



Image: Unsplash / Chay Kelly

ROTTERDAM 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 Rotterdam 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 Rotterdam 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.



TABLE OF CONTENTS

Executive summary	2
Glossary	3
The importance of upscaling – UP2030 Upscaling Methodology	4
Introduction of the city.....	5
From vision to action	5
Rotterdam's adaptive pathway	5
The people and tools needed for developing the adaptive pathway	5
Upscaling for Rotterdam	6
What are the barriers that need to be overcome with upscaling?.....	6
What are the opportunities that have been found in the upscale phase?.....	7
Enabling the environment: governance and finance	7
Governance	7
Finance	8
Greening the city - Action plan for the next steps	9
Tools's contribution to the prototype and post-project use	11
Transferability of the prototype.....	12
Key message from the city.....	13
City contact	14

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.

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.

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.

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 districts of Bospolder and Tussendijken (BoTu), located to the west of Rotterdam city centre, have a high population density and a high degree of diversity among their residents. The area is home to a large number of relatively young people from a non-Dutch background, and it is one of the poorest districts in the Netherlands. To strengthen social cohesion and create economic opportunities, the municipality launched the "Resilient BoTu 2028" programme, which includes several interventions and initiatives, with energy transition serving as the entry point for achieving transformative change. Through UP2030, the ambition is to increase the scale of interventions to raise social resilience, improve energy efficiency, renovate housing stock and increase the number of people involved in upskilling in the two districts, as well as to seek for opportunities to replicate and upscale these interventions in other neighbourhoods of the city.

From vision to action

CITY'S VISION

Leverage the lessons learnt from the Resilient BoTu 2028 programme:

- ★ Co-create and engage with residents, ensuring that the knowledge and investment stays in the neighbourhood.
- ★ Leverage energy transition to address social development.
- ★ Harness the power of community and build adaptive capacity.

PROTOTYPE

Resilient District Learning Toolkit

Rotterdam's adaptive pathway

Rotterdam captures lessons from the BoTu 2028 program in a [practical toolkit](#) to support just, climate-resilient, and energy-neutral neighbourhoods citywide. Designed for municipal practitioners and stakeholders, the toolkit consolidates case studies, methods, interventions and resources ranging from energy retrofit to community engagement approaches, aiming to promote climate neutrality, energy transition, resilience, and social equity at the neighbourhood scale. Designed collaboratively with local departments, community programs, and knowledge partners, the toolkit intends to strengthen Rotterdam's capacity and provide a replicable model to scale tested interventions across Rotterdam's districts.

The people and tools needed for developing the adaptive pathway:

- ★ **Veldacademie:** Lead in developing toolkit through 2025.
- ★ **Municipality of Rotterdam:** Owner and co-developer of the toolkit.
- ★ **Resilient Cities Network:** City liaison and co-developer of the toolkit.
- ★ **BoTu 2028 Program:** Core content source, including natural gas-free strategy, local engagement, and energy transition efforts.
- ★ **Vrije Universiteit Brussel and Centre for Research & Technology Hellas:** Supporting the integration of the [Neutrality Story Maps](#).
- ★ **RSPW, Wijk aan Zet, and Driehoeksplein Team:** Contributing cases and evaluative insights.
- ★ **Transition Academy:** Platform within the Municipality which will integrate toolkit into its learning programme from 2026 onwards.

UPSCALING FOR ROTTERDAM

During the scaling-up phase of UP2030, Rotterdam aims to integrate the Resilient District Learning Toolkit into the city's policy structure, establishing it as the essential resource for implementing the neighbourhood resilience approach. Having been developed in the context of the BoTu neighbourhood, Rotterdam now wants to explore how the toolkit could be replicated in other districts and scaled up to city level. To this end, it is also essential to align the toolkit with the various planning processes and approaches of different municipal departments, integrating it into existing plans and programmes. This will involve bringing together practitioners from various departments (mobility, biodiversity, climate adaptation, etc.) to explore how resilience can be incorporated into different policy domains.

In order to accomplish these objectives, the city of Rotterdam restructured the UP2030 upscale methodology by organising four LAA workshops with different stakeholders, in order to address the objectives in a more specific way.

- ★ The first workshop was focused on the evaluation of the Driekhoekplein, which is one of the case studies featured in the toolkit. The objective of this workshop was to capture the lessons on evaluation of integral climate adaptation and public square, and to strengthen ownership and shared responsibility for square maintenance and management.
- ★ The second workshop was a higher-level discussion held with researchers and different departments working on the integrated neighbourhood development approach. The intention was to connect and align our toolkit with the approach that the municipality has and discuss its structure. This approach is currently being monitored by researchers and aims to ensure that findings can directly inform and support municipal processes already underway.
- ★ The third discussion focused on collaboration opportunities with the Transition Academy within the Municipality of Rotterdam, a learning environment within the municipality that will operate for three years to improve collaboration, integrate silos and prepare the city for social and physical transitions.
- ★ The fourth discussion took place with municipal professionals linked to the BoTu program itself and the opportunities they identified to continue and scale up the approach.

The following sections provide an overview of the main results achieved by Rotterdam 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?

- ✿ **Poor transition from the implementation phase to maintenance activities** due to different departments' responsibilities in the municipality.
- ✿ **Lack of consensus found in the evaluation with the citizens**, as there are concerns over the maintenance of the green spaces.
- ✿ **Improbable interaction between the project scale and the urban scale and the relevant departments**. The existing processes within the municipality can be sometimes parallel, overlapping and conflicting with each other.
- ✿ **Loss of institutional memory**, which has an impact on the continuation of the project. Related to this, there is also **a loss of resources due to the end of the projects or change of personnel**, since the municipality works mainly on a project-based approach, meaning that there is not usually a continuity after the project ends. This has an influence on the continuation and therefore, on the impact of the activities as well.
- ✿ **Lack of leadership on the project**, as there were many cross-department discussions that slowed down the procedures and no specific department guiding the process. Too much joint ownership could create risks such as delays and stagnation.



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

- ★ Before the project comes to an end, **the municipal department and relevant stakeholders involved in the project activities need to start communicating about the toolkit**, and provide people with information about what it means for them and how they can use it.
- ★ **Foster collaboration with the Transition Academy.** The academy is working on similar topics, but from a different approach. The principles that will be followed have been defined, especially for making neighbourhoods resilient, and now these principles need to be aligned with the Transition Academy.
- ★ **Align the Resilient District Learning Toolkit with the municipality's integrated neighbourhood development approach and different urban agendas.** The toolkit could contribute to the efforts of bringing the social component into the climate transition.
- ★ **Develop a plan for replicating activities** from the public square of Driehoeksplein to the square of Bospolderplein, located in the same neighbourhood.
- ★ **Develop policy recommendations** to ensure that the Healthy Streets methodology can be mandated in public space development projects.
- ★ **Advance engagement with different municipal departments** (mobility, biodiversity, climate adaptation, etc.), **as well as with the new neighbourhood community builders** working on integral neighbourhood approaches.

★ **Create a new way of evaluating the project impact** by engaging with the users (mainly citizens and local stakeholders).

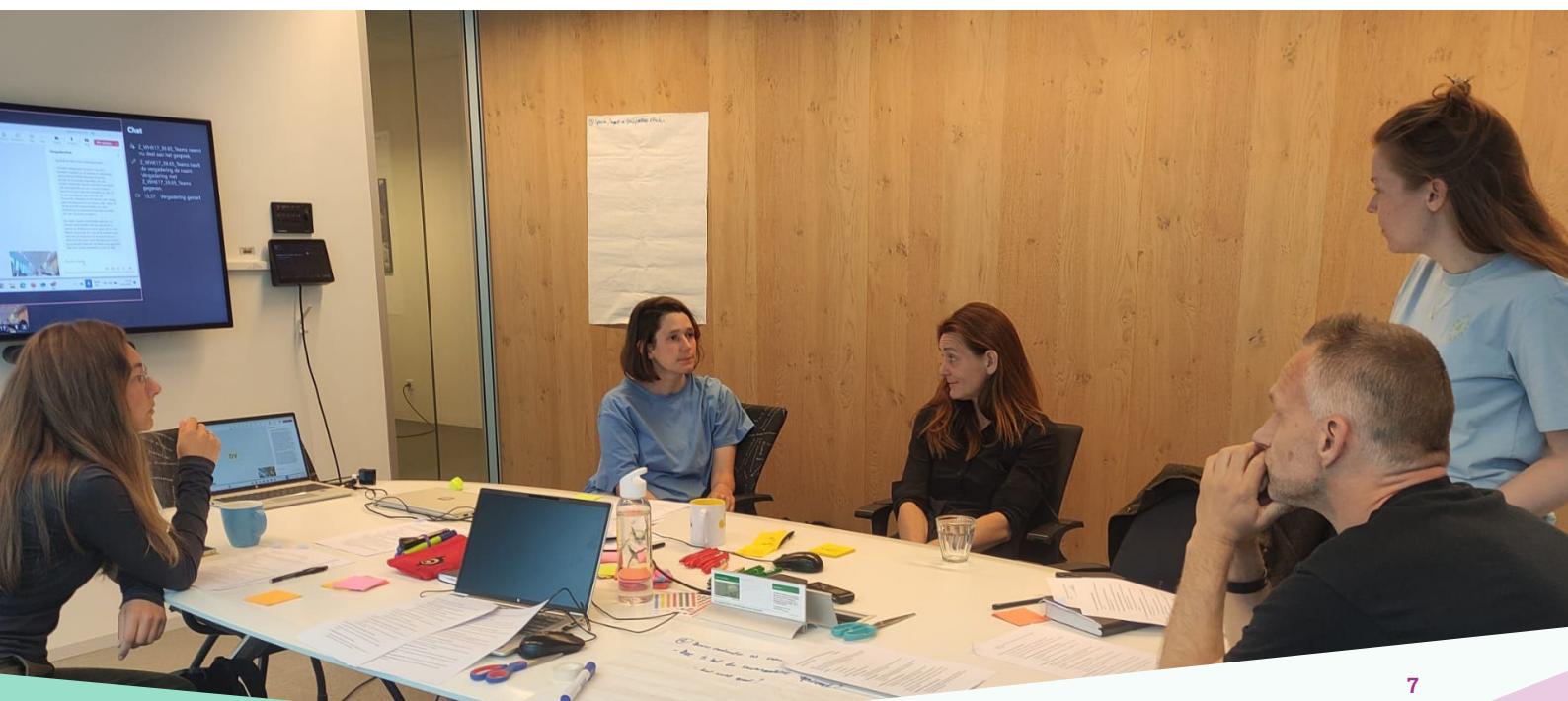
- ★ **The toolkit will be an added value** to the resources that are already existing in the municipality, as it is not comparable to any other resources.
- ★ As the maintenance activities need to be better integrated in the project development phase, this project could serve as an **example on how to ensure the continuity and maintenance** of the project after it ends.

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

In the governance workshop, Rotterdam discussed that resilience as a policy concept does not always resonate with stakeholders. A key takeaway was therefore the need to reframe resilience in terms that



connect to existing priorities and policy agendas. The workshop encouraged us to ask actors what they already contribute to urban transition/resilience. This approach helped to align insights with other agendas without requiring actors to adopt new terminology. This reframing was reflected in existing initiatives such as the Transition Academy and integrated neighbourhood development programmes, which already contribute to resilience outcomes even though they do not explicitly use the term "resilience". In addition, reframing "working with communities" as "creating alliances built around shared goals" also helped to put co-creation with local stakeholders and shared ownership on the agenda in policy.

The discussions underlined that this reframing should operate across multiple scales, from municipal programmes to district-level initiatives and learning environments.

The four Learning Action Alliance (LAA) discussions led to several adjustments to the prototype, as it became clear that different user groups have different priorities. Through these discussions, a clearer distinction emerged between elements that are specific to the Resilient BoTu 2028 approach, such as local stories and photographs, and more generic insights and building blocks that can be applied beyond the neighbourhood. Both elements were identified as essential for upscaling, although not all are equally relevant for all audiences.

The locally grounded materials help foster recognition and engagement within the neighbourhood and inspire others, while the generic building blocks support transferability and reuse in other contexts by providing more in-depth guidance for implementation and action. To further enhance their applicability, the building blocks were specified for different user groups, including urban designers, policy makers, and neighbourhood workers, enabling each group to effectively apply them within their own professional practice.

Further development of the toolkit goes hand in hand with capacity building. A key lesson from the process was that tools only become effective when users recognise their own practices and priorities in them. For this reason, the toolkit should not be presented as a stand-alone product, but as a shared learning instrument that is actively used and adapted in practice.

Organising hands-on workshops around the toolkit is therefore essential. These workshops serve both to build capacity in accessing and using the

toolkit and to further refine it through real-world application. By working in co-creation with municipal teams, the Field Academy, the Transition Academy, community builders, and local initiatives in concrete neighbourhood contexts, ownership of the toolkit is deliberately fostered. This collaborative approach ensures that the toolkit evolves collectively, while simultaneously strengthening the skills and long-term commitment of those who will apply it after upscaling process.

Finance

In the finance workshop, several tools for cost-benefit analysis were discussed. Most of these tools focus primarily on physical and technical interventions and therefore proved to be less directly applicable, particularly given the strong emphasis on social resilience in Resilient BoTu 2028.

The most applicable was the C40 Heat Stress Tool, which was identified as highly relevant. The tool was discussed in relation to the evaluation of a neighbourhood square and also in anticipation of another square that is scheduled for redevelopment. In these cases, the tool helps link heat stress interventions to measurable economic benefits, such as avoided health costs and reduced vulnerability.

Overall, the workshop highlighted the importance of applying financial tools selectively and of complementing quantitative cost-benefit analyses with qualitative and social value considerations when working at neighbourhood level.

Opportunities for new financing streams for Resilient BoTu 2028 and the prototype lie primarily in funding arrangements that prioritise learning over project delivery. The Transition Academy is a key opportunity in this regard, as it is based on a learning-oriented budget rather than a traditional project budget, creating space for experimentation and iterative development. Future urban development projects in Rotterdam will be embedded in the Transition Academy as practice-based case studies.

In addition, neighbourhood-based programmes such as Wijk aan Zet and Integrated Neighbourhood Development offer concrete opportunities to connect the toolkit to citizen-driven initiatives and local priorities. When combined with municipal programmes that integrate social and physical neighbourhood development, these funding streams can support the application of the toolkit in practice, while strengthening local ownership and long-term impact.

Greening the city - Action plan for the next steps



Partners involved

Research partner (e.g. Veldacademie/TU Delft)	Residents	Rotterdam city makers
Municipality of Rotterdam	Community builders/organisations	Housing associations
Square users	Neighbourhood managers/workers	NGOs
Designers	International partners	Project teams
Policy departments/officers		
Local Initiatives		

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

★ **Evaluation workshop Driehoeksplein (case study)** (Lead actor(s): Lead research partner (e.g. Veldacademie / TU Delft); Contributor(s): Municipal project team, square users, designers):

- Workshop conducted – June 2025.
- 6 months milestone: evaluation lessons documented.
- 12 months milestone: lessons integrated into toolkit.
- 24 months milestone: lessons applied to Bospolderplein.

★ **Exchange with municipal researchers & Integrated Neighbourhood Development** (Lead actor(s): Municipality (research & neighbourhood development); Contributor(s): Researchers, policy departments):

- Exchange organised – June 2025.
- 12 months milestone: workshop toolkit and municipal approach.
- 24 months milestone: toolkit embedded in programme.

★ **Local stakeholder workshop in BoTu**
(Lead actor(s): Lead research partner; Contributor(s): Local initiatives, residents, community builders):

- Workshop conducted – September 2025.
- 6 months milestone: local priorities incorporated in the toolkit.

★ **Workshop with Transition Academy (Municipality of Rotterdam)** (Lead actor(s): Municipality (Transition Academy); Contributor(s): Research partners, municipal departments):

- Collaboration explored – September 2025.
- 12 months milestone: opportunities for upscaling identified.
- 24 months milestone: toolkit structurally embedded in Transition Academy.

★ **Governance workshop with BoTu programme professionals** (Lead actor(s): Municipality (BoTu programme); Contributor(s): Policy officers, neighbourhood managers):

- Discussion held – September 2025.
- 6 months milestone: evaluation lessons documented.
- 12 months milestone: lessons integrated into toolkit.
- 24 months milestone: lessons applied to Bospolderplein.

★ **Promotion at Call to Action Barcelona & Stadmakerscongres** (Lead actor(s): Research partner and Municipality; Contributor(s): International partners, Rotterdam citymakers):

- Dissemination completed – November 2025.
- 2 months milestone: increased interest at launch event.

★ **Toolkit launch event** (Lead actor(s): Research partner and Municipality; Contributor(s): Community builders, professionals, residents):

- Official launch – 26 January 2026.
- 6 months milestone: follow-up sessions organised.
- 12 months milestone: toolkit actively used.

★ **Implementation and train toolkit in Transition Academy case studies** (Lead actor(s): Municipality (Transition Academy); Contributor(s): Project teams, neighbourhood workers):

- 6-12 months milestone: first case studies implemented.
- 24 months milestone: multiple cases completed.

★ **Upscaling toolkit to other neighbourhoods**
(Lead actor(s): Municipality; Contributor(s): Housing associations, NGOs, community organisations):

- 12 months milestone: pilot neighbourhoods identified.
- 24 months milestone: broader citywide application.

TOOLS' CONTRIBUTION TO THE PROTOTYPE AND POST-PROJECT USE

The Rotterdam prototype, the [Resilient District Toolkit](#), is primarily supported for long-term sustainability and replication by integrating the Neutrality Story Maps (NSM) tool and aligning the toolkit's approach with existing municipal policy frameworks and capacity-building efforts. The core tool directly integrated from the project to support the prototype's long-term sustainability is the [Neutrality Story Maps \(NSM\)](#):

- ✿ **Integration and Dissemination:** The climate story map of BoTu will be featured within the toolkit. The NSM functions as an engagement tool to visualise climate change impacts and net zero solutions, and it will communicate the prototype's activities to the public in an accessible multimedia narrative format.
- ✿ **Knowledge Transfer and Replication:** By showcasing the prototype, including success stories, lessons learned, and future strategies, the NSM helps encourage the uptake of successful strategies and approaches in other cities and neighbourhoods. This directly supports the toolkit's goal of being a robust and accessible resource for practitioners to contextualize and replicate the neighbourhood resilience approach.
- ✿ **Operational Sustainability:** The NSM is an open platform. Cities, including Rotterdam, have expressed interest in using the platform for five

years free of charge after the project concludes. During this period, Rotterdam can use and add/edit content independently. This operational independence, managed by the city, ensures the visualization and engagement aspect of the toolkit can be maintained.

The strategic alignment for the Rotterdam Resilient District Toolkit is focused on ensuring the prototype moves beyond an isolated project and becomes an essential, institutionalized resource integrated into the municipality's permanent operations. This involves aligning the toolkit, which captures lessons from the Resilient BoTu 2028 program, with the city's broader policy structures, including the integrated neighbourhood development approach. The core aim is to mainstream the neighbourhood resilience approach, helping to achieve city goals related to climate neutrality, energy transition, resilience, and just transition. By bringing together practitioners from different departments (such as mobility, biodiversity, and climate adaptation), the toolkit helps build a shared understanding of resilience as a cross-cutting principle across policy domains, thereby informing and supporting municipal processes already underway. Furthermore, this alignment is supported by exploring linkages with external strategic tools like the [C40 heat tool](#) and parallel engagement with the [Spatial Justice Framework](#).



TRANSFERABILITY OF THE PROTOTYPE

Rotterdam 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 Groot-Rijnmond:

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 industrials emissions and average renewables potential

This cluster is defined by its **extremely high industrial CO₂ emissions** – the highest in the study area, combined with **high emissions from buildings and vehicles, and a very high urbanization rate**. The regions of this cluster are sparsely distributed mostly throughout the Netherlands, Germany, Poland, and Czech Republic. This cluster has **high photovoltaics potential and very high wind energy potential**, offering substantial opportunities for renewable energy deployment. **Forests and wetlands are sparse**, suggesting the need for systemic restoration strategies. Covering only 4% of the study area, the cluster accounts for 10% of the population and 13% of the urban population, highlighting the **concentration of people therein**.

CLIMATE HAZARDS

Extreme flooding and sea-level rise exposure in urbanized low-lying coastal areas

This cluster is mostly found in **urbanized, low-lying coastal areas** of Belgium, the Netherlands, Germany and parts of Scandinavia, and includes **major port cities such as Rotterdam, Amsterdam and Hamburg**. Its defining characteristic is the **highest exposure to sea-level rise**. Almost all regions with very high exposure sea-level rise are in this cluster, despite a large spatial spread. **Exposure to 100-year return flooding events of pluvial, fluvial and coastal floods is also very high**, reflecting the combined risk of slow- and fast-onset flooding in lowland coastal zones. **Heat stress is currently low and air pollution moderate**. Landslide susceptibility is essentially non-existent, and wildfire risk is low.

Rotterdam 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](#).

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 **flat 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.

KEY MESSAGE FROM THE CITY

"Upscaling works best when resilience is reframed to align with existing priorities and everyday practices. Connecting resilience to what actors already do and value enables integration across policy agendas and organisational structures."

"Distinguishing between locally grounded elements and transferable building blocks is essential for meaningful upscaling. Stories and images foster recognition and engagement, while generic building blocks enable implementation and transfer to other contexts."

"Toolkits are most effective when embedded in learning environments rather than treated as stand-alone products. Positioning the toolkit as a shared learning instrument within structures such as Transition Academies supports continuous adaptation and long-term impact."

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.

CITY CONTACT

Liesbeth Werleman

(lc.werleman@rotterdam.nl),

Municipality of Rotterdam, Neighbourhood manager and programme manager Resilient BoTu 2028

Marthe van Gils

(marthe@veldacademie.nl),

Lead researcher, Veldacademie

Otto Trienekens

(otto@veldacademie.nl),

Veldacademie, Municipality of Rotterdam, Transition Academy

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



All images: UP2030 Rotterdam team

This document has been produced thanks to the work of the entire UP2030 consortium:



Funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them. This project has received funding from the Horizon Innovation Actions under the grant agreement n° 101096405.

UP2030 CONTACT



up2030-he.eu



x.com/UP2030_HE