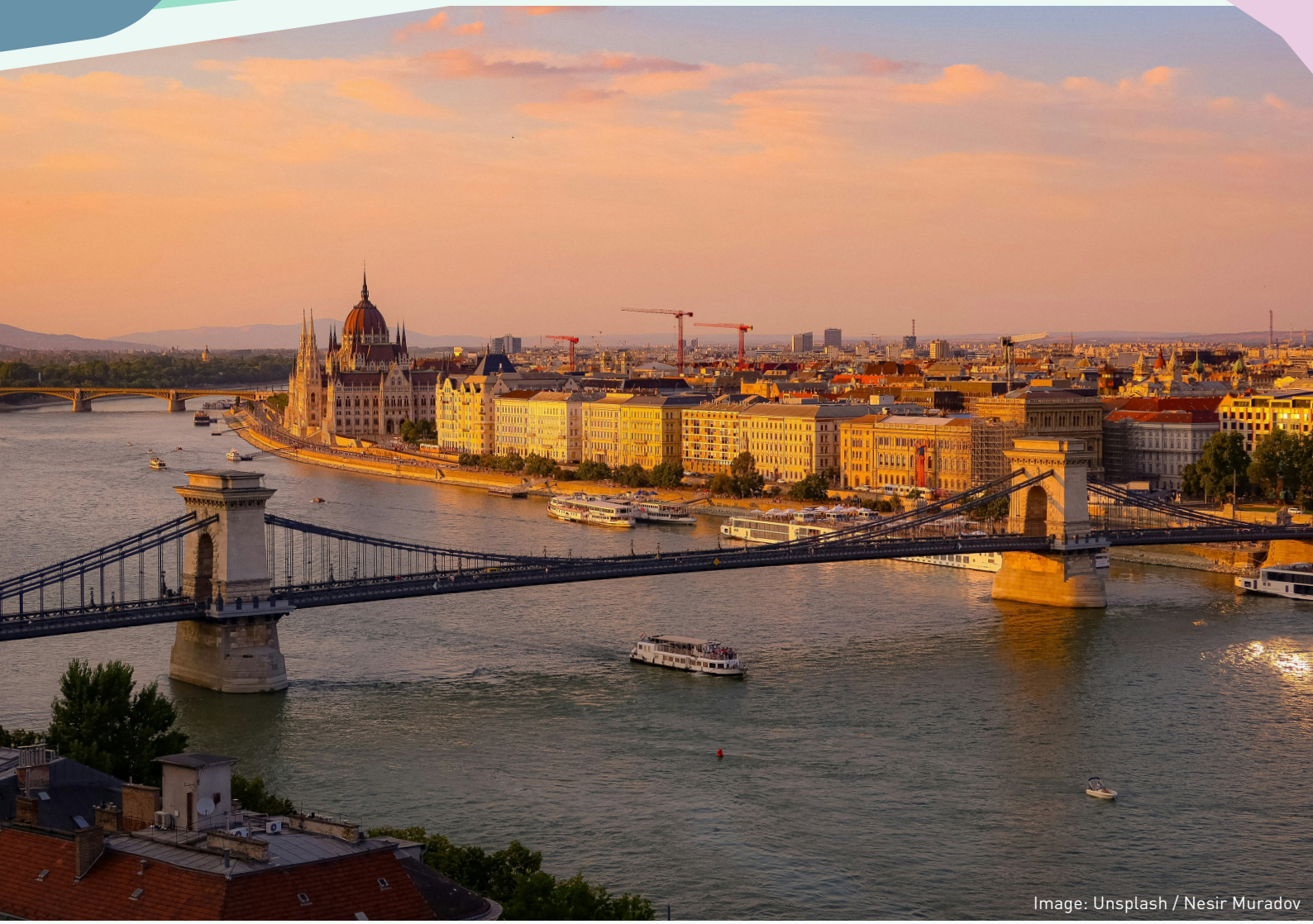

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BUDAPEST
TRANSFERABILITY PACKAGE

UP2030 UPSCALING PHASE

UP2030

EXECUTIVE SUMMARY

The purpose of this document is to transfer the knowledge and results acquired by the city of Budapest during the UP2030 project, so that the prototype developed can be replicated or scaled up both in other parts of the city and in other cities seeking innovative solutions for sustainable urban development. This 'transferability package' contains information about the scaling methodology designed in UP2030, defining the key concepts to be taken into account for its effective implementation in cities. The following sections of this document also provide a detailed account of how Budapest has implemented the methodology in its local context, along with the results obtained from the process:

- Definition of the objectives for the upscaling phase for the city, specifying which are the dimensions that will be addressed and the impact generated with the actions.
- List of barriers when it comes to upscaling and measures proposed to overcome these. Some of these measures could be recommendations obtained from the finance and governance tools.
- Definition of a plan for upscaling the prototype, collecting the next steps for design and implementation and assigning roles and responsibilities among the actors involved.
- Provide a list of guidance materials and resources to inform key stakeholders about the upscaling phase and the activities that need to be conducted.

Image: Utc

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GLOSSARY

Replication: transfer of a tested or proven interventions or initiatives to a different location at the same scale, in order to repeat success elsewhere and achieve similar results.

Upscaling: ability to take a tested concept, pilot project or initiative, and expand it while maintaining efficiency, in terms of people served, revenues generated, or other similar targets.

Prototype: initiatives, plans, programs or solutions developed by cities during the UP2030 project.

Learning Action Alliance (LAA): knowledge exchange and co-creation platforms intended to support the communication, coordination, innovation, and dialogue between city stakeholders at multiple levels.

THE IMPORTANCE OF UPSCALING – UP2030 UPSCALING METHODOLOGY

In projects such as UP2030, it is essential to devise a strategy for sustaining the work carried out during the project and maximising its impact. Due to this reason, the UP2030 project built an **upscaling methodology** to provide cities with instrument and resources developed during the project, so that the prototypes developed during the project can be grown and adapted to other sectors, regions and countries, in order to accomplish the goals defined by each city. This process ensures that best practices are transferable and adaptable across different urban contexts.

The success of the replication or upscaling efforts is completely reliant on the institutional environment in which the actions will be implemented. Therefore, it is essential to create an "enabling environment", which is constituted primarily by:

Finance

Mechanisms for accessing financial, technical and political support.

Governance

Supportive policy, legal and regulatory frameworks and better policy coordination.

Capacity

Enhanced capacity across all levels of government.

The upscale methodology was structured in three phases:

1. PREPARATORY WORK

Setting the basis for upscaling

- Understand the local context, challenges and priorities of cities.
- Define the objectives for upscaling.
- Explore the available tools on governance and finance that support upscaling.

2. LAA WORKSHOP

Bringing local stakeholders to the process

- Set the scene, presenting the objective and defining the resources and capacities to move forward.
- Create readiness among the stakeholders at the local level.
- Design an initial implementation plan for upscaling actions.

3. FOLLOW-UP WORKSHOP

Refining the next steps

- Analyse the main insights and results obtained in the LAA workshop.
- Define next steps for the implementation of upscaling activities.
- Develop a transferability package, collecting information about objectives, opportunities, barriers, actions and resources needed for upscaling.

One of the key outcomes of this process is the **transferability package**, which is designed to serve as a guidance document for cities to assist them in transitioning from the planning phase to the implementation phase of upscaling activities. The transferability package is also designed to facilitate the communication of results with relevant stakeholders within the municipality, as well as with other local and regional governments seeking to learn from best practices.

INTRODUCTION OF THE CITY

The city of Budapest is currently affected by air and noise pollution, caused by the increasing car traffic. The number of private vehicles increased by 20% and transport CO_2 emissions grew by 24% from 2010 to 2020, which has a negative impact on citizen's health and on city's net-zero ambitions. The restriction of car use is a politically sensitive topic, but as urgent interventions are needed, the municipality is currently elaborating the criteria, methodology and funding needs of the Healthy Streets project to be adapted in Budapest. In UP2030, Budapest aims to create a monitoring and impact measuring methodology to be applied in the Healthy Streets projects, in order to meet city's objectives on climate action, safety, health and social well-being.

From vision to action

CITY'S VISION	PROTOTYPE
✪ Create a liveable, people-centred city, where every element of design builds on a harmonious synergy of communities, green and blue infrastructure and sustainability, creating high quality public spaces that promote social interaction, climate resilience and environmentally conscious and active transport and public space use. ✪ Raise awareness of the Healthy Streets framework among urban planning and real estate development professionals.	Creation of the Healthy Streets Knowledge Centre

Budapest's adaptive pathway

The **Healthy Streets Knowledge Centre (HSKC)** developed by Budapest with the support of the Global Green Growth Institute (GGGI) is a collaborative hub that embeds climate-conscious, people-focused planning into urban development. The Knowledge Centre now serves both as a citywide **online platform** and a coalition of professionals promoting consistent, sustainable urban design practices. Its development is closely tied to the city's vision of liveability, resilience, and equitable access to quality public space.

The Healthy Streets Knowledge Centre offers a scalable and transferable model for cities across Europe. It strengthens the link between policy, practice, and public engagement in sustainable urban planning, targeting urban planners, local communities, district officials, designers, local businesses and other relevant stakeholders. The platform ensures open access to guides, methodologies, case studies, participatory tools, and training materials, all in Hungarian (with a few exceptions), tailored for local implementation.

The people and tools needed for developing the adaptive pathway:

- **Mapping for Change**: delivering **Community Maps** for citizen feedback on green spaces and relation to healthy streets development in selected districts (planned for 2026).
- **Design Clips**: Developing **youth engagement materials** for schools.
- **Institute of Urban Excellence**: providing **storytelling tools for community-led planning** in relation to healthy streets development in selected districts (planned for 2026).
- **Vrije Universited Brussel and Centre for Research & Technology Hellas**: creating **Neutrality Story maps** to visually communicate climate challenges and solutions, and healthy streets implemented across Budapest (planned for 2026).
- **Delft University of Technology and adelphi**: supporting **governance and justice** aspects.

UPSCALING FOR BUDAPEST

The Knowledge Centre developed in UP2030 will disseminate and adapt the Healthy Streets methodology in the city. The online platform has been developed on an "upscaled" version, as it currently covers the city level. There might be opportunities to replicate the methodology in other cities in the long term, but before that there are many steps that need to be taken, starting from actions to ensure long term operability and sustain the platform. These are the main objectives defined by Budapest for upscaling:

- Involve district municipalities, decision-makers, and urban planners in the adaptation and implementation of Healthy Streets methodology, through active advisory support, communication and dissemination of the methodology and the Knowledge Centre, fostering knowledge-sharing.
- Ensure the operationability and sustainability of the Knowledge Centre and the operational framework beyond the UP2030 project, securing the financial and capacity needs to meet the objectives for the continuation and implementation of the Knowledge Centre's objectives.

In order to get the necessary resources to maintain the platform, it is mandatory to count on the support of the municipal departments and other companies that will be involved. The Learning Action Alliance (LAA) workshop played a key role on this, as it gathered together important stakeholders such as the Budapest Transport Centre and Budapest Capital City Urban Planning departments, with the objective of defining key next steps and set targets. The LAA members in the project became the founding members of the HSKC. A big part of the discussion was centred on the financing, management and operation aspects; this included a mapping exercise to calculate the expected costs and explore funding opportunities. In addition, an action plan for the upcoming 12 months was developed, assigning roles to the actors involved in these actions, based on the input and ideas provided by the stakeholders.

This LAA workshop was the central component of the upscale methodology for Budapest, which was divided in three phases and conducted between May and July 2025. The following sections provide an overview of the main results achieved by Budapest in the upscaling phase, including the barriers and opportunities encountered together with local stakeholders, key decisions made, and a plan for next steps.

What are the barriers that need to be overcome with upscaling?

- **Limited resources and capacity** at the municipal level **for the continued operation and maintenance** of the Knowledge Centre. The financing plan beyond the project only covers human resources costs of key members for maintenance and operation, but **for further development that require larger resources** (e.g., development of training materials with the involvement of professionals) **financing is currently unclear and unsustainable**.
- **Lack of public awareness and engagement**, which could be overcome with the implementation of UP2030 citizen engagement tools and other education activities addressed to urban planners.
- **Limited access to professional knowledge and best practices** on the topic of Healthy Streets and on how to develop sustainable and liveable urban spaces.
- **Weak collaboration between local governments** and a **delicate political situation in the city**.
- **Lack of policy and regulatory support**. The operation of the platform **needs to be integrated in the municipal workplan**.
- **Limited resources and capacities for the continued implementation of the tools** used in UP2030 by Budapest.

What are the opportunities that have been found in the upscale phase?

- **Boost current knowledge management** by aligning the Knowledge Centre platform development with existing guides and reinforcing the Healthy Streets methodology. This could also be an **opportunity to develop and share practical tools, methodologies and professional guidelines**. A stronger knowledge base will also reinforce the ongoing management and upkeep of the platform.

- **Develop and implement training programmes and capacity building activities**, such as professional trainings, workshops, webinars and e-learning programs, knowledge exchanges, **directed mainly to districts, urban planners, developers and universities**.

- **Build and coordinate an expert network**, by organising the Healthy Streets conference (on a yearly basis), and/or by collaborating with local, national and international partners.

- **Provide technical support and consultations** to local districts and urban planners.

- **Develop policy recommendations** to ensure that the Healthy Streets methodology can be mandated in public space development projects.

- Elaborate communication and dissemination campaigns and materials to **promote the Healthy Streets Knowledge Centre and community participation in planning activities** through UP2030 tools implementation.

- **Estimate finance and human resources** needs, as well as available funding sources, in order to **integrate the tasks related to the Knowledge Centre into the municipal workplan and mobilise external funds** as needed.

- **Establish an operating framework**, laying down key terms of operations and key indicators for monitoring the planned tasks and goals of the Knowledge Centre for the upcoming 12 months. These key terms will also **clarify the roles and responsibilities of the staff involved** in these tasks.

Enabling the environment: governance and finance

Governance and finance are essential components of an upscaling plan. During the first phase of the upscaling methodology (preparatory work), the city of Budapest went through the finance and governance aspects, taking as a reference the **tools** developed by GGGI and adelphi, respectively, and explored how these resources could help them shape an enabling environment for their upscaling plan. The key findings obtained from this initial phase were then discussed with the stakeholders of the Learning Action Alliance. The main results of the discussion are detailed below.

Governance

One of the main points for discussion was the enforcement of the Healthy Streets scoring methodology through regulations and standards. Membership options were explored, to define how to invite other members to join the Knowledge Centre, how to strengthen the current organisational structure and how to enforce Healthy Streets methodology among practitioners. Stakeholder that participated in the LAA workshop made the following suggestions:

- Expand userbase and strengthen dissemination of the Knowledge Centre, at the same time that the mechanisms to update and adapt the platform are established.
- Define clear roles and responsibilities for HSKC maintenance and expansion. A high-level roadmap for the Knowledge Centre that defines tasks and goals needs to be paved.
- Clarify regulatory questions in terms of making Healthy Streets urban design methodology mandatory when designing and upgrading public spaces across the city.
- Conduct regular community building events and meetings. The organisation of events and conferences could also contribute to the effort for capacity building and dissemination.

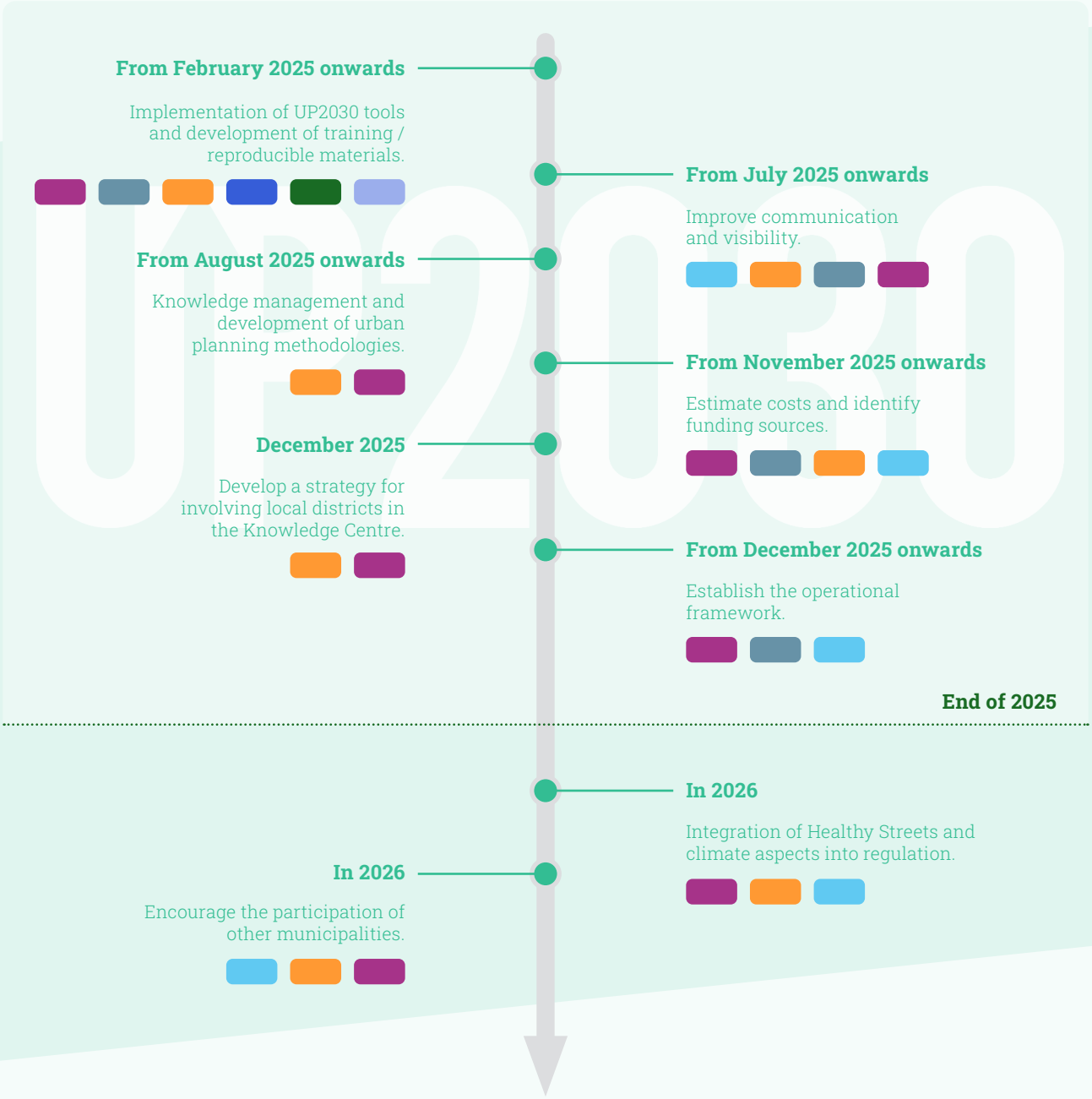
Finance

The key priority for Budapest in finance is to find funding resources and ensure capacity from the city to continue with the work done during the UP2030 project. The financial tools developed by GGGI provided high level ideas, and the city tailored them and prioritised the relevant resources that could be used at the local level. These financial tools will also be available for urban planners and other interested actors via the Knowledge Centre platform.

Together with local stakeholders, Budapest estimated the needs and costs for the next 12 months, and explored what sources of finance could cover those costs:

- The main costs that would need to be covered are related to personnel for maintaining the platform and to conferences and events that need to be organised for dissemination purposes.
- Funding options for short- or medium-term maintenance and development could be the use of municipal budget, the participating members' own budgets and upcoming Horizon Europe funds.
- Sources of finance for long-term expansion could include user fees (if the Knowledge Centre expands member base, once its benefits can be monetized), conference fees, sponsorship of private actors and other national and European funds, such as the European City Facility or philanthropic actions.

Greening the city - Action plan for the next steps



Partners involved

- Municipality of Budapest
- Global Green Growth Institute
- BKK (Budapest Transport Centre)
- BFVT (Budapest Urban Planning Company)
- Design Clips
- Mapping for Change
- Institute for Urban Excellence

A **detailed list of sub-actions** for the timeline presented before can be found below:

Improve communication and visibility
- Ensuring buy-in from the leadership of the City of Budapest – August 2025
- Development and presentation of promotional materials introducing Healthy Street principles in schools (guidance developed together with DC), universities, and events – October 2025
- Annual Healthy Streets conference – October 2025
- Launching newsletters – 2026
- Organizing and participating in events – Continuous action
- Improving communication – Continuous action
- Updating the event calendar on the HSKC platform – Continuous action

Implementation of UP2030 tools and development of training / reproducible materials
- Neutrality Story Maps – July 2025
- Community Maps – February 2025
- Workshops with children and youth – December 2025
- Storytelling tool – December 2025 / 2026

Knowledge management, development of urban planning methodologies (from August onwards)
- Upload missing materials to the platform – Continuous action
- Review of design-check (refinement of 18 criteria) – September 2025
- Mapping of topics and responsible parties – December 2025
- Harmonization of existing materials, develop urban planning hierarchy of guidance – 2026
- Assess how to include healthy streets aspects into regulation – 2026

Develop a strategy for involving local districts in the knowledge centre – December 2025

Estimate costs and identify funding sources
- Estimating annual operating costs – November 2025
- Including operating costs of the Knowledge Centre in the annual budget plans of Knowledge Centre member organizations – November 2025
- Identifying potential funding sources for larger finance needs (e.g., development of training materials, conferences etc.) – 2026

Establish the operational framework
- Members' participation in joint work and annual meetings – Continuous action
- Formalizing BFFH-BFVT Knowledge Centre collaboration in yearly workplan between the organisations - 2026
- Organizing annual meetings of the HSKC members – Continuous action
- Defining framework and process for admitting new members – December 2026

Encourage the participation of other municipalities
- Involving foreign municipalities to share best practices, then disseminating them to districts – 2026
- Contacting local municipalities outside Budapest and inviting them to the annual conference – August 2025
- Creating a guide for local municipalities outside Budapest – 2026

Before

After

TOOLS' CONTRIBUTION TO THE PROTOTYPE AND POST-PROJECT USE

As mentioned in previous sections, Budapest aims to ensure the operability and sustainability of the Knowledge Centre. To this end, the city will continue to apply some of the tools used for developing the prototype after the project ends.

Youth engagement materials for schools (Design Clips)

The **toolkit** contributes to the pilot's long-term vision by embedding child- and youth-friendly perspectives into active travel and urban design initiatives. The toolkit includes a variety of practical materials (such as project roadmaps, campaign templates, and participatory tools with detailed instructions) that build local capacity and enable independent application beyond the project.

Local stakeholders have been actively involved in the co-development of the toolkits, ensuring ownership and long-term usability. The tailored toolkit was co-developed with the Budapest Transport Centre (BKK). It was piloted in a workshop with a school preparing to test a School Street closure in autumn, and BKK plans to expand its use to more schools in the new academic year. The toolkit will also be uploaded to Budapest's Healthy Streets Knowledge Centre to support future urban design and child-friendly city initiatives involving children and young people.

Community Maps (Mapping for Change)

The **Community Maps** are aligned with Budapest's vision of a liveable, people-centred city by integrating community input into planning. The tool supports sustainable mobility, green space development and climate adaptation strategies. In terms of local application, it has been embedded into Budapest's updated Green Infrastructure Strategy and is part of the Healthy Streets Knowledge Centre. It also supports the city's "Concrete and Asphalt for Green Surfaces" programme and the pilot sponge city initiative. Further plans are in place to use the tool for community engagement by local districts in the development of their own healthy streets projects.

In order to ensure that it can be maintained and updated in the future, training and capacity-building sessions were held with municipal staff. Nine municipal districts have already expressed interest in deploying Community Maps to support local outreach and planning. In relation to that, Mapping for Change will continue to offer hosting, updates and training as needed.

Storytelling for Participatory Exchange (Institute for Urban Excellence)

The Storytelling for Participatory Exchange is a methodology that uses guided storytelling processes to enables citizens to express their perspectives on their living environment and their desires for the future by telling imaginary stories that reflect their real-life experiences. This tool that can be implemented via workshops and implementation in Budapest will happen in early 2026, in relation to healthy streets development in selected districts.

Neutrality Story Maps (VUB and CERTH)

By showcasing the work of the pilots and their prototypes in an accessible format with success stories, lessons learned and future strategies, **Neutrality Story Maps** allows other neighbourhoods in the city to learn and adopt similar climate neutrality strategies and approaches.

The tool has been embedded in the communication strategy for the project by Budapest, who is using the tool to communicate their activities in UP2030 to the general public in an accessible multimedia narrative format. The city expressed interest in using the platform for at least the next five years that will be freely accessible.

TRANSFERABILITY OF THE PROTOTYPE

Budapest is a good example for cities looking to develop projects or interventions linked to master planning and informed decision making. These projects can guide current municipal planning processes and transform the way local governments think and act. In UP2030, one of the objectives that has been defined in the upscale phase is to maximise the impact of the prototypes developed during the project, expanding them to other sectors, regions and countries.

To this end, it is extremely important to understand the characteristics of the context of the place where the prototypes are to be scaled up or replicated. To facilitate this process of transferring processes and results, the UP2030 project has developed four Urban Typologies with over 1000 provinces each in order to identify provinces, covering almost all of Europe, that have similarities based on different indicators that have been analysed. By grouping European regions with similar attributes, the Urban Typologies aims to foster targeted collaboration and encourage knowledge-sharing and communication for more effective solutions, especially between regions and cities sharing similar opportunities and challenges.

Four distinct typologies have been created:

- **Capacity for action**: Considers socio-economic factors and governance indicators.
- **Contributions to mitigation**: Focuses on sectoral emissions, carbon sequestration capacity and renewable energy potential.
- **Climate hazards**: Focuses on prevalent climate hazards and exposure.
- **Urban morphology**: Focuses on urban landscape and infrastructure characteristics such as urban density, land use types, etc.

For each typology, respectively, these are the clusters that correspond to the province in which Budapest is located (Budapest province), and hence which most closely resemble the province Budapest:

CAPACITY FOR ACTION

Touristic Destinations

Spanning across Europe, with particular prominence along the Mediterranean coastlines of France and Spain, as well as the Alpine regions of Northern Italy and Austria, this cluster is characterised by **very high tourism activity and a large population size**. It boasts a **strong workforce and robust economy**, alongside an **average level of institutional trust and effectiveness**. The **proportion of protected areas is relatively high**, especially when compared to other clusters with similarly high levels of urbanisation.

CONTRIBUTIONS TO MITIGATION

High solar power potential, low sectoral emissions in southern continental Europe

This cluster is defined by **very high photovoltaic and CSP potential** and v**irtually no wind energy potential**. The spatial distribution of this cluster mostly concentrated on central Europe and northern Italy. **CO_2 emissions from buildings, vehicles, and industry are among the lowest** across study area, while the **urbanization rate is high**, covering key urban centers in relatively flat, lowland basin landscapes. The **low share of forests and wetlands** indicates potential for focused solar energy deployment without interfering with these ecosystems.

CLIMATE HAZARDS

Highest exposure to flooding in pockets of Europe

This cluster with multiple large capitals is **densely populated and highly urbanized**, and scattered across **heterogeneous landscapes**, including alpine, coastal, semi-arid Mediterranean, and secondary mountain ranges in **Central and Eastern Europe**. Its defining characteristic is the **very high exposure to pluvial, fluvial, and coastal flooding**, driven by diverse geographical, hydrological, and meteorological conditions. **High heat stress and high air pollution** (moderate risk according to WHO Air Quality Guideline (AQG) 2021) are additional critical hazards, while landslide and wildfire risks are moderate. The cluster faces **complex, multi-hazard challenges requiring integrated adaptation**. The cluster is closely related to the cluster "Heat hazard and air pollution in lowlands and basins in southern and eastern Europe" with respect to air pollution, heat stress and wildfire.

URBAN MORPHOLOGY

Flat urban-industrial hubs with low green coverage

Regions in this cluster are found all throughout the study area but concentrated in Western and Northern Europe. Urban areas in this cluster are characterised by a **high proportion of industrial and commercial spaces**, the highest amongst all clusters. The urban landscape is f**lat and highly sealed**, and **dense built-up structures are common**, with **very limited space dedicated to green areas. Population density is slightly above the average** of the study area.

For each of these four typologies, and for all clusters constituting the typologies, the following useful information is highlighted and can be explored: a short characterization, common challenges and opportunities in each cluster, as well as key areas for action and example measures and instruments therein.

In doing so, clusters can support urban planners and decision-makers in identifying strategic priorities, in addressing climate challenges more effectively, and with knowledge transfer between similar provinces, across Europe.

Budapest can serve as an example for other cities in these clusters, i.e. with these similar characteristics that are seeking to develop sustainable, climate-resilient and inclusive strategies for their local contexts. However, it should be noted that these typologies do not restrict the scope for replication and scaling up (i.e., the Budapest prototype is not only applicable in places classified within these four typologies), but rather help to identify places where the transfer of this package of Budapest is most likely to be successful. In addition, it goes without saying that these clusters can not replace province or city case studies, and not be used as such. The clusters are on a province level.

*To explore the typologies, use the **interactive map**.*

*The full list of indicators is also found in the **methodology section**.*

KEY MESSAGE FROM THE CITY

"We need to make sure that the Knowledge Centre will remain operational after UP2030 and that it will be integrated into the workplan of the municipality and of the partners (BKK and BFVT). For this purpose, it is essential to secure funding resources, so that we can build enough capacities for continuing working on it."

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The local actions have been led by the municipality of Budapest and its liaison, the Global Green Growth Institute.

All images: UP2030 Budapest team

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