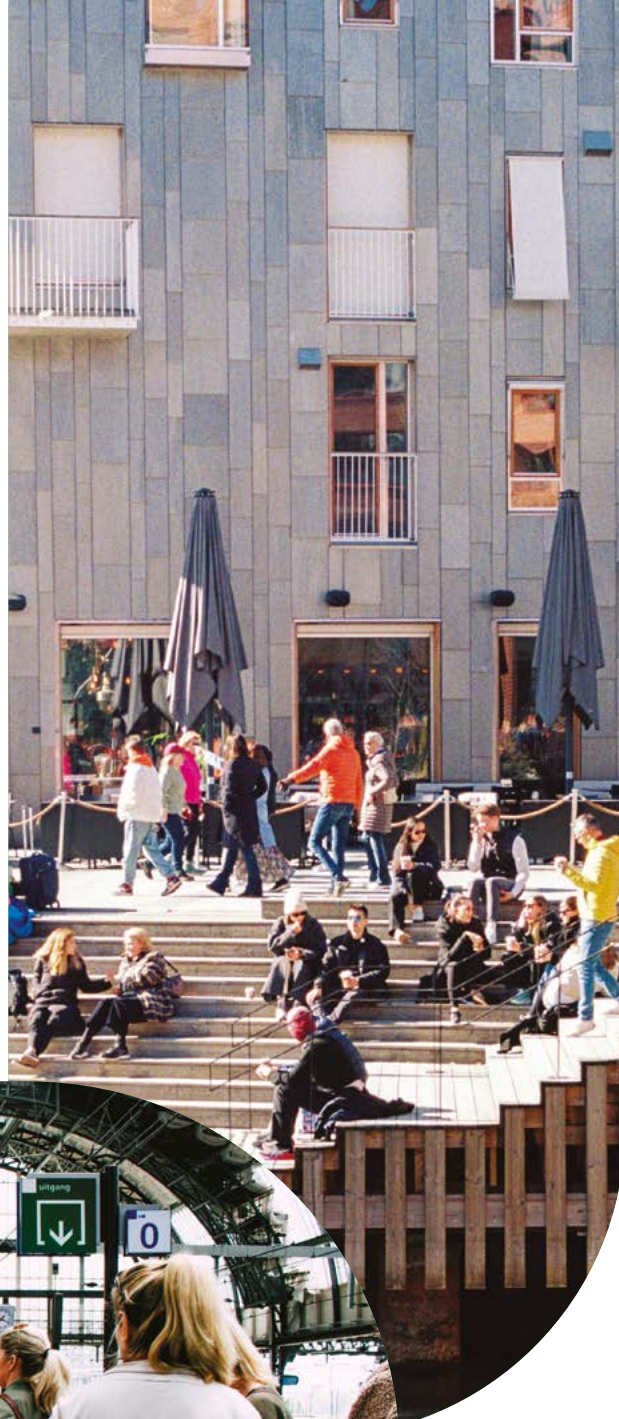


Barriers and Recommendations for **Transformative (Urban) Research and Innovation Programming**

White Paper





Imprint

Driving Urban Transitions (DUT) Partnership

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1. Introduction

In an era of global crises – from climate change and biodiversity to socio-economic – the urgency for transformative action is mammoth. Addressing these interconnected challenges demands comprehensive strategies, innovative approaches and a collective commitment to supporting urban transitions.



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This White Paper aims to equip Driving Urban Transitions (DUT) partners and governance bodies with essential insights and strategies to unlock DUT's transformative potential, advancing significant urban transitions to meet the challenges of the 2020s and beyond.

The Intergovernmental Panel for Climate Change (IPCC) warns of a “rapidly closing window of opportunity to secure a liveable and sustainable future for all”.¹ Humanity must urgently confront the escalating crises of climate, biodiversity and socio-economic stability. Navigating the Anthropocene –age of human impact – requires critical reflection on human processes to address these issues effectively.

While the urgency is undeniable, the awareness that humanity has the power to transition away from exploitative practices towards a sustainable, regenerative future is a powerful motivator if kept in constant awareness.

In parallel, the European Union has increasingly reframed its policy agenda around competitiveness, positioning innovation as a central driver of strategic autonomy, economic resilience, and sustainable growth. Research and innovation are now expected to deliver measurable outcomes that contribute not only to climate and societal goals but also to Europe's global standing and productivity.

¹ IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

This evolving focus challenges stakeholders to ensure that the twin transitions—green and digital—are grounded in systemic innovation, with an emphasis on scalability, economic relevance, and long-term societal benefit.

In 2019, European Union (EU) member states adopted the EU Green Deal, a comprehensive strategy to make Europe the first climate-neutral continent by 2050. This initiative includes policies aimed at reducing greenhouse gas emissions, protecting biodiversity, fostering a circular economy, and ensuring a fair, inclusive transition that leaves no one behind.

Aligned with the EU Green Deal, the EU Horizon Europe (HE) Research and Innovation Framework Programme directs research and innovation to support the Green Deal's goals. Unlike previous frameworks, HE, launched in 2021, embraces a mission-driven approach, establishing specific, measurable missions to tackle major societal challenges.

This mission orientation promotes cross-disciplinary collaboration, direct impact, and stronger connections between scientific advancements and societal needs (see Chapter 4 for more details on mission orientation).

European Partnerships within HE, particularly the Driving Urban Transitions (DUT) Partnership, play a key role in supporting Green Deal priorities by facilitating cross-sectoral collaboration and leveraging investment for sustainable urbanisation. DUT builds on more than a decade of challenge-driven research under the Joint Programming Initiative (JPI) Urban Europe, pioneering innovative frameworks, requirements, and measures that contribute to urban transformation. JPI Urban Europe not only addressed critical urban challenges in an integrative, holistic manner (the WHAT) but also adopted co-creative approaches (the HOW) to embrace urban complexities. Building on these foundations, DUT has set high ambitions to develop a truly transformative research and innovation programme (see Chapter 3 for further insights).

DUT as a laboratory for R&I funders

DUT can be seen as a laboratory for R&I funders by providing a platform for exchanging insights, sharing experiences, and testing innovative, challenge-driven funding instruments. As a learning environment, DUT refines funding tools, frameworks, and regulations, aiming to ensure that investments significantly impact urban challenges of the 2020s and beyond.

Creating and implementing a transformative R&I programme requires ongoing improvements to achieve DUT's ambitious vision. While DUT has advanced the establishment of a transformative ecosystem, challenges remain – some of them longstanding since JPI Urban Europe, and others newly emerging due to the urgent societal crises of the 2020s and the increased complexity of joint programming in EU Partnerships under HE. To advance towards its vision, DUT must address these barriers and bottlenecks.

This White Paper provides DUT partners and governance bodies with actionable insights to unleash DUT's full transformative potential. By identifying barriers to transformative action, it recommends reimagining R&I funding and its frameworks to foster urban transitions. Based on a robust basis of gathered information and evidence, this paper seeks to ignite a sense of urgency to continually enhance DUT's frameworks and to inspire creativity in designing and implementing a truly transformative research and innovation programme.

2. Methodology

The methodology to generate input for developing this white paper encompassed a mix of desk research, interviews, workshops with DUT partners, stakeholders and urban actors, project workshops, and personal experiences. This mix aimed to bring together various experiences, perspectives and knowledge to identify barriers and formulate recommendations for how to address them.

The work was conducted from March 2023 to November 2024. Figure 1 illustrates the process towards the final White Paper and the events, which produced input and provided insights.

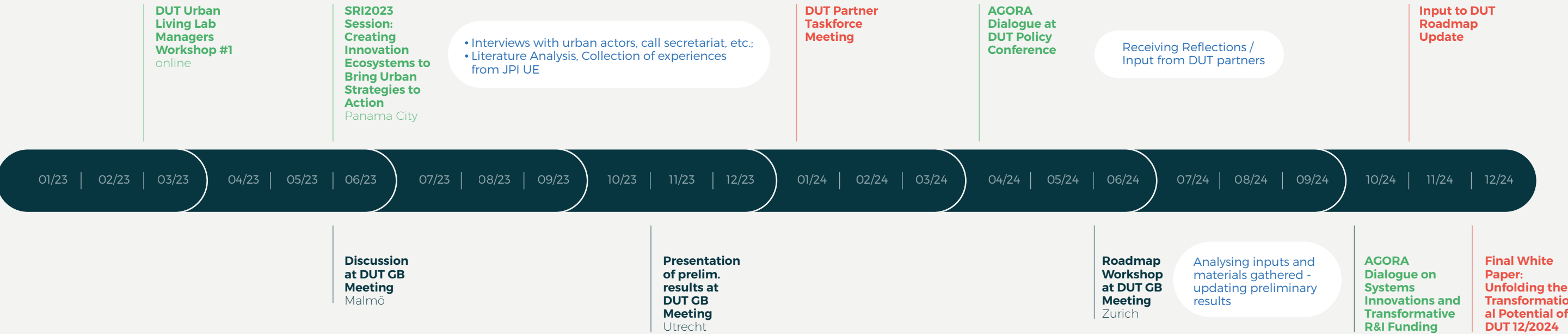
In the completion phase of the paper, ChatGPT has been used for streamlining the language of the content.

3. The DUT Partnership: Building on JPI Urban Europe’s Legacy

As noted above, Driving Urban Transitions Partnership (DUT) builds on over a decade of experience from JPI Urban Europe). JPI Urban Europe established a strategic partnership with over 20 European countries, focused on developing knowledge, tools and dialogue platforms for urban

transformations. Central to its mission was co-funding research and innovation projects, resulting in the support of over 154 projects across 16 calls with a total investment of € 140 million, many co-funded through the European Commission’s European Research Areas Network (ERA-NET) scheme.

Development process of the White Paper



Since its inception in 2011, JPI Urban Europe has focused on addressing the complexity of urban issues, recognising urbanism as a “wicked issue” marked by interwoven disciplines, stakeholders and conflicting interests. Tackling urban challenges often results in cascading impacts across various sectors. To address this, JPI Urban Europe adopted a strategic approach that emphasised dilemmas, synergies and the need for comprehensive solutions. By challenging traditional funding schemes, it promoted innovative methods and frameworks to ensure funded projects could effectively address urban complexities. To achieve this, JPI Urban Europe and its Funding Agencies Working Group developed innovative approaches to address complex urban challenges, including:

- **Urban Living Labs:** To address urban issues comprehensively, JPI Urban Europe encouraged experimental, co-creative approaches, such as Urban Living Labs (ULLs). These labs facilitated collaboration among science, policy, society and business sectors, bringing diverse stakeholders together for experimentation and policy co-design. ULLs provide co-creation grounds for new governance models and solutions within real life settings, evolving over time from ULL 1.0 to 2.0. This shift represented a deeper understanding of ULLs as central tools for addressing urban challenges in holistic, integrated ways. ULLs continue to be a central tool in DUT to foster co-creation and urban experimentation. Analysing the first DUT Joint Call, more than 85 implemented urban living labs could be identified. Furthermore, DUT promotes ULLs regularly in conference sessions and dedicated training events.
- **Co-creative strategic and thematic development:** Challenge-driven research must begin with defining joint challenges. JPI Urban Europe prioritised co-designing its strategic and thematic focus with a wide range of urban stakeholders, including local governments, civil society, small

businesses, urban programmes, social innovators, and practitioners. This approach fosters a collaborative framework for shaping joint calls and project topics that reflect the complex needs of urban areas. The co-creative spirit to develop strategic and thematic orientation continues in DUT, ensuring that the voices, challenges, as well as needs and requirements of a diverse set of urban actors are met in DUT activities.

- **AGORA Stakeholder Involvement**

Platform: To facilitate engagement across sectors, JPI Urban Europe developed AGORA, a Stakeholder Involvement Platform that has hosted dozens of strategic, thematic and individual workshops. AGORA offers an accessible space for stakeholders to discuss, learn and collaborate on urban challenges, contributing to a vibrant network of urban actors. AGORA continues to be DUT's central tool for discussions.

Translating global goals into local urban context

Since 2015, the urban policy landscape has shifted with the introduction of the United Nations' Agenda 2030 and Sustainable Development Goals (SDGs), UN-Habitat's New Urban Agenda, and the EU Green Deal. These frameworks aim to drive sustainable and liveable urban futures but often require translation into local contexts. JPI Urban Europe used these global agendas as a foundation, translating high-level objectives into localised research and innovation needs through AGORA dialogues and workshops into strategic directions for joint calls. These sessions helped define the necessary research themes, project criteria and funding needs to achieve transformative urban goals.

As a result, AGORA Dialogues, activities related to ULLs and co-creation of the strategic orientation, continue in DUT, playing a crucial role in linking global

objectives with local requirements, shaping a European research and innovation programme that is both grounded and ambitious.

Adapting funding conditions and criteria for challenge-driven R&I

Since the launch of JPI Urban Europe, the significance of challenge-driven and mission-oriented research has grown, advancing a research ecosystem that fosters multidisciplinary, transdisciplinary and experimental projects. JPI Urban Europe was instrumental in moving beyond the traditional, linear approach of basic to applied research, creating a platform for research and innovation that addresses urban challenges in a more dynamic, integrative manner.

In partnership with national research and innovation funding agencies across Europe (and the world, in the scope of the ERA-NET Sustainable Urbanisation Global Initiative, ERA-NET Urban Accessibility and Connectivity's Joint Call with China, for example) JPI Urban Europe has made substantial strides in supporting challenge-driven R&I projects. Key improvements include:

- **Identifying call topics through local challenges:** JPI Urban Europe's *Making Cities Work* call marked a pivotal moment, as it based call topics on real challenges pitched by local public administrations. At an event in Brussels, local authorities shared their toughest issues, directly informing call themes. This experimental approach led to the development of call topics rooted in genuine urban needs and priorities. This practice has inspired and is used for the business DUT City Panel meeting.
- **Engaging local public administrations in projects:** Recognising the crucial role of local public administrations in urban transformation, JPI Urban Europe has increasingly facilitated their involvement in funded projects.

Over successive calls, the number of actively participating local authorities has grown to 26% in the 2022 DUT Call (compared to 6% in the first ERA-Net call of JPI Urban Europe), strengthening the connection between research outcomes and practical urban needs.

To attract urban actors beyond traditional research organisations, JPI Urban Europe implemented frameworks and support activities tailored to public administrations. Measures included making local public administrations eligible as project partners in many participating countries, requiring active involvement beyond letters of intent, making them required partners and co-creators in projects, and involving them in the programme's strategic direction. Local public administrations were also engaged in communication activities, such as Urban Lunch Talks, sessions and conferences, ensuring a robust exchange of insights across sectors.

Through these adaptations, JPI Urban Europe has created a funding environment that supports impactful, challenge-driven research, actively involving local stakeholders and ensuring that urban R&I projects address the complex, real world needs of cities.



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4. Mission Orientation and Horizon Europe

The shift toward mission-oriented research, influenced significantly by economist Mariana Mazzucato, underpins the European Commission's HE programme and aligns with JPI Urban Europe's longstanding focus on transformative urban research. Mazzucato's work, particularly in *The Entrepreneurial State* (2013), has shaped the understanding that public agencies should not only regulate but actively invest in ambitious research to tackle pressing societal challenges. She advocates that the public sector take on a proactive, entrepreneurial role, investing in transformative missions that address issues like climate change, public health and urban sustainability.



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Horizon Europe (HE), the EU's ninth research and innovation funding programme, embraces this mission-driven approach, recognising the complexity of the 2020s and the urgent need to realign human activities toward sustainable futures. HE's design emphasises clear, goal-oriented missions, building on Mazzucato's concept that missions should achieve specific outcomes with societal impact. This approach represents a step forward in EU policy, aiming to break with the notion that only the private sector can drive innovation.

Key aspects of mission-oriented research in Horizon Europe²

- 1. Ambitious, specific missions:** HE focuses on clear, outcome-driven missions targeting significant societal issues such as climate action, sustainable energy and digital transformation. By setting these defined goals, the programme aspires to deliver impactful, measurable solutions.
- 2. Public-private collaboration:** Horizon Europe promotes partnerships between governments, businesses and research institutions, recognising that collective expertise and resources are essential. The public sector provides strategic direction and funding, while private entities contribute innovative approaches and technical knowledge.
- 3. Outcome-driven approach:** Rather than merely funding projects, HE emphasises achieving tangible, real world solutions, holding projects accountable for delivering results that address complex societal problems.
- 4. Long-term vision and investment:** Mission-oriented projects in HE are designed to tackle long-term goals, with the EU willing to invest in high-risk projects that may take time to yield results. This patience is critical for generating breakthroughs with substantial societal impact.
- 5. Learning from failures:** Recognising that some missions may not meet their objectives, HE incorporates an iterative learning approach. Failures are valued as lessons, refining strategies for future missions rather than deterring mission-oriented efforts.
- 6. Broad societal impact:** Beyond economic benefits, HE mission-oriented framework aims to enhance social equity, environmental sustainability and public well-being.

DUT and mission orientation

With the launch of DUT, JPI Urban Europe capitalised on HE's mission orientation, enhancing efforts to fund transformative urban research. DUT leverages over a decade of JPI Urban Europe's achievements, including experimental programmes such as the *Urban Doers Community*, which connects local initiatives and civil society to European urban R&I. This model also includes direct input from city representatives, ensuring projects address on the ground needs in urban contexts.



Photo Daniele Salutari on Unsplash

² European Commission, Directorate-General for Research and Innovation, Mazzucato, M. (2019).

5. Findings: Unfolding DUT's Transformative Potential



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While DUT and JPI Urban Europe have taken significant steps toward becoming a transformative research and innovation programme, challenges remain in maximising the impact of investments and funded projects. A shift to challenge-driven and mission-oriented R&I funding demands reforms, along with new and improved working methods across all levels. Transformative research and innovation not only require identifying critical challenge-driven topics but also enhancing funding tools, schemes and frameworks to enable participants to fully leverage investments and their efforts. In other words, transformative R&I goes beyond simply identifying thematic areas needing change.

As we have seen in previous chapters of this paper, DUT has a long history in improving activities and frameworks to enable transformative projects and activities. However, a number of key challenges and bottlenecks to fully unfold the transformational potential persist. As of 2024, we have entered a stage in transformational urban research and innovation where addressing the barriers to urban transitions is essential to achieving the DUT Partnership's ambitious goals.

The following chapters outline the key challenges which have been identified in interviews, conversations and workshops (see Chapter 2 for more information on the methodology). These are part of the current DUT funding frameworks and activities, and provide recommendations for addressing these challenges.

As shown, in previous chapters, there is an urgent need to transform human processes to address the anthropogenic crises of our time. As broadly recognised³, urban areas behold a strategic significance to address these crises in just ways, contributing to liveability, and thriving economies and nature. Current research and innovation programmes such as DUT and others, foremost the EU Mission for 100 Climate-Neutral and Smart Cities by 2030, have the ambition to significantly contribute to the transformations of our cities, however, challenges remain.

Although big steps have been made over the past years, the transformative ambition that current research and innovation programmes follow does not translate into instruments, requirements, funding structures, accompanying activities, nor mindsets and understandings, yet.

This chapter aims to highlight the current challenges and barriers of DUT to unfold its full transformative potential and provide recommendations to address these barriers and challenges. The barriers listed in this section have been identified by at least two interviewees, highlighted in publications or have been the key outcomes of events and workshops organised (refer to Chapter 2 for methodologies).

The barriers and recommendations show a great variety; some challenges are well known and the structural result of joint programming in a variable geometry.

Highlighting the barriers and challenges and providing recommendations on how to possibly overcome them aims at providing a basis for discussion within DUT bodies such as the DUT Governing Board, DUT Programme Owners and Managers Group and the DUT Management Board.

Unfolding DUT's full transformational potential requires actions on various scales and levels. Some recommendations brought forward might be low-hanging fruit and be implemented easily. Others would require significant efforts, agreement among DUT partners, or alignment, mobilisation efforts and changes in regulations at a national level. For that reason, the 'barrier owners' (those DUT groups and partners whose mandates encompass the recommendations) are listed per recommendation.

³ E.G. United Nations, 2015; UN-Habitat, 2017; European Commission, 2019

Barrier 1

Risk avoidance and averseness to change funding frameworks (aka ‘the unmeasurable risk of risk-averseness’)

Frameworks, regulations and guidelines for public research and innovation funding have grown historically and are to be seen in the context of their time. As such, they are not designed to support transformative research and innovation practices addressing the large societal challenges of the 2020s. Programmes tend to favour incremental improvements of the current system over transformative projects, which limits the potential for breakthrough innovations.⁴ Incremental improvements contribute to small, predictable advancements within existing frameworks. At the same time, predictable outcomes are favoured by many funding bodies to reduce uncertainty and ensure that the investments result in some (humble) level of returns. This preference tends to be reflected in the very design of the proven funding instruments and their institutionalised working logic, including evaluation and success criteria.

An invisible risk of investment

The current approach to funding is heavily focused on safe, predictable outcomes. While this reduces immediate risks, it also limits the potential for transformative innovation. As a result, progress has stagnated, with little room for transformative change. Although these investments appear safe on paper, the hidden risk is that they lead to minimal impact and slow advancement; therefore, they do not achieve the maximum impact possible. In an era where urgent societal transformations are needed, this cautious approach carries a significant, often overlooked risk: failing to address critical issues quickly and effectively enough.

A fail-safe portfolio: A luxury DUT cannot afford if we want to fulfil our mission.

Many funding frameworks have been shaped by historical precedents and are designed to align with past political goals. While these frameworks serve a purpose, they are outdated and need significant updates to support mission-oriented R&I that tackles the urban challenges of the 2020s.

For transformative change, an environment that fosters creativity and experimentation is essential. However, current funding frameworks often discourage risk-taking and can stifle creativity by restricting the freedom to explore unconventional ideas.

The strict requirements imposed during the proposal and implementation phase have been identified by interviewees as being counterproductive to the flexible, exploratory nature needed for transformative urban R&I. This rigidity makes it difficult to address arising challenges and barriers, limiting the potential impact and scale of innovation. To overcome this issue, funding agencies should consider adopting more adaptive and flexible proposal and implementation requirements, allowing for dynamic and transformative research and innovation projects.

Funding transformative, mission-oriented R&I projects requires specific, tailored instruments and funding frameworks. The outcomes of the projects are often unknown, highly explorative and experimental, compared to classic, broader R&I funding.

⁴ Schot & Steinmueller, 2018

Consequences of this barrier

Limited potential for breakthrough innovations:

The current funding frameworks prioritise small, incremental improvements, limiting the potential for transformative, high-impact innovations that could address urgent societal challenges.

Stagnation and slow progress:

The focus on predictable outcomes and safe investments results in slow advancements, leaving critical issues unaddressed and hindering the progress needed for societal transformation.

Missed opportunities for mission-oriented R&I:

Outdated funding models are not aligned with the needs of mission-oriented R&I that aims to solve complex urban challenges in the 2020s.

Limited creativity and experimentation:

The rigid requirements of current funding schemes discourage creative thinking and experimentation in the funded projects, limiting the flexibility needed for tackling dynamic and emerging urban challenges.

Lack of adaptive funding instruments:

Current frameworks fail to support high-risk, exploratory research needed for transformative R&I, calling for new, flexible funding instruments tailored to the unpredictable nature of such projects.

Recommendation 1.1

Adding calculated risks for transformative results to DUT's funding portfolio

Shifting from historically grown, fail-safe funding approaches towards embracing calculated risks through specific portfolio strategies is recommended to enhance the impact of research and innovation investments. This includes dedicating approximately 20% of the financial resources spent on joint calls (= 20% of the total budget of each DUT call) to speculative projects with high impact potential, despite the uncertainty of the project's outcomes and risks. Such approaches are often characterised by agile and innovative attributes, often seen in philanthropic funding models aiming to support blue-sky thinking and rapid experimentation. By dedicating a certain percentage of the overall investments into projects which prioritise tackling a concrete challenge, funding agencies could break away from tendencies which tend to lock the ambitions of research and innovation projects into predictable outcomes instead of providing the frameworks for transformative breakthroughs. This approach encourages researchers and innovators to explore (radical) ideas but also cultivates a culture where proposing impactful approaches and results try to overcome established non-sustainable norms and practices in our cities. Adding calculated risks to the portfolio of projects would ensure that projects are driven by an innovative spirit rather than by ensuring that funding criteria are met as the basis for their operation.

Additionally, for the remaining 80%, alternative methods and ways to assess and minimise risks and ensure transparency, which do not bear strict administrative and reporting requirements, should be explored.

Recommendation 1.2

Transforming urban areas through outcome-driven funding: Urban transformation actions

Introducing “Urban Transformation Actions” could be a measure to implement and work with, embracing calculated risks in DUT’s portfolio. To improve funding for transformative research and innovation projects, it is recommended to develop this new funding tool that prioritises flexibility and results to address a concrete challenge/mission. Inspired by Mazzucato’s work and reinforced by feedback from many interviewees from funding agencies, research communities and non-academic urban actors during the development of this paper, this tool should not require the submission of a strict project plan during the proposal phase. Instead, the focus should lie on the outcome of the projects and how it contributes to addressing/tackling one or more specific, clearly defined and place-based urban challenges through project activities

To ensure the relevance, the challenges addressed in these outcome-driven projects should be identified directly by local public administrations and communities. Inspired by JPI Urban Europe Making Cities Work call, local public administrations and communities (exact definition tbd) should be invited to present their challenges and research and innovation needs in a public event (or in a moderated online format) linked to a larger DUT event (alternatively in a dedicated online event, etc.). The challenges should be taken to a vote, either among the participants in the event, online or among a dedicated jury. Those participating in the voting/evaluation should be asked to assess the challenge according to certain criteria such as, added value by the action for the sustainability and liveability of the city/neighbourhood/street, etc.

Principles for the Urban Transformation Action might include:

- **Keep requirements for proposals as slim as possible:** No requirement for the submission of a strict project plan for implementation during the call for proposal phase.
- **Ensure that parts of the funding are only made accessible if the challenge has been addressed** and a visible (or highly tangible) impact in cities has been achieved.
- **Select evaluation criteria which prioritise high-impact.**
- **Demand fixed deliverables about their transformation journey** from project consortia, which could be used for inspiration, knowledge exchange, etc.

The evaluation criteria, legal issues, amount of funding etc., need to be worked out in detail by a task force after the decision to pilot the Urban Transformation Action. The DUT Urban Transformation Action could be one instrument for taking a calculated risk in DUT’s portfolio, among other activities. For next steps, it is suggested to explore links to DUT WP7, in particular to the work on Urban Arenas and valorisation.



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Barrier 2

Accessibility of funding and exclusion of certain urban actor groups driving transitions

JPI Urban Europe and DUT have made significant efforts to mobilise diverse urban actors to join R&I projects. However, in many countries, not all urban actors are eligible for funding, which hinders the mobilisation of all relevant actors in the local urban innovation ecosystem.

DUT promotes transdisciplinary R&I projects that bring together urban actors to co-create on a level playing field. However, current funding frameworks and eligibility criteria in many DUT countries hinder the participation of certain stakeholder groups, such as local public administrations, civil society organisations, business organisations, artists, and the cultural and creative sectors, including those actors defined as Urban Doers. This situation results in the underrepresentation of key actors driving urban transformations. Too often, those organisations excluded from funding need to identify alternative ways to participate under precarious conditions: e.g. joining the consortium on their own budgets, looking for alternative funding sources. Some micro-businesses and NGOs that are ineligible due to national funding criteria have found a workaround by participating in projects as subcontractors. While this allows ineligible organisations to contribute, it also creates undesirable dependencies and imbalances among the project partners.

There is a desire among several DUT partners to fund more diverse actors, emphasising that targeted calls towards cities still often prioritise traditional R&I projects.

The difficulty in overcoming this barrier is significant, as in some cases it would require deep changes in national regulations and even laws. However, this well-known challenge of variable geometry funding limits the transformative potential of DUT. It leads to unbalanced participation of urban actors in the funded projects and prevents the mobilisation of the knowledge and experiences of many urban actors and change makers. It has an immediate effect on the composition of the R&I projects and is a barrier to challenge and mission-oriented activities.

Consequences of this barrier

- Unbalanced participation of urban actors from countries where certain organisations are ineligible to receive funding.
- Challenges in ensuring real and active involvement of practitioners from city administration, business, and civil society, going beyond mere letters of intent
- Reduced potential for research-policy-society cooperation.
- Limited funding options for non-academic actors.
- Difficulty in linking research with implementation and bringing research results into policymaking and practice.

Recommendation 2

Ensuring eligibility for partners from a broad variety of backgrounds in all countries participating in DUT joint calls

Challenging the status quo of eligibility and ensuring that a wide variety of urban actors are eligible might be one of the hardest nuts to crack for transformative research programmes based on a variable geometry.

All participating countries base their funding criteria on the national requirements of the participating countries and funding agencies. For that reason, this barrier is (mainly) a national one, which translates into the overall transformative potential of DUT as a European Partnership.

However, a programme such as DUT, which has the ambition to drive urban transitions, must ensure that projects are co-created across sectors beyond academia. This requires taking a step back, assessing the funding frameworks and requirements needed by non-academic actors and ensuring eligibility as project partners/coordinators to create a level playing field. Tackling this issue will ensure more holistic and impactful R&I investments in urban transformations.

Addressing this barrier requires work on a national level, such as:

- **Highlight the need for change in national funding regulations:** Start an internal/national process to emphasise the necessity of changing national funding guidelines for transformative urban R&I.
- **Mobilise other funders and agencies:** Identify and mobilise national funding agencies and funding bodies able to fund a broad variety of organisations to complement funding streams.
- **Support urban transitions in all their complexity:** Initiate a national discussion on the requirements and needs to support urban transitions comprehensively. Identify how funding criteria either support or hinder contributions to urban transitions. For example, . Identify transition priorities and develop support instruments according to the innovation ecosystems' demands.

Barrier 3

Administrative burdens and times of funding are preventing transformative organisations and actors from joining DUT projects

R&I funding ecosystems, very often, present challenges in funding project partners. Carrying on the argument from Barrier, it is not only about the eligibility of certain actors but equally important about providing frameworks welcoming non-academic actors and smaller scale initiatives (such as the Urban Doers) into the projects.

During the development process of this paper, interviewees stated that the current frameworks do not match the realities of these initiatives. In some countries, the funding regulations and times of payments of the grants bear great financial risk for initiatives, as their costs only receive reimbursement after the work has been performed/at the project's end. This results in a situation where smaller scale organisations need to seek pre-financing via bank loans to cover personnel and running costs.

As a result, the attractiveness of applying to DUT calls is significantly reduced, and different funding streams are looked for, in many cases, from larger-scale philanthropic funders, as those regulations are developed to meet the requirements of the audience applying for the funds. Additionally, DUT calls favour large, known organisations with the organisational and financial capacity to be part of European R&I projects and therefore reduce the involvement of “newcomers” in project consortia.

Recommendation 3:

Start a national process to assess if the national funding requirements prevent transformative initiatives

Countries and funding agencies engaged in DUT are recommended to assess their funding requirements and frameworks, such as dates for payments etc. To ensure that the programme provides attractive conditions, national processes which invite smaller scale organisations to express their needs and requirements towards R&I funding could be started. Local organisations that are part of the DUT Urban Doers Community could be engaged to help identify bottlenecks and challenges.



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Barrier 4

Limited focus on innovation with arts and culture

Current focus areas in R&I funding often emphasise investment, infrastructural transformation, climate change and climate neutrality. While these are crucial topics, they tend to overlook the transformative potential of arts, culture and grassroots initiatives. Effective urban transformation requires thinking outside the box and recognising different forms of innovation, including social, governance and process innovations. These are equally important for driving systemic urban change.

It is essential to incorporate perspectives from social sciences and humanities, as these disciplines address and reflect upon how societies function. Projects should be co-created across sectors beyond academia. Innovation should not be confined to technological advancements but should also encompass social integration, systemic innovation, and other diverse perspectives. A narrow focus on innovation often limits the potential for broader societal impact and the engagement of diverse stakeholders necessary for comprehensive urban transformations.

Recommendation 4

Broadening the scope of the call topics to support different kinds of innovation including arts, culture and grassroots movements

To truly harness the transformative power of innovation, it is important to deliberate efforts towards these sectors. By understanding innovation in its broadest sense, funding can be directed towards creating calls that attract a variety of actors, including those from cultural and creative sectors, designers, and grassroots movements. This approach can create valuable funding opportunities and leverage interesting calls that appeal to a wider range of participants.

The DUT Consortium should be specific about these broader forms of innovation in their calls. Projects should highlight the inclusion of social sciences, humanities, political science, and governance to foster a more comprehensive understanding of innovation. Nationally, DUT can serve as an example to argue that innovation encompasses very different kinds of innovation. This inclusive approach ensures that urban transformation projects are complemented by diverse perspectives and innovative approaches, ultimately contributing to more holistic and effective urban transitions. This scope should be reflected in the call topics, the call texts, and the eligibility and evaluation criteria.

Barrier 5

Call topics are not fit for transformational change

For transformative change, the call topics in current DUT calls are seen of many interviewees as not ambitious enough to encourage transformative project proposals. They tend to support incremental change. In a transformative R&I programme, call topics should be framed to encourage and facilitate transformative projects.

DUT has a tradition to co-creating topics for upcoming calls in a structured and highly participatory process, which ensures that the voices of practitioners and problem owners are translated into call topics, and thus, ensure that they address concrete challenges in urban areas. Additionally, this process is accompanied with discussions among funding agencies and DUT partners. While the process ensures that various voices, interests, requirements and ambitions are met, currently, too little attention is being paid to the transformative edge of the call topics.



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Recommendation 5

Ensure that the call topics reflect the transformative ambition of DUT and the DUT Transition Pathways

The transformative ambition of DUT and its transition pathways must be clearly reflected in the call topics to encourage and challenge projects to design and implement transformative projects. Sufficient consideration of governance, planning, regulation, economic models and other legal aspects should be given in the design process of the call topics. When developing/before publishing the call topics, attention should be given to carving out a transformative edge of the call topics.

Ensuring a transformative edge of the call topics requires including new ways of thinking and gathering input. DUT, for good reason, is focusing on today's challenges in cities and for local public administrations. However, the societal challenges and crises upon us require taking into account futuring and foresight methodologies, which take into account climate and biodiversity scenarios. To address the multifaceted challenges of today and ahead, it is essential to integrate challenge-driven co-creation of call topics with forward-looking approaches. As one first measure, the AGORA Strategic Dialogue in February 2025 (dedicated to the DUT Roadmap Update) worked with scenarios, personas and longer-term "futuring".

Barrier 6

Inadequate project running times and lone-standing R&I activities

Depending on the topic and the scope of a challenge addressed by a DUT funded project, the required running time of the project varies. The typical running time of three years for a DUT funded project, in many cases, might be too short to fully utilise the knowledge and experiences generated and draw important learnings. At the same time, there is the occasional wish of urban actors and problem owners towards urban R&I to help tackle specific challenges and answer defined research questions rapidly. Limiting DUT funding to the “regular” joint calls only, risks, on the one side, not learning from the novel knowledge and experiences generated by the projects in practice and drawing important policy conclusions while, on the other side, the processes and running time of typically four to five years from submitting the project proposal to finalisation of the project are perceived too long to tackle challenges on a more ad-hoc basis.

The running time of three years restricts the ability to communicate results effectively, translate findings to other urban contexts, and work on mainstreaming and enhancing impacts. In other words, it is hindering the contribution to systemic transitions in urban areas.

The learnings from JPI Urban Europe show⁵, that many local public administrations use R&I funding in a sequence and embed individual projects to longer-term experimentation and infrastructure, such as place-based, longer-term urban living labs, utilising various funding streams. However, projects and project partners which do not have the opportunity to do so are faced with limited options to continue after a project has ended, and fully learn from and institutionalise their work. This disconnection can lead to a loss of momentum and an inability to sustain the transformative changes initiated during the project lifecycle. This results in fragmented efforts that fail to drive significant and sustained urban transformation.

⁵ Bylund, Riegler, Wrangsten (2022)



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Recommendation 6

Integrate projects into a greater learning and implementation process

To address the challenges posed by the current project running times, it is crucial to view projects as part of a broader learning and implementation process. DUT should consider moving away from one-size-fits-all funding instruments towards a toolbox with different instruments. These instruments should be designed for projects and project partners in different stages in an innovation/learning curve and reflect the needs of problem owners. This approach requires several strategic adjustments to funding structures and project design. In the following, several recommendations brought forward by interviewees and workshop participants are highlighted:

Quick innovation call: Some urban issues require short and quick, ad-hoc action (while for others the project running time of three years is not enough). To ensure quick responsiveness of DUT actions to urgent challenges, the idea has been raised to design a "Quick Innovation Call": a simplified one-stage procedure for funding short (one year) projects that are much smaller than the DUT Joint Calls. It should be considered to have a rolling procedure, without a deadline and the opportunity to submit proposals which need to fulfil certain requirements (to be defined) at any time.

Pre-financing for identifying key challenges and questions: Providing pre-financing for project partners/consortia to identify the transformative questions for R&I projects could contribute to ensuring that projects start with a clear and focused agenda, addressing the most relevant urban challenges in challenge-driven ways.

Continuation calls for governance

integration and learning: Offering continuation calls, following to 'regular' DUT calls can support the integration of urban living lab approaches and learnings into governance frameworks and facilitate mainstreaming of results within participating cities and translate to other urban areas and contexts. Providing follow-up funding for the continuation of urban living labs and the application of their results would help sustain the momentum built in the project phases. Together with follow-up calls (see below, this will ensure scaling of good practice, speeding up transformation, shifting norms and institutionalising sustainable practices.

Piloting phase before the official project start:

Allowing for a piloting phase before the official start of a project helps adapt to local contexts and have the urban living lab approaches in place when the projects officially kick-off. It would enhance the preparedness of the project consortia to contribute to transformative change.

Follow-up funding for continuation

and mainstreaming: Earmarking follow-up funding for the continuation of urban living labs and the application of their results to a wider range of urban actors helps sustain momentum and build on the successes of initial project phases (see Recommendation 5.1).

In addition, to these concrete recommendations for developing different funding tools, interviewees mentioned that the URBACT programme provides resources and inspiration on how to learn from successful cases. In particular, URBACT recently funded 10 city networks which aims at translating the experiences, knowledge and practices developed in specific cities in Urban Innovation Actions to 4-7 cities per network. DUT could explore a.) joining forces with URBACT, and/or b.) drawing inspiration for a DUT-driven learning activity.

Barrier 7

Excellence paradigm prevents learning for urban transformations

The emphasis on the excellence paradigm in R&I projects has been mentioned to hinder creative and co-creative processes. The strong focus on excellence prevents project teams to openly exploring different hypotheses and changing course during the projects. A focus on achieving excellence can restrict the flexibility needed to adapt and change project activities because of the emergence of new insights and challenges during the run time. These changes, twists and new information coming to light are typical for co-creative processes; however, they might be perceived as failures. This culture and requirements for excellence risk discouraging an open debate about setbacks, challenges within projects and how they potentially could be overcome. However, for urban transformations, learning from failure is a crucial aspect of mission-oriented R&I programmes. These diversions offer valuable learning opportunities.

Recommendation 7

Embrace a culture of learning

As Mazzucato stressed, learning from failure is essential in mission-oriented R&I programmes and projects. DUT should encourage funded projects to report on failures and challenges. To ensure that all the knowledge and experiences generated within R&I projects (including those diverging from the project proposals) contribute to learning for urban transformations, it is essential to shift away from the excellence paradigm and recognise the value of learning from failure. This understanding should be reflected in the design and implementation of R&I projects, encouraging openness.

Encourage reporting on failures/divergence:

DUT should require funded projects to report on challenges and what has not worked out according to plan in their reports and policy papers. This practice will help normalise the discussion of challenges as part of the learning process.

Create spaces for discussion:

Organise workshops and meetings that provide «safe spaces» for project partners to highlight and discuss challenges and those aspects which did not go according to plan. These forums should provide room for discussing experiences and strategies for how to address difficulties. It might be helpful to develop reports out of the results of dedicated workshops of reoccurring challenges.

Ensure opportunities to change course within a funded project:

Project consortia would benefit from more flexibility to adapt to new situations which arise throughout the projects' running time. Consider providing opportunities to do so and ensure that the changes are indeed part of the projects' learning journey.

Barrier 8

Improper communication by the funded projects to a broader public

Target specific communication about the progress and the results of the funded projects is important to increase the visibility, impact and acceptance in society for projects. As the experience from JPI Urban Europe shows, projects with partners and experienced communicators increase the (visual) quality of resources, hence, contribute to the attractiveness of the projects' outcomes. Since the target groups of projects are different, from local civil society to Europe and global policy-making, tailored approaches are required to capture the knowledge and experiences in the project and use communication as a means for broader debates/ translation of results, instead of a one-way direction.

Additionally, currently, communicating on projects and their results is very focused on showcasing achievements (often in the form of deliverables) rather than achieving real impacts. Project websites tend to highlight innovative cases or good practice without adequately addressing crucial objectives: mainstreaming and opportunities to translate knowledge into other urban contexts. Communications should facilitate the implementation of transformative solutions by clearly explaining the value to practitioners, and defining the conditions for their applicability. This shift in focus will help urban actors to adopt and implement innovative solutions, driving broader and more impactful urban transformations.

Recommendation 8

Demand effective and innovative forms of communication from projects

Effective communication plays an important role to place for the success and impact of R&I projects. It ensures that the knowledge and experiences gained and lessons learned are effectively disseminated.

For that reason, DUT should demand innovative and target group-specific communication strategies from the projects. Projects should be required to focus on their target audiences throughout their duration, using novel and engaging methods to communicate results. For a broad acceptance and behaviour change and awareness, methods and tools beyond policy briefs are required such as exhibitions (e.g. in public space) and contributions to museums, documentaries and short videos, podcasts, social media, as well as, high-quality visuals, accessible publications, infographics, media presence etc.

Wherever possible, professional communicators should be integrated into project teams to enhance the quality of communication efforts. By putting more emphasis on the communication of results and experiences, DUT can ensure that the insights and results generated by the projects are accessible, understandable and impactful for all relevant urban actors and stakeholders.

Barrier 9

Cross-cutting topics

The problem owner's challenges and transformation ambitions might connect issues of two or more DUT Transition Pathways. While there are many topics which would be beneficial to generate impact by addressing from more than one DUT Transition Pathway (TP) angle, DUT's variable geometry limits the possibility for funding topics across the three TPs: Not all DUT partners/countries/funding agencies participate in all TPs and call topics. One topic which has been mentioned that should be addressed as cross-cutting the three TPs is the climate crisis; what will cities be/look like when two degrees of warming becomes a reality? How will cities be adapted to these new realities?

Recommendation 9

Consider pooling of funding for strategic, cross-cutting topics

Pooling of limited amounts of national funds to address strategic, cross-cutting urban transformation topics could be a way to overcome the limitation. This funding tool/format should be open to organisations with different backgrounds and regardless of geographies. Further discussions in the Programme Owners and Managers Group on feasibility and conditions would be needed.



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6. Concluding Remarks

The Driving Urban Transitions (DUT) Partnership demonstrates strong foundations and a forward-looking structure that make it well positioned to scale its impact. As a laboratory for research and innovation funders, DUT offers a valuable environment for experimentation, learning, and the refinement of funding instruments capable of driving systemic urban change. To fully realise this potential, continued improvements are essential—particularly in reducing administrative burdens, broadening access and inclusivity, and ensuring that call topics align more closely with transformational goals. By addressing these challenges and fostering a culture of learning and adaptive governance, DUT can consolidate its role as a catalyst for urban transitions across Europe. Its current setup provides a robust platform for developing even more inclusive, impactful, and outcome-oriented research and innovation programmes.

This White Paper contributes to this vision by offering actionable insights to enhance the DUT Partnership. By identifying and addressing systemic barriers such as risk aversion, funding inaccessibility, and administrative constraints, DUT can serve as a model for future EU R&I initiatives. Its focus on cross-sector collaboration, outcome-driven funding, and co-creation aligns strongly with the evolving priorities of the European Research Area (ERA), which is shifting toward greater mission orientation, interdisciplinarity, and territorial cohesion.

As Europe prepares for the next Framework Programme (FP10), competitiveness and resilience are being redefined in light of changing global policy frameworks—particularly the increased geopolitical fragmentation, climate imperatives, and a global race for technological sovereignty. The EU is seeking not only to maintain economic relevance but to uphold democratic values and inclusive governance as core pillars of its innovation agenda. In this context, DUT's holistic, participatory, and impact-focused approach provides a timely and relevant blueprint. It demonstrates how research and innovation can be mobilised to deliver not just growth, but equitable and democratic urban transitions that reinforce Europe's role as a global leader in sustainability and innovation.

In summary, the recommendations outlined in this White Paper not only aim to unlock DUT's transformative potential but also offer strategic guidance for shaping a more dynamic, inclusive, and competitive European Research Area in the lead-up to FP10.

Bibliography

Bylund, J., Riegler, J., & Wrangsten, C. (2022). Anticipating experimentation as the 'new normal' through urban living labs 2.0: Lessons learnt by JPI Urban Europe. *Urban Transformation*, 4, 8.
<https://doi.org/10.1186/s42854-022-00037-5>

Caniglia, G., Freeth, R., Luederitz, C., et al. (2023). Practical wisdom and virtue ethics for knowledge co-production in sustainability science. *Nature Sustainability*, 6, 493–501.
<https://doi.org/10.1038/s41893-022-01040-1>

European Commission, Directorate-General for Research and Innovation, Mazzucato, M. (2018). Mission-oriented research & innovation in the European Union: A problem-solving approach to fuel innovation-led growth.
<https://data.europa.eu/doi/10.2777/360325>

European Commission, Directorate-General for Research and Innovation, Mazzucato, M. (2019). Governing missions in the European Union.
<https://data.europa.eu/doi/10.2777/618697>

European Commission. (2019). *The European Green Deal*.
https://ec.europa.eu/commission/presscorner/detail/en/ip_19_6691

Mazzucato, M. (2013). *The entrepreneurial state: Debunking public vs. private sector myths*. Anthem Press.

Schot, J., & Steinmueller, W. E. (2018). Three frames for innovation policy: R&D, systems of innovation, and transformative change. *Research Policy*, 47(9), 1554–1567.
<https://doi.org/10.1016/j.respol.2018.08.011>

United Nations Human Settlements Programme (UN-Habitat). (2017). *New Urban Agenda*.
<https://habitat3.org/the-new-urban-agenda/>

United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*.
<https://www.un.org/sustainabledevelopment/development-agenda/>

Notes





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