JOINT CALL FOR PROPOSALS FOR RESEARCH AND INNOVATION PROJECTS

DRIVING URBAN TRANSITIONS PARTNERSHIP

Call for proposals n°1 (2022)

Co-funded by the European Commission (Grant N° 101069506)

Call text

DISCLAIMER: This is a draft version, not the final text; it is subject to changes.

IMPORTANT DEADLINES

Submission deadline pre-proposals:

November 21, 2022 at 13.00 (CET)

Submission deadline full-proposals:



May 3, 2023 at 13.00 (CEST)

Revisions of the call text

If the call text has been updated, the changes are tracked in the table below.

Date	Update in call text	





Driving Urban Transitions (DUT)

The *Driving Urban Transitions* (DUT) Partnership builds upon the achievements of the Joint Programming Initiative (JPI) Urban Europe created in 2010 to address the global urban challenges with the ambition to develop a European research and innovation (R&I) hub on urban matters and create European solutions by means of coordinated research. JPI Urban Europe (https://jpi-urbaneurope.eu/) so far has implemented fifteen transnational Joint Calls (out of which five were in cooperation with the European Commission (EC), three in international cooperation).

With 111 funded projects bringing together 765 beneficiaries from 35 countries throughout Europe and the world it has contracted EUR 116.8 million.

It has published strategic research and innovation agendas (SRIA), in co-creation with urban stakeholders and R&I actors. In addition, active AGORA community and city network groups have been created.

While the DUT Partnership will build upon all these achievements, it will at the same time allow to enhance the ambition, strongly increase the portfolio of projects, set up new measures towards capacity building, urban policy support, demonstration and mainstreaming of results.

The DUT Partnership is supported by the EC and funded under the Horizon Europe co-funded Partnership scheme (Topic HORIZON-CL5-2021-D2-01-16) under grant agreement N° **101069506**.

LOGO DUT



Page **3** of **105**

Contents

1.	Inti	oduction	6
	1.1	Structure of call text	<i>6</i>
	1.2	Background to urban challenges addressed through the DUT Partnership	7
	1.3	Available budget and funding scheme	8
2.	Sco	pe and topics of the Call for proposals	10
	2.1	Aims, approaches and recommendations for the proposals	10
	2.2	Types of research and innovation (R&I) activities to be supported	12
	2.3	Call topics	
	2.3.	.1 Positive Energy Districts Pathway (PED)	15
		.2 15-minutes City Pathway (15mC)	
	2.4.	.3 Circular Urban Economies Pathway (CUE)	22
3.	Elig	ribility criteria and guidelines for applicants	26
	3.1	Consortium: who can participate and apply	2 <i>e</i>
	3.2	What can be applied for	28
	3.3	Preparing and submitting an application	28
	3.4	Summary of the transnational eligibility criteria	29
	3.5	National/regional specific eligibility rules	30
	3.6	Eligibility check	30
4.	Ass	essment and selection procedure	32
	4.1	Pre-proposal stage (stage 1)	32
	4.2	Full-proposal stage (stage 2)	33
	4.3	Right to object a decision, redress procedure	33
	4.4	Time schedule	34
	4.5	Evaluation criteria	34
	4.6	Conflicts of interest (Expert Panel)	36
5	Pro	ject implementation	37
	5.1	Consortium Agreement	37
	5.2	Project monitoring and reporting	37
	5.3	Programme activities	37
	5.3.1	Mandatory project events	38
	5.3.2	Reports and summaries for the general public	38
	5.4	Publications and dissemination	38



5.4.1 Acknowledgements				
5.4.2 Open science practices, data management and data sharing38				
5.5 Personal data protection	39			
5.6 "Do No Significant Harm" (DNSH) principle	40			
6 Contact details and other information	41			
Annex A: Specific Funding Agencies' Budgets and Rules of Eligibility	42			
Annex B: Data Management	100			
Annex C: Definitions of strategic and applied research, and innovation	101			
Annex D: Urban Living Labs				
Annex E: Glossary	104			





1. Introduction

The purpose of this Call for proposals is to support transnational research and/or innovation projects addressing urban challenges to help cities in their transition towards a more sustainable economy and functioning. The challenges are grouped into three themes called 'Transition Pathways': Positive Energy Districts, the 15-minute City and Circular Urban Economies.

It is the first Call of the Partnership *Driving Urban Transitions* (DUT) funded by the European Commission under the Horizon Europe Partnership scheme.

The projects selected within this Call will be funded directly by national/regional Funding Agencies from the following countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Each proposal must involve, at least, three partners from three countries on this list and that are eligible for funding by their respective national/regional Funding Agency. The added value of transnational collaboration should be clearly stated.

The Call is opened to a wide range of scientific disciplines and welcomes interdisciplinary approaches. It intends to support a large range of activities, from research to innovation and implementation.

It also asks applicants to engage explicitly with stakeholders (companies, public authorities, NGOs...) in the projects and to consider users' needs in the identification of the project goals. Projects are expected to take a transdisciplinary and preferably co-creative approach from the early project formulation stages.

This document describes the objectives, scope, and topics of the Call, rules for participation and procedures for proposal development and project implementation.

Further information on this Call (mandatory templates to use for applying, link to the submission platform...) can be found on the XXXwebsite.

1.1 Structure of call text

This call text is structured as follows (see also figure below):

- The aims and topics of the Call are described in chapter 2.
- Chapter 3 presents the eligibility criteria for an application as well as the instructions for submission.
- Chapter 4 covers the assessment and selection procedure and presents the evaluation criteria.
- Finally, in chapter 5, the implementation of the project with regards to the consortium agreement, project monitoring and programme activities is described.

LOGO DUT



Project no. 101069506



1.2 Background to urban challenges addressed through the DUT Partnership

Our future relies on tackling complex grand challenges now, many of which must be addressed within cities and by urban communities. Cities and urban areas are the nexus for the transformations required if the European Union (EU) is to achieve the targets of the European Green Deal (EGD) and to fulfil commitments related to the United Nations (UN)' Agenda 2030 Sustainable Development Goals (SDGs), UN-Habitat's New Urban Agenda, the Urban Agenda for the European Union, the Paris Agreement and to support the New European Bauhaus (NEB) movement.

The *Driving Urban Transitions* (DUT) Partnership aims to address these challenges with an integrated approach to offer decision makers in municipalities, companies and, more generally, society the means to enact and enable the necessary urban transformations. Furthermore, the DUT Partnership aims to develop, through research and innovation (R&I) projects, skills and tools (including technology) to make urban change happen and boost the urgently needed urban transformations, and to bring existing and new knowledge and evidence into action.

The DUT Partnership focuses on three critical urban sectors (and their interrelationships) which are laid out in its roadmap¹ as Transition Pathways (TP):

- The *Positive Energy Districts* (PED) *Transition Pathway* aims at supporting urban energy transitions through innovative solutions for the planning, large-scale implementation and replication of PEDs with the mission to have at least 100 PED by 2025. Furthermore, it will contribute to the Mission on Climate Neutral and Smart Cities² by building a portfolio of PED-related solutions towards climate-neutrality. PEDs build on the optimisation of energy efficiency, (local) energy generation from renewables and energy flexibility and will be synergistically connected to the energy system in Europe. By applying an integrative approach including technology, spatial, regulatory, legal, financial, environmental, social and economic perspectives, PEDs raise the quality of life in cities, contribute to achieving the COP21 targets and the EGD objectives and enhance European capacities and knowledge to become a global role model.
- The **15-minute City** (15mC) **Transition Pathway** fosters sustainable urban mobility transitions by improving accessibility and connectivity, starting from the neighbourhood level. The concept of the

LOGO DUT



Page **7** of **105**

¹ https://jpi-urbaneurope.eu/driving-urban-transitions-to-a-sustainable-future-dut/

² https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en_

15mC is based on the idea that city dwellers should be able to cover the vast majority of their daily needs within a 15-minute radius, by walking and cycling, while connecting to further districts and travelling larger distances by other forms of sustainable transport. The 15mC seeks to establish integrated and mixed-used neighbourhoods at large, which are key to reduce greenhouse gases (GHG) emissions in the transport and logistic sector and adapt urban environments to the challenges of climate change. Thus, the 15mC wants to account for the diversity of contemporary lifestyles and boost climate-neutral, liveable and inclusive cities. The 15mC objective is to facilitate analysis, elaboration, experimenting and testing of innovations for 15-minute cities in co-creative settings, bringing these together in a 15mC innovation portfolio of 50+ experiences and practices, recognising different urban contexts and focusing on transferability.

• The *Circular Urban Economies Transition Pathway* (CUE) aims to support the planning and design of inclusive urban spaces sustained by circular resource flows. The CUE TP operates from the assumption that such spaces can only emerge if transformative interventions understand and address urban areas as simultaneously characterised by their resource use and socio-economic aspects. Thus, it encourages a multitude of tools and approaches that combine efforts towards increased urban resource efficiency and liveability. By collecting examples and grouping them according to topic and context, the CUE TP will provide a portfolio of 50+ solutions that can contribute to the circular transformation of urban areas until the end of the DUT Partnership.

For the DUT Partnership to maximise impact for European and global policies, these three Transition Pathways (TP) are to be considered in an integrated manner and with a firm commitment to urban, regional and city authority capacity building in terms of ambitious policy-making and implementation. Evidence will be created with and for city administrations, municipalities, business and society, aiming at all kinds of innovation and capacity building needed to transform our neighbourhoods and urban areas. The DUT Partnership will offer a framework for innovation, demonstration and preparation of larger-scale translation of solutions and approaches into local urban settings.

This first Call aims to create or reinforce a portfolio of R&I projects that address issues and challenges identified in one of the three TPs. Proposals addressing subjects from across different TPs can be submitted and are welcome, though it is not mandatory³. All projects are asked to choose a main TP and may indicate which other TP(s) are involved, if any.

1.3 Available budget and funding scheme

The total available budget for this Call is approximately XX M€, including support from the European Commission (EC) through Horizon Europe (co-funded action DUT – grant agreement number 101069506).

The national/regional Funding Agencies (the list is given in **Annex A**), which are the partners of the EC grant under the DUT Partnership project, are not eligible for funding under this co-funded call.

Each national/regional Funding Agency will provide funds directly to their eligible beneficiaries in accordance with the agencies' rules and regulations.

Tables 1 and 2, provided in **Annex A**, provide a synthetic view of the national and regional contributions that are available for this call from each Funding Agency and of its positioning on which topics and who can be funded.



³ The evaluation will take into account the specificity of the projects addressing several Transition Pathways.

Table 3, provided in **Annex A**, presents the funding rules and guidelines for each national/regional Funding Agency.





2. Scope and topics of the Call for proposals

2.1 Aims, approaches and recommendations for the proposals

Focus on urban areas, in the context of achieving climate-neutral and sustainable cities

Projects are expected to be **focussed on urban area** (including peri-urban area) **issues and challenges**. Where appropriate, they may also consider the effects and impact on other territories like rural areas or take into account the urban-rural relationships.

Transdisciplinarity, involvement of "stakeholders", practitioners, citizens, community groups, NGOs

The complex societal challenges addressed in the DUT Partnership also ask for knowledge on and insight in transition, innovation and implementation processes, acceptance of new systems and services and insight in mid- and long-term behaviour of stakeholders.

Therefore, collaboration and co-production of knowledge with research users and, in particular, professionals in companies and governments, citizen groups or NGOs (grouped under the generic name of "stakeholders" below), is highly relevant.

All projects must clearly engage stakeholders and demonstrate user needs relevant to the project goals (see the evaluation criteria in section 4.2).

Stakeholders might, for example, be involved in the choice of the topic of the proposal, in the design and advising on the project and/or in carrying out parts of the work programme. Therefore, consortia submitting proposals to this Call are asked to describe how stakeholders are involved in the project (such as throughout the various stages of project design, implementation, analysis and dissemination). The extent of involvement may vary according to the context of the project proposed and national/regional regulations of participating funding organisations.

Stakeholders may be associated to the project as full partners (particularly for R&I proposals, see below the definitions), or as associated co-operation partners that do not directly receive funding but can contribute to the project through various forms (steering committee, advisor, provider of data...). See **Annex A** for individual funder rules.

Projects are expected to take a transdisciplinary and preferably co-creative approach from the early project formulation stages.

Scientific disciplines and interdisciplinary approaches

This Call is open to a very **wide range of scientific disciplines**, in social sciences and arts and humanities (economics, geography, political science, psychology, sociology, history, design, law, architecture, heritage...), in environmental sciences, in natural and technical sciences (engineering, computer sciences, physics...) and application fields such as architecture, spatial planning and policy development.

Moreover, the complexity of urban sustainability usually requires **interdisciplinary approaches** to analyse the challenges and find solutions. Projects should mobilise the necessary disciplines required to address all aspects of the issues they wish to tackle.



Inclusion of diversity (including gender dimension) or specific population considerations

Applicants are highly encouraged to integrate diversity considerations in submitted proposals, as well as to consider underrepresented populations in the planned research.

This includes not only the diversity distribution and gender balance in the consortium composition, but also the inclusion of diversity perspectives and analysis in the R&I activities if it is relevant⁴.

Transnational benefit

Projects should support collaboration that goes beyond individual national efforts and demonstrates sharing, operationalising and transferring existing knowledge, resources, and research facilities to mutual, transnational benefit. Clear added value of the transnational consortium should be demonstrated and, if relevant, the added value for national investments.

Connection to earlier European, national, regional research and innovation actions

The projects resulting from this Call are expected to build on existing knowledge and experiences as achieved in earlier relevant European, national and regional R&I programmes, pilots and test implementations and field labs⁵. In the proposal, it is necessary to indicate how projects are positioned with respect to the state-of-the art.

In particular, the projects are expected to clearly explain how they complement and go beyond earlier or on-going European, national and regional R&I projects (and, of course, beyond the state-of-the-art) in the domain or on the subject they would like to explore.

Outputs and outcomes of the projects, broader impacts of the proposed activity

Establishment of potential long-term partnerships, leveraging of existing knowledge networks and project co-design between researchers and stakeholders should be essential components of the proposed projects.

Outputs should be targeted towards decision-making (including public and private spheres as well as communities) and innovations (technological, organisational and institutional as well as social).

The proposals are expected to clearly present:

- how stakeholders will be engaged and contribute to the project and will be involved in the dissemination and use of the results;
- their plan for broadly communicating and disseminating their outputs and outcomes, to enhance scientific and technological understanding and transfer their results to end users; and describe their strategy for longer-term utilisation of project outcomes;

The projects are also asked to contribute to, and through their results, feed into the dissemination and valorisation activities of the DUT Partnership (see section 5.3 Programme activities).

LOGO DUT



Page **11** of **105**

⁴ A project is considered diversity (or gender) relevant when it concerns individuals or specific groups of people and/or when its findings may affect individuals or specific groups.

⁵ This does not necessarily mean earlier projects by one of the applicants, but refers to projects and knowledge in general.

2.2 Types of research and innovation (R&I) activities to be supported

This Call is open for proposals referring to a broad range of research types: strategic urban research, applied urban research, urban innovation and implementation (see definitions in the table below).

Different Funding Agencies have the possibility to fund different parts of the R&I landscape. Table 1 in **Annex A** indicates the research types that will be funded by each Funding Agency.

The combination of different research types within one project (with potential differentiation at work package level) is possible as long as involved Funding Agencies' eligibility rules are fulfilled.

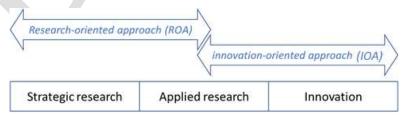
However, it is clear that the purpose, expected impact at the end of the project, level of involvement and role of stakeholders (companies, local authorities, end users' representatives...) in a project depends on the positioning with respect to R&I activities.

The assessment procedure of the proposals is built to take into account these differences in characteristics, goals and expectations. In particular, some sub-criteria differ if the project is more focussed on research or if it is more focussed on innovation (see section 4.5) and the relative weighting in assessment between academic expertise and more practical expertise will also be adjusted.

The topics presented below for each **TP** are open to this broad range of R&I activities. None of the topics favour one research type over the other: research as well as innovation approaches can be suggested for all call topics. However, it is likely that specific subjects or issues tackled at the level of a project are more suited to one or other of these approaches.

Research and innovation should not be seen as conflicting and instead as a continuum and most projects will probably be a mix of both. However, to help ensure a balanced portfolio of funded projects covering the R&I landscape, applicants are asked to identify and indicate which of the following approaches is the best fit for their project, depending on the main purpose of their proposal:

- a more "research-oriented approach" (ROA) to support projects aiming at producing knowledge, analysing data, better understanding and modelling phenomena and developing expertise and tools that will be useful to stakeholders, practitioners and policy-makers. This R&I orientation (called ROA moving forwards) welcomes proposals mainly focused on strategic and/or applied research;
- > a more "innovation-oriented approach" (IOA) to support projects aiming at developing or improving practical, operational solutions – technological and organisational – for companies, local communities and authorities in charge of urban transport and urban planning, as well as management and testing of such solutions. This R&I orientation (called IOA moving forwards) welcomes proposals mainly focused on applied research and innovation⁶;



Both approaches are equal in relevance for this call.

⁶ If this call was focussed on technological research and development (which is not the case), we would have been talking of TRLs between 1 and 4 for ROA and above 4 for IOA.





Page **12** of **105** Project no. 101069506

For proposals combining both research and innovation aspects, the project coordinator has to choose the R&I approach that is the most relevant considering the main objective and major novelty brought about by their project.

Definitions of strategic research, applied research and innovation (research types)

The key characteristics of the three stages of R&I activities are defined as follows:

- "strategic urban research" is defined as research activities driven by the desire to know, understand, and explain how cities function and interact across domains and sectors. Strategic urban research by this definition encompasses qualitative as well as quantitative approaches, and examples can be found in any academic discipline. The subject of this type of research can be a specific aspect of a city or a city in its entirety, or even a network of related cities. Strategic urban research can be theoretical, comparative or case-specific. For this research approach, the prime goal is to expand on the common knowledge about how cities function. In line with this, it places a high value on traditional scientific method and publication in peer reviewed journals. In many cases, this type of research would still have value to end users so they should be engaged where appropriate.
- Understanding of how cities function (including urban mobility and connectivity) is essential to be able to achieve effective (policy) intervention. Achieving this through knowledge creation is often referred to as "applied urban research". Applied urban research in this context is about how city officials, citizens, practitioners, and others can influence and interact with a city, with a purpose of improving it or adapting it in some respect. In applied urban research, there is good opportunity to involve citizens, and representatives from non-academic institutions (NGO's, citizen organisations, companies, public authorities...) in the projects, to bring the practitioners' perspective in order to co-produce knowledge relevant for user stakeholders. Applied urban research is designed to be tangible and applicable to such a degree that the results are likely to have an impact on actual decisions and policy. Apart from publication in peer-reviewed journals, knowledge exchange activities such as policy briefings, policy seminars and other events targeted at stakeholders are important, as well as dissemination in popular media.
- While strategic and applied urban research are both focused on producing knowledge, "urban innovation and implementation" takes things one step further, and promotes the actual creation or advancement towards new policies, practices, services, products or processes such as integrated systems, tools, services and data in such a manner that the first impact already takes place during the project phase. Initiatives should therefore have a focus on experimentation, testing, implementation, evaluating and disseminating results, and are always carried out in close collaboration with stakeholders. Policies, practices, processes, services or products being developed could be of commercial value, but equally welcome is innovation directed at public governance, management, and operation. Urban innovation should be carried out in close collaboration with stakeholders.



The following table provides some key characteristics of the two R&I approaches.

Table: Characteristics of the two R&I approaches

	Research-oriented approach (ROA)	Innovation-oriented approach (IOA)
Desired impact	Advance towards answering the questions: - "How do cities really function?" in a way that can be generalised and add to the universal body of knowledge about cities, and serve as a foundation for future research. - "What works, when attempting to improve cities?" in a way that can be generalised enough to serve as useful knowledge for decision-makers and practitioners.	Advance towards the development, implementation, demonstration, testing, evaluation, and uptake of approaches for new products, services, policies, practices, and processes, with potential for improving economic, social, or environmental sustainability in cities.
Importance of generating results fit for publication in reputable academic journals	Very important	Encouraged
Methodological approach	Rigorous scientific method including methodological advancement	Systematic, proven approach
Foundation of work on evaluation and analysis of empirical observations	Encouraged	Required
Involvement of stakeholders	Involved at least as advisors	Directly involved into the workload
Role for applying <i>Urban Living Labs</i>	Welcome	Encouraged
Role for policy research	Fits well	May fit
Valorisation of project results	Provision of insights to an important societal issue, production of useful knowledge for stakeholders/decision makers/practitioners	Market potential of the project or capacity to respond to a demand or need (including societal needs)
Interdisciplinary approach	Encouraged	
Academic disciplines expected in project	All welcome (especially from social sciences, arts and humanities)	
Preference for qualitative or quantitative methods	Both welcome	
Background of evaluators for project assessment	Knowledgeable researchers from universities and Research and Technology Organisations (RTOs) with topic-relevant disciplinary background and expertise, researchers with strong experience on utilization of research results, representatives of companies, cities and other relevant stakeholders.	



2.3 Call topics

The basis of the call topics description is the three **TPs**: Positive Energy Districts, 15-minute City, and Circular Urban Economies.

For each TP, several topics are defined. The context, issues and opportunities that define each topic are presented first, in terms that aim to inspire research and innovation ideas, along with examples of expected results and outcomes that may be addressed either through the research-oriented approach or through the innovation-oriented approach.

Furthermore, since urban transition issues are intrinsically interconnected, it is possible to address several topics, either from the same or different TPs, within the same proposal.

All projects should choose as their main TP, the TP that is the closest to the subject they would like to address and may indicate another TP involved if needed. Though the proposal will be evaluated within its principal main TP, crosscutting characteristics will also be taken into account in the assessment.

2.3.1 Positive Energy Districts Pathway (PED)

The PED Programme⁷ has developed a framework definition for PEDs that builds on the technological optimisation of the three energy functions of PEDs, while equally considering the context of the societal, economic and environmental challenges and with the goal of advancing urban energy transitions towards climate neutrality:

"PEDs are energy-efficient and energy-flexible urban areas or groups of connected buildings which produce net-zero greenhouse gas (GHG) emissions and actively manage an annual local or regional surplus production of renewable energy. They require integration of different systems and infrastructures and interaction between buildings, the users and the regional energy, mobility and ICT systems, while securing the energy supply and a good life for all in line with social, economic and environmental sustainability." ⁸

Proposals are asked to refer to this framework definition and provide details as to how it applies to the local context of the project.

PED topic 1: Energy communities – energy transition driven by civil society

The transformation of the energy system towards net-zero greenhouse gas (GHG) emissions and climate neutrality also aims to empower individuals and shift the citizens' role from their traditional position as customers towards a more active role. As organised local initiatives addressing the energy transition, energy communities play an important part in facilitating citizens' participation and decision making in the energy system. Energy communities organise collective and citizen-driven energy actions that will help pave the way for a clean energy transition, whilst moving citizens to the fore. They contribute to increasing both public acceptance of renewable energy projects and scale of uptake and make it easier to attract private investments in the clean energy transition. By supporting citizen participation, energy communities can moreover help in providing flexibility and resilience to the electricity system through demand-response and storage.

LOGO DUT



Page **15** of **105**

⁷ The PED Programme as a joint transnational R&I initiative of the European SET Plan and JPI Urban Europe has been operating since 2018 and has been transformed into the PED TP of the DUT Partnership.

⁸ https://ipi-urbaneurope.eu/wp-content/uploads/2020/04/White-Paper-PED-Framework-Definition-2020323-final.pdf

Energy communities will strengthen the PED concept with its neighbourhood-oriented focus and contribute to a better organisational grounding of PEDs within local communities. How can we mainstream the concept of energy communities in different contexts? How can energy communities be involved already in early planning phases or urban planning processes in general? Proposals are encouraged to design PED implementation processes largely based on bottom-up initiatives like energy communities, show challenges, barriers and benefits of these approaches and provide technologies/products/services (e.g., in the context of digitalisation) that can support these communities.

Regulatory framework for energy communities

Through the Clean Energy for All Europeans Package⁹, the EU has introduced the concept of energy communities in its legislation, notably as citizen energy communities and renewable energy communities, including new rules that enable active consumer participation. National legislation is increasingly adapted according to the EU directives. Proposals are asked to identify barriers and opportunities of the legislative framework in a given national context and make use of the transnational setting of projects by comparing and identifying fruitful frameworks and best practice examples. Based on this, proposals should explore multiple governance models for energy communities, their place in current regulatory system, questions of ownership (e.g., physical elements) and their connection to existing governing bodies. Furthermore, proposals are asked to design strategies for better involving energy communities in the process for PED implementation according to this framework.

Process design for incentivizing/mobilizing energy communities

Proposals are asked to design and demonstrate strategies for mobilising active citizen participation in the energy market in a given local context through awareness- and capacity-building, linking with existing local initiatives, etc. Proposals should explore initiation and onboarding processes for individuals and entities to an energy community. This should make sure that these are not gated communities, and people with different economic backgrounds are able to participate on multiple levels.

Business models and public-private partnerships

An increasingly decentralised energy market asks for new business models and new forms of public-private partnership. In order to enable residents to form energy communities, they need to be provided with models that involve all relevant stakeholder groups in the process: energy suppliers, grid operators, operators of the energy community, participants/users and public authorities. Proposals are asked to design business model development in a given local context and design a process for technical implementation, planning and design of the energy-relevant assets in an energy community. Furthermore, proposals are asked to design processes to handle and track assets and their value exchange in a minimum trust environment. Due to the multi-owned nature of resources in such communities, a trustworthy way to exchange goods is necessary.

PED topic 2: Energy flexibility strategies – technological, legal, societal challenges

For a climate-neutral future energy system based on renewables, energy flexibility is a core challenge. Energy flexibility actively contributes to the resilience and balancing of the regional energy system with the optimal benefit for the regional energy system in mind. The main roles and functions of PEDs regarding energy flexibility are:



⁹ https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package_en

- to actively contribute to the resilience and balancing of the regional energy system with the optimal benefit for the regional energy system in mind. With urban districts/neighbourhoods being among the main consumers of energy in the energy system, demand side management, sector coupling and storage are among the main instruments to achieve this goal;
- to ensure energy security and prevent energy poverty, as well as to create and ensure resilience to external cost increases without excluding anyone;
- to manage any interactions between the urban district/neighbourhood and the regional energy system such as to enable carbon neutrality and 100% renewable energy in local consumption and an additional surplus of renewable energy over the year.

With PEDs being an essential part of the regional energy system, PEDs themselves become balancing factors in the regional energy system, based on the reduction of energy demand, and with instruments for balancing seasonal and regional fluctuations of energy use and energy generation.

Technological solutions

Proposals are asked to design innovative technological solutions for energy flexibility strategies in PEDs and to show innovative bridging of existing technological solutions, and demonstrate them in a specific urban context, e.g. by means of Living Labs. Solutions shall refer to demand side management, sector coupling, active management for balancing and optimisation, peak shaving, load shifting and storage and consider strategies for implementation considering the societal, cultural, economic, legal and spatial context. Technological solutions must contribute to the net-zero emission goal and embed circularity and nature-based solutions. Proposals should also focus on exploring tools and approaches to calculate and optimise technical solutions on multiple levels (building, neighbourhood, district, city).

Legal framework and challenges

The EU promotes active consumer participation in all energy markets through Clean Energy for All Europeans Package¹⁰. National legal frameworks are often seen as a major barrier for energy flexibility measures (e.g., sharing and trading of energy, etc.). Proposals are asked to identify these barriers and provide proposals for overcoming them, as well as identify gaps in the regulatory framework.

Role of PEDs in the regional/national energy system

PEDs require active interaction with the regional energy system, according to the potential of renewables – only a few PEDs will be able to manage an exclusively locally generated energy surplus. Regarding energy flexibility, PEDs may play an important balancing role in the regional context. In the transformation phase of the energy system¹¹, for actual climate-neutrality of a PED, energy sources from outside the PED need to be fossil-free. Proposals are asked to design strategies for interaction between PEDs and the regional/national energy system, considering smart grids, share of energy between national, regional and local levels, storing for balancing seasonal fluctuations, etc. Proposals should collect different kind of viable incentives, and create a framework and process that allows for a selection of optimal incentive packages in different contexts.

Societal impact

¹¹ With the Green Deal, Europe has committed to be a climate-neutral continent by 2050. In the focus of them (or according to national climate goals), national and regional energy systems will include both fossil and renewable energy. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en





¹⁰ https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package_en

As with all technological solutions, energy flexibility strategies need to strongly consider both societal conditions and societal impact. Proposals are asked to design and demonstrate strategies for public participation and stakeholder involvement regarding energy flexibility solutions and to raise awareness and capacity. Project proposals must consider behavioural aspects, governance structures, the legal framework and the social capital of the local population. They also need to demonstrate the impact of proposed solutions on energy security and the prevention of energy poverty, including the identification and addressing of systemic inequalities regarding energy supply. Overall, proposals need to show the positive societal impact of their proposals, connecting technological solutions with improving the quality of life in a given urban context, mobilising inhabitants and stakeholders and incentivising community-building.

PED topic 3: Energy efficiency in existing urban structures

For a successful journey towards climate-neutral cities and the energy transition, we need innovative strategies for (local) generation of renewable energy, for energy flexibility and for energy efficiency. The aim of energy efficiency strategies is an optimal reduction of energy consumption within PEDs, balancing out the needs of the different sectors, building infrastructure, the use of energy, settlement typology, as well as transport and mobility. This topic focuses on energy efficiency strategies in existing urban neighbourhoods, starting with strategies for the reduction of energy demand and for significantly improving efficiency of use of the remaining energy demand, including all different layers of energy: power/heating & cooling, mobility, embodied energy. Embodied energy needs to be considered via a life cycle approach and by assessing the energetic and ecological footprint of goods and services.

Even without a PED ambition, coordinated comprehensive urban retrofitting processes are complex, time-consuming and require intense cooperation between public authorities, the building sector, owners and tenants, investors etc. Driving the energy transition via PEDs in existing urban neighbourhoods face specific challenges regarding:

- applying technological solutions in an existing, potentially historic setting with a grown building structure and infrastructure;
- behavioural aspects when it comes to energy-efficient use in households, mobility, etc;
- process design, which aims at participation and co-creation with local residents and different stakeholders' groups, considering the social and economic capital of people living and working in a given neighbourhood and the complex ownership structures.

Strategies for tackling the transformation of existing urban neighbourhoods towards PEDs are strongly connected with the ambitions of the European Renovation Wave and the New European Bauhaus (NEB), respectively. Proposals are encouraged to align with these initiatives. The European Renovation Wave 12 has identified three focus areas:

- Tackling energy poverty and worst-performing buildings
- Public buildings and social infrastructure
- Decarbonising heating and cooling

To boost energy performance of buildings, the EU has established a legislative framework that includes the Energy Performance of Buildings Directive 2010/31/EU and the Energy Efficiency Directive 2012/27/EU¹³.



¹² https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/renovation-wave en#a-renovation-wave-for-europe

¹³ https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive en

The NEB has identified "three inseparable values": sustainability, aesthetics and inclusion. ¹⁴ This implies a comprehensively transdisciplinary approach, including technologists, architects and designers, social sciences, etc.

Technological solutions for neighbourhood-oriented strategies for retrofitting/refurbishment of buildings

Proposals are asked to provide innovative retrofitting and refurbishment strategies in an existing urban neighbourhood and to demonstrate the ability to replicate these strategies, disseminate them and foster replication. This specifically includes insulation of buildings (public/private) and building services and the need to connect with local energy generation through renewables (photovoltaic, heat-pumps, etc.) and energy flexibility strategies. Functional mix and building density are aspects that need to be considered properly, proposals are encouraged to make suggestions for improving the local mix of uses or densification/de-densification, respectively, and show the impact on energy efficiency.

Proposals need to consider aspects of design, cityscape and preservation of historical buildings and show the economic feasibility and inclusion aspects of proposed solutions. Regarding processes, proposals are asked to design and demonstrate cooperation modes between public authorities, the building sector and utilities, as well as strategies for involving residents, civic society, building owners and other stakeholders into planning and implementation processes. Since indicators are often misinterpreted and not properly acted on, proposals should be encouraged to explore and create decision support processes and tools for multiple stakeholders based on different goals. Proposals should also emphasize the exploration of synergies between existing and refurbished buildings, how these mixed developments should be handled, and how energy communities can be also extended to newly built buildings.

Energy efficiency in local mobility and transport, public services and public infrastructure

Proposals are encouraged to provide strategies and solutions for increased energy efficiency and climate-neutrality in the local/regional mobility and transport system as elements of a PED and to explore synergies between mobility, transport systems and decentralised energy generation and storage. This includes strategies for public and private mobility and the design of public spaces regarding promotion of walking, cycling and other "green" modes of mobility. Furthermore, proposals should provide innovative solutions for increasing energy efficiency in other public services and public infrastructures, e.g. public lighting, waste management, public buildings, digital infrastructure, etc. and to design strategies for the transformation process. Proposed strategies may take into consideration the wider urban context and show pathways for promoting a mixed-use functional structure of a given urban neighbourhood as a way of reducing mobility and transport needs –referring to the concept of the 15-minutes city or similar concepts.

Societal aspects

Proposals are asked to connect technological solutions with aspects of quality of life and inclusion and to link technological solutions with greening strategies and the improvement of the quality of public spaces. Proposed strategies and solutions need to not only support the goal of climate-neutrality, but also climate change mitigation. Refurbishment processes usually come with a burden for local residents, processes need to be designed sympathetically to residents. Strategies need to consider inclusiveness, meaning both affordability (effect on rents, etc.) and safety of refurbishment processes and involvement of the public in the process. They also need to address energy poverty issues, specifically by considering the socioeconomic and demographic structure of existing neighbourhoods.

LOGO DUT



Page **19** of **105**

¹⁴ https://europa.eu/new-european-bauhaus/index en

2.4.2 15-minutes City Pathway (15mC)

15mC topic 1: Strengthen the mix of urban functions and services

At the core of the 15mC stands the idea that daily necessities of diverse urban societies are within reach of comfortable walking or biking distance. A key prerequisite that makes such short distances to services and opportunities possible – to enable needs around living, working, supplying, caring, learning and enjoying – is the spatial quality and capacity of accommodating services for the local population as well as having a mix of functions in a neighbourhood. However, the recent decline of urban retail, and continuous suburbanisation, undermine this idea. Additionally, cities have had to intensify efforts to reverse and adapt car-centric and modernist developments in Europe's post-war era that focused on separating functions in different parts of town, thus disentangling grown structures and formerly existing connections.

This topic encourages proposals that rethink the role and integration of services and institutions into the urban fabric, to the end of strengthening neighbourhood functions that provide for climate-neutral urban mobility. We encourage projects that explore current trends and diverse social needs, projects that challenge legal frameworks as well as the regulatory environment and reimagine governance, alliances of stakeholders and business models in order to enhance and implement the mix of urban functions and services – focused on mobility needs, but also on other services and amenities used daily in a neighbourhood – within the built environment. Considering the multidisciplinary nature of this theme, projects are required to consider, take up and link different groups of (urban) society, city administrations, businesses and citizens in co-creative methods.

Where (spaces for) key functions are lacking in neighbourhoods, this topic welcomes experimenting and testing innovative approaches that incentivise closely-knit networks of diverse opportunities for inhabitants, while preserving existing green spaces. Proposals are invited to reflect on experiences with such measures and procedures that build on synergies and avoid conflicts with other needs, especially with housing. More generally, ways of preserving existing and incentivising the creation of new spaces for social infrastructure, services and places of work are of interest, especially in widely mono-functional neighbourhoods. The starting point of these investigations is set on the neighbourhood level, but can also reach a system perspective on city- or metropolitan level. Here, we furthermore call for approaches and procedures to reactivate underutilised and vacant spaces for production, retail and services as well as testing concepts to make use of ambulant services for low-density and suburban areas. Proposals are invited to build on previous projects and initiatives investigate and synthesise learnings and experience of international good practice in this field.

15mC topic 2: Foster sustainable options for personal mobility and logistics in urban outskirts¹⁵ (and beyond)

Today, the 15mC seems within reach in most lively city centres, often characterised by spatial constellations and favouring preconditions that developed over long periods of time. On the other end, many questions are left unanswered on how the principles of proximity and the city of short distances can be transferred to low- and mid-density neighbourhoods. Such areas – ranging from the urban outskirts to suburban areas and the metropolitan region – pose a considerable challenge for climate-neutral mobility, especially to active and shared forms of transport. Often established forms of public transport are unable

LOGO DUT



Page **20** of **105**

¹⁵ Urban outskirts in this context describe especially low and mid-density areas, with rather low connectivity to urban centres and their services.

to provide high service standards at reasonable cost. The accessibility of many destinations (workplace, schools), functions and opportunities (shopping and healthcare) is low, resulting in a high dependence on the private car and longer travel distances for individuals as well as for deliveries of products. This has been compounded by car-focused city planning, leading to persistent preferences and habits that have been shaped, anchored and are hard to be reconsidered individually.

To a high degree existing infrastructure and the local built environment are constants that cannot be rebuilt to reach targets on climate change. Therefore, the emphasis should be on reusing, repurposing and reimagining them. In order to test and deliver approaches for low- and mid-density areas more quickly, this topic focuses on sustainable mobility and logistic options as well as measures to reduce the need for frequent or long trips in these contexts. Thus, this topic highlights the importance of learning from concepts that rethink mobility in the urban outskirts, reflecting the regulatory framework and infrastructure requirements for different transport modes and investigating combinations, hubs, intermodal junctions and platforms to deliver comfortable and attractive offers for shared and active mobility, e.g. with regard to commuter traffic. Proposals are furthermore invited to cover opportunities and new business models (including public good oriented business models) for public (micro) transport, as well as broader shared mobility (bike-, scooter-, car- and ride sharing) and delivery traffic. Submitted proposals are welcome to investigate potentials for and specific approaches to delivering sustainable mobility both between city centre(s) and suburbs as well as between suburban areas.

We encourage projects that start from issues for walk- and bikeability, their potential for urban outskirts as well as the need for appropriate infrastructure and possible ways and procedures to quickly answer these (e.g. by temporary and tactical measures). The social dimension of mobility is considered central to forthcoming projects, such as in strengthening existing sustainable mobility behaviour, as well as raising awareness and creating incentives to change negative habits. This should add to existing efforts to shift away from car dependency in low- to mid-density neighbourhoods. Possible answers should start from the established local context and account for the desire of many people to live in suburban settings, while optionally including the needs of socio-economic and different age groups.

15mC topic 3: (Re)imagine urban public spaces and streets for vibrant, sustainable neighbourhoods

Public space is a scarce and critical resource in cities. Today's streets and squares are (still) widely dominated by cars, representing a spatially inefficient form of urban mobility, both when moving and standing still. While the uneven distribution of urban street space between different transport modes is long-known, the COVID-19 pandemic highlighted the importance of high-quality public space on a neighbourhood level — and the apparent widespread lack of it. In this context, urban societies are to answer the questions of which uses they want to prioritise in public space, and how (local) streets and vibrant urban neighbourhoods will (have to) look like in climate-neutral cities.

To this end, this topic focuses on strategies, procedures, tactics and narratives that reimagine streets, where central qualities are lacking. Such qualities in public space encompass safety of stay and movement — with an emphasis on active mobility, openness to a multitude of uses, promotion of human contact and social activity and much more. We look for true alternatives to the current status quo and concepts that make use of the vast amount of space available, once street space is distribute more fairly among transport and social functions. Proposals are invited to critically reflect and conceptualise (planning) approaches, including participatory and co-creative methods, built around the involvement of the needs and expertise of the local population and businesses and that account for diversity of needs and lifestyles. We welcome projects to experiment with innovative and bold propositions, methods of placemaking, and community



design to tackle this challenging task as well as to develop guiding narratives for transformation, especially promoting active mobility and fostering consciousness for climate-neutral urban lifestyles in public spaces.

Another important challenge is opening public spaces and public infrastructure for multi-functional use that also considers aspects of time and day-night cycles. Here, projects can elaborate and scrutinise concepts and approaches that explore the nature of street space, and extend the scope to the ground floor zone in buildings, existing potentials of public infrastructures (such as schools and courtyards of public buildings) and to opening semi-public spaces (e.g. new walking routes through housing blocks). From such a perspective, projects are invited to investigate the rising demand of public space for deliveries due to online shopping and propose ways, designs and procedures to cover it efficiently, while addressing possible conflicts and harnessing synergies of uses in public space.

In sum, projects are encouraged to develop, contextualise and test tools and methods for (re)distributing street space in favour of sustainable mobility options and the social dimension of streets and squares. They can build on existing experience locally and promising results from other contexts. Projects can, but are not limited to, synthesise learnings from international experience in redistributing and reassigning public space to different temporal or permanent uses, with the aim of transferring knowledge to other streets, squares, districts and cities. Within this topic, we are looking for tangible solutions, rather than theoretical concepts. These can build on urban living lab methodologies, testing contextualised or new approaches and experimentation clauses, where possible and helpful. Active involvement of city administrations will be central for such endeavours.

2.4.3 Circular Urban Economies Pathway (CUE)

CUE topic 1: Urban Resource Sharing and Circularity

The way cities and urban areas are organised have far-reaching impact on the consumption of natural resources. Given the linear ways in which most urban economies use these resources, cities and urban areas are also the main drivers of waste creation. And where solutions to increase circularity and resource efficiency exist, these tend to be loosely connected to efforts to strengthen social sustainability in the urban setting. Moreover, there are numerous hindrances – legal, physical, cultural, practical etc. – in the way to implement more circular and less resource-intensive economic models. At the core of this topic is the need for innovative ways to overcome such obstacles and to create new urban resource sharing infrastructures and circular solutions that can provide socio-economic benefits in urban communities while also fostering equal access to resources.

Proposals are asked to investigate how the combined efforts of sharing and circular economy principles, respectively, can be used to reduce, re-use, and recycle resources in ways that prolong and close material loops so that the overall volume of materials used and consumed in urban areas is decreased. The sharing economy refers to the sharing of goods or other resources by multiple people. Different solutions for sharing things between citizens and consumers are included, such as borrowing, renting, and pooling resources. Circularity refers to making efficient use of resources in circular material loops by using, re-using, and recycling resources in the urban economy, in a way that reduces the input needs of new raw materials. Circularity should not be perceived as a goal in itself, but rather that the circular urban economy is a tool to reach the goal of sustainable urban transitions.

All kinds of products, services and product-service-systems that transform waste into resources in the urban context are included. Strategies to improve the lifespan, re-use, and recycling of urban building and infrastructure materials are encouraged, as well as innovations addressing increased sharing of household appliances or furniture in buildings and neighbourhoods. Also encouraged is critical scrutiny of how



planning and urban design processes could promote sharing and circularity in urban contexts and improve social sustainability.

The topic asks projects to address issues that hinder the transition to urban circular economies, such as matters of scale (how can resource sharing and circularity be facilitated both at the level of the local neighbourhood and at a larger, city-wide, scale), space and place (where can materials be circulated), responsibility (which actors share and circulate resources, and how is this responsibility regulated), social inclusion (how to ensure inclusion of all inhabitants in resource sharing and circularity schemes), and consumer behaviours and attitudes (how are perceptions and attitudes toward waste and new consumption practices shaped, and how do these hinder or facilitate adoption of sharing and other circular practices).

Projects submitted to this call topic are encouraged to address one or more of the following challenges:

- How can digital tools, and the application of digital tools, facilitate urban resource sharing and circularity without excluding marginalised or vulnerable groups in society, including those lacking digital access and capabilities?
- What incentives and disincentives are needed to increase urban resource sharing and circularity, and to reduce resource use and consumption, and how could such incentives be designed and implemented in inclusive way?
- How can urban resource sharing and circularity measures be designed and implemented so that the benefits of such measures strengthen social sustainability and justice?

CUE topic 2: Nature-based solutions (NBS)

In the coming decades, European cities and urban areas will become increasingly affected by climate change-related weather-events, such as heat waves, droughts, heavy rains, flooding and sea level rise. To proactively address these challenges, cities can make use of multifunctional greening approaches to implement nature-based solutions (NBS) that combine climate change adaptation and mitigation strategies with efforts to protect, manage, and restore urban ecosystems. Such solutions can generate green public spaces and neighbourhoods that are regenerative, attractive, and that increase the quality of life in urban communities.

In this topic, NBS are understood as an umbrella term for a great variety of actions that are inspired by the processes and the functioning of nature. Moreover, NBS can be implemented into the urban realm to help decrease the environmental impact of the urban area and promote the restoration and regeneration of urban ecosystems. To be able to do so, NBS must have political, financial, and public support from different levels of society, and be implemented in ways that consider and address urban mechanisms of exclusion. Inclusive public spaces within this topic are understood in intersectional terms, i.e., they acknowledge diversity and inclusion in terms of ethnicity, age, gender, ability, etc, and how these intersect.

Proposals are invited that address how to integrate multifunctional greening approaches in and around urban communities of varying size, density and location. Proposals can, but are not limited to, address how NBS can mitigate climate-change related urban threats and challenges by means of adaptation, while simultaneously providing additional ecosystem services. Spaces that could be explored in this topic are those that rely on a combination of social and blue-green urban qualities, such as squares, parks, private and public gardens, commons, streets, playgrounds, plant nurseries and allotment areas, and various urban and peri-urban nature areas such as wetlands, woodlands, creeks, ponds and surface water reservoirs. The topic also includes and highlights cities' capacities to create green public, semi-public, and private spaces that serve to strengthen both the social and ecological resilience of urban areas. It welcomes proposals that address how multifunctional greening approaches and blue-green infrastructure planning



are crucial to climate adaptation and mitigation. Projects submitted to this call topic are encouraged to address one or more of the following challenges:

- How can urban planning and design proactively consider and safeguard the use and reuse of blue-green resources, for climate adaptation and ecosystem services that benefit all citizens?
- How can co-design be used to identify and mitigate urban inequalities in processes for integrating nature-based solutions into local policies and plans?
- How can planning and urban design address multifunctional greening approaches in ways that cut
 across and integrate spatial and governance scales, from neighbourhoods to urban districts to periurban areas, and that contribute multiple benefits?

CUE topic 3: Urban food systems

The ecological footprints of cities and urban areas are intimately connected to the resources needed to provide food for their inhabitants. At the same time, urban populations often lack a connection to agricultural production, and urban food cultures often favour fast and processed foods. Increased self-sufficiency measures, for example in the form of urban agriculture and food system innovations, are key to increase urban resilience. For such measures to also contribute to the social cohesion and sustainability of urban areas, it is important that urban food systems are grounded in locally rooted bottom-up practices that are socially inclusive. Urban food systems are also a key component of a circular urban economy and can play an important role in reconnecting the urban population with agricultural production and providing access to healthier foods. As a key building block of the urban circular economy, a sustainable urban food system needs to provide effective ways to minimise organic waste, recycle nutrients and make efficient use of raw materials, by-products and residual-products. Individual patterns of food consumption are intertwined with cultural norms, commercial pressures and complex supply chains. To achieve change at scale, new regulations, policies and financial incentives need to address these mechanisms and how they affect individuals' behaviours and choices.

This topic encourages proposals that address all aspects of the food supply chain in an urban context – from production, refining, packaging, distribution, retail and consumption to organic waste and the circularisation of such waste, and also the overall size and complexity of the supply chains. The topic welcomes proposals that address the transition towards low-impact and regenerative urban food systems that provide healthy and sustainable food to all inhabitants, including reliable accessibility to food for low-income people, while meeting cultural needs.

The topic stresses that the development of long-term sustainable urban food systems is dependent on the interconnection of urban, peri-urban, and rural areas, and therefore relies on healthy ecosystems in surrounding regions. A change in urban diets (reducing the intake of processed foods and increasing the share of local and sustainably produced, fresh products) can strengthen such interconnections and create opportunities and incentives for local and regional farmers and food producers to engage in the sustainability transition, thus improving the social and ecological resilience of urban areas and the regions they are situated in.

Projects submitted to this call topic are encouraged to address one or more of the following challenges:

- What does a sustainable urban food system and supply chain look like, and how does it function and deliver both ecological and social sustainability benefits to local communities as well as to the entire region in which the urban area is situated?
- How can urban food systems be integrated with other urban resource systems, so as to increase circularity and decrease resource use and consumption, and how can the benefits of such systems be equally distributed?
- How can urban planning and design contribute to the realisation of urban food systems that provide sustainable and healthy food to all inhabitants, including low-income people and in ways that meet



cultural diversity, and what barriers (legal, economic, social, etc.) need to be overcome for this to happen?





3. Eligibility criteria and guidelines for applicants

This Call includes both a set of **transnational requirements common for all Applicants** (*i.e.* transnational eligibility criteria) as well as **national/regional requirements** for Applicants participating in a consortium (namely **specific Funding Agency rules** which apply to Applicants that claim funds from a specific Funding Agency, see Annex A for guidance and agency web links with further information).

All funded partners in this Call will be funded by their national/regional Funding Agencies in accordance with their respective national/regional eligibility criteria. Please note that a specific national/regional agency may not be able to fund all types of organisations. Applicants have to pay careful attention to the relevant national/regional funding rules indicated in Annex A and contact the relevant national/regional contact person with any queries to avoid any issues related to national/regional eligibility.

The term "proposal" is used both for the pre-proposal (first stage of the selection procedure) and the full-proposal (second stage of the selection procedure).

3.1 Consortium: who can participate and apply

<u>Definitions:</u> applicants, main applicant, co-applicant, principal investigator

- Applicants are defined as organisations/institutions/companies (i.e. legal entities) that apply for funding. Applicants can be:
 - research organisations (universities, university colleges, research institutes or other entities with research undertakings),
 - companies and commercial organisations,
 - urban government authorities (such as regional and local government institutions, municipalities and municipal organisations, city authorities, urban public administrations, and infrastructure and service providers),
 - o *consumers and civil society representatives* (e.g. local and community organisations, non-governmental organisations, not-for-profit organisations, citizens' representatives, etc).
- The Main Applicant is the body responsible for coordinating and managing the project (i.e. project coordinator). It will be the contact point with the DUT Call Secretariat on behalf of the whole consortium and is responsible for the administrative management of the complete project. The Main Applicant is responsible for overseeing the project activities and ensuring that the work programme is on track.
- **Co-applicants** are Applicants other than the Main Applicant, eligible for funding from a Funding Agency. There may be more than one Co-applicant from any participating country. If there is more than one Co-applicant from a country, one of them needs to be identified as the National Contact Point.
- Co-operation Partners are partners that are not eligible for funding from Funding Agencies (e.g. partners from countries not participating in this Call or not eligible for funding by any of the Funding Agencies), but may be included in a project as Co-operation Partners if (a) they finance their activity from other sources and (b) the consortium in general fulfils the requirements on the number of eligible applicants from participating countries. A clear description/indication of the role and form of engagement of these Cooperation Partners should be included in the proposal. A written commitment (Letter of Intent) from Cooperation Partners, participating with their own funding or with an in-kind contribution should be submitted with the full-proposal. It should be noted that Co-operation Partners



do not count toward the minimum of three eligible applicants from at least three participating countries outlined in the transnational eligibility rule 1 below.

• The Principal Investigator (PI) is defined as the person who is the lead investigator for an Applicant.

Eligibility rules for the consortia and Applicants

• Transnational eligibility rule 1: Each proposal must be submitted by a consortium consisting of <u>at least three eligible Applicants from at least three different participating countries</u> (see Annex A). Only Applicants eligible for the funding of the participating Funding Agencies ¹⁶ from the following countries are eligible to apply as Main Applicant or Co-applicant: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, Turkey and the United-Kingdom. In addition, <u>at least two of the eligible Applicants must be from different EU Member States or Associated Countries eligible for EC co-funding in this Call</u>: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden and Turkey.

All legal entities must be independent from each other to be considered as different applicants¹⁷.

Please pay careful attention to the specific Funding Agencies' rules regarding eligibility of applicants in Annex A since not all Funding Agencies can support all types of Applicants.

Non-eligible Applicants (e.g. from other countries or non-eligible to receive funding from a participating Funding Agency) may participate as a Co-operation Partner.

- **Transnational eligibility rule 2:** The Main Applicant (project coordinator) must be eligible to be funded and request funding by its national/regional participating Funding Agency.
- Transnational eligibility rule 3: A Principal Investigator (PI) must only participate in a maximum of two proposals¹⁸, and only once as the PI of a Main Applicant. If the Call Secretariat, in charge of checking transnational eligibility, identifies the same person as PI in more than two pre-proposals, or as PI of the Main Applicant of more than one pre-proposal, all pre-proposals/full-proposals in which they are a PI will be declared ineligible.
- Transnational eligibility rule 4: Consortia must include at least one urban government authority (city, municipality or entity providing key urban services¹⁹) either as a Main Applicant, Co-applicant, or Co-operation Partner depending on the national/regional eligibility criteria.

Recommendations for the consortia composition

¹⁷ For instance, a company located in three participating countries and eligible for funding by the respective Funding Agencies will not be considered as three independent applicants and will count for only one applicant.



¹⁶ see **Annex A** – Table **1**.

¹⁸ Some Funding Agencies may impose stricter participation rules, such as no participation in more than one pre-proposal. The potential applicants are invited to read the national annexes and check this kind of eligibility rule with the Funding Agency's contact person.

¹⁹ Key urban services include sanitation, energy, water, transport infrastructure and transportation, education, health services, emergency services and (public) housing.

Consortia may include partners active across several positions within the research and development system (i.e. innovation, applied research, fundamental research) and across disciplines (natural sciences, social sciences, arts and humanities, engineering, etc). Moreover, consortia should include preferably at least one representative from companies and commercial organisations, consumers or civil society, either as a Main Applicant, Co-applicant, or Cooperation Partner, depending on the national/regional eligibility criteria.

Typically, small to medium-sized consortia (involving funding requests to 3-5 Funding Agencies on average per proposal) are expected. However, there is no upper limit and consortia may involve as many partners as necessary for a convincing proposal, ensuring that all participants have a justified role. Each partner within the consortium should clearly add value to the objectives of the proposed project. Depending on the nature of the project, each partner in the consortium must demonstrate how they will exploit the expected results.

Consortia are expected to be balanced between countries both in terms of number of partners and distribution of budget and no individual Applicant or Cooperation Partner may represent more than 50% of the workload calculated in terms of person-months.

It is also recommended to consider the gender balance and the inclusion of "widening" countries (namely Bulgaria, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, Turkey)²⁰.

3.2 What can be applied for

This section presents the eligibility rule and the recommendations concerning the duration and funding request of a project.

Transnational eligibility rule 5: Project duration: Projects may be funded for a maximum of 36 months.

Funding recommendations

There are no fixed minimum or maximum limits for a project size. Medium-sized projects with a total budget request from all involved Funding Agencies in the range of 1-2 M€ are typically expected, though total project costs can be lower or higher.

However, funding limits exist for many Funding Agencies. Annex A indicates the budget available from each Funding Agency and corresponding funding rules and limitations (namely maximum amount per project or per national applicant, or a range of funding demands expected from one proposal).

In the proposal, a justification of the requested budget is required. The estimated budget must be given in Euros only and be tabulated according to the proposal template provided. All costs must be eligible according to the Funding Agencies' rules (see Annex A). In case of doubt, Applicants should consult their respective Funding Agencies.

3.3 Preparing and submitting an application

This section presents the eligibility rules and the recommendations for preparing and submitting a preproposal/full-proposal. It also presents what is not allowed and what may be exceptionally allowed in terms of modifications between the pre-proposal and the full-proposal.

LOGO DUT



Page **28** of **105** Project no. 101069506

²⁰ See https://www.era-learn.eu/support-for-partnerships/additional-activities/openness-inclusivness-transparency/widening-andinclusiveness for more information about "widening" countries under Horizon Europe.

• Transnational eligibility rule 6: Language and mandatory forms.

Pre-proposals/full-proposals must be prepared in English using the designated mandatory proposal form. Proposals written in other languages will be ineligible.

The proposal form should be completely filled in.

Pre-proposals and full-proposals must respect the total number of pages using a standard font size and normal page margins as indicated on the proposal form.

• *Transnational eligibility rule 7:* Submission.

Pre-proposals and full-proposals must be submitted on the UEFISCDI electronic submission system, UDiManager (www.uefiscdi-direct.ro), before each associated deadline:

- the Call for pre-proposals is open until 21 November 2022 (1:00 p.m. CET).
- In March 2023, applicants will be invited to enter the second stage of the procedure: the **Call for full-proposals** will **close on 3 May 2023 (1:00 p.m. CEST)**.

An online help document with guidelines for submission will be provided, detailing the procedures and duties of the Main Applicant and of other consortium partners.

It is not possible to resubmit or revise the pre-proposal/full-proposal after the submission deadline, unless it pertains to corrections to technical-administrative details and is requested by the Call Secretariat.

- Transnational eligibility rule 8: Only pre-proposals invited to submit a full-proposal will be eligible in the second stage of the selection procedure. If a Main Applicant decides to submit a full-proposal of a pre-proposal rejected at the end of the first stage, this full-proposal will be declared ineligible.
- *Transnational eligibility rule 9:* No fundamental changes initiated by the applicants alone between the pre-proposal and the full-proposal will be accepted. Namely:
 - o the project objectives stated in the pre-proposal cannot be changed,
 - o the Main Applicant (and its PI) must stay the same, except in case of force majeure,
 - o the consortium (co-applicants) should stay the same (with the exception of the widening possibilities allowed explicitly by the Call Secretariat, see below in section 4.1),
 - only minor changes on the funding demand per Funding Agency can be allowed (except in the case adding widening partners).

The Call Secretariat may allow such modifications in exceptional cases, if duly justified.

Modifications requested by a Funding Agency do not count as changes between the pre-proposal and the full-proposal stages.

By submitting a pre-proposal/full-proposal, applicants agree that it will be forwarded to all Funding Agencies which are receiving a request to provide funding for that proposal.

Some Funding Agencies require submission of information on a national/regional level as well (see **Annex A**).

3.4 Summary of the transnational eligibility criteria



- 1. Only transnational projects will be funded; consortia must include at least three independent legal entities applying for funding from three different countries that have Funding Agencies participating in the call. In addition, at least two eligible Applicants within a consortia must be from different EU Member States or Associated Countries eligible for EC co-funding in this Call.
- 2. The project coordinator (Main Applicant) must be eligible to be funded by its national/regional participating Funding Agency and request funding.
- 3. One person must only participate in a maximum of two proposals as a PI, and only once as the PI of a Main Applicant²¹.
- 4. Each consortium must include at least one urban government authority partner, either as a Main Applicant, Co-applicant or Cooperation Partner, depending on the national/regional eligibility criteria.
- 5. The duration of a project must not exceed 36 months.
- 6. Pre-proposals/full-proposals must be written in English and respect the template form (in terms of overall size, limit of pages and characters). The template form must be completely filled in.
- 7. Pre-proposals/full-proposals have to be submitted on the UEFISCDI electronic submission system before the corresponding deadlines indicated in this document.
- 8. Only pre-proposals invited to submit a full-proposal are eligible in the second stage.
- 9. No fundamental changes between the pre-proposal and the full-proposal, initiated by the applicants alone, will be accepted.

3.5 National/regional specific eligibility rules

In addition to the transnational rules and procedures laid out in the previous section, there may be specific Funding Agencies' rules (e.g. Funding Agencies' eligibility criteria for certain organisations, co-funding requirements, national/regional evaluation rules, submission of additional documents or information on a national/regional platform, etc.). Please that note there are also limitations regarding the types of research or innovation activities that different Funding Agencies are able to support.

It is strongly recommended to check these national/regional rules with the contact person at the respective Funding Agency (see **Annex A**) before submitting a proposal.

3.6 Eligibility check

The DUT Call Secretariat will verify the eligibility of the pre-proposals/full-proposals according to the transnational eligibility criteria described in the previous section.

The participating Funding Agencies will perform a check for compliance according to their funding rules.

Both transnational and Funding Agencies' eligibility criteria must be met in order for a proposal to be declared eligible at either stage.

In the case a Co-applicant(s) is (are) not eligible, the proposal may still be eligible if and when the eligibility criteria are met by the proposal without this (these) partner(s).



²¹ National/regional rules may be more restrictive regarding this eligibility criterion.

If a proposal is "eligible", this does not mean that it will be awarded funding, only that the proposal will be admitted to the evaluation procedure.



LOGO DUT



Page **31** of **105**

4. Assessment and selection procedure

For this Call for proposals, a two-stages procedure will be adopted.

4.1 Pre-proposal stage (stage 1)

In the first stage, consortia are invited to submit pre-proposals.

A pre-proposal includes a description of the partners, concise project description of **no more than 12 pages**, and budget indications with limited details fulfilling national/regional requirements.

Transnational evaluation

The pre-proposals declared to be eligible according to the transnational and national/regional criteria will be assessed by an Expert Panel. The Panel will consist of recognised international experts in relevant fields, academics as well as practitioners and innovators, who can assess the scientific as well as the innovative and practical value of the pre-proposals. The Panel will be appointed by the Funding Agencies. No external referees or reviewers will be part of the assessment at this stage.

The Expert Panel will assess the pre-proposals using the evaluation criteria described in section 4.5. Each pre-proposal will be assessed by at least three Expert Panel members. The Expert Panel will meet to discuss all pre-proposals, to produce an assessment report for each pre-proposal and ranking lists to advise the Funding Agencies responsible for the selection of pre-proposals.

The outcome of the Expert Panel's work will consist of six ranking lists, each corresponding to one specific TP and one specific R&I approach (ROA or IOA):

	Research-oriented approach (ROA)	Innovation-oriented approach (IOA)
PED TP	Ranking list PED + ROA	Ranking list PED + IOA
15mC TP	Ranking list 15mC + ROA	Ranking list 15mC + IOA
CUE TP	Ranking list CUE + ROA	Ranking list CUE + IOA

Figure: the six ranking lists (used for stage 1 and for stage 2)

Selection of the pre-proposals invited to the second stage

The decision for the invitation to submit a full-proposal in the second stage will be conjointly taken by the participating Funding Agencies (acting as a Call Steering Committee) and will be based on these six ranking lists and the following other criteria that will be used to arbitrate between the ranking lists.

These criteria will aim to ensure that:

- the invited pre-proposals represent national/regional funding requests that do not exceed three times (two times for Finland, Switzerland and the United-Kingdom) the available national/regional budget of each Funding Agency;
- a maximum of countries participating in the Call are represented in the proposals accepted in the second stage;
- a good representation (in terms of the number of proposals) of the three TPs and of both types of R&I approaches will be included at the second stage.

Invited consortia will then have the opportunity to elaborate their ideas to full-proposals (second stage).



It is possible that invited consortia will be allowed explicitly by the DUT Call Secretariat to integrate, in their full-proposal, additional partners from specific countries, if these countries are under-represented in the proposals invited to the second stage. However, this possibility does not invalidate the consistency requirements between pre-proposal and proposal indicated at the end of section 3.3.

All consortia will be provided with an overall assessment of the quality of their pre-proposals.

4.2 Full-proposal stage (stage 2)

Transnational evaluation

Full-proposals deemed eligible (as described in sections 3.4, 3.5 and 3.6) according to the transnational and national/regional criteria will be assessed by an international Expert Panel, as in the first stage.

Each full-proposal will be evaluated by at least four independent experts.

The Expert Panel will meet to discuss all proposals, to produce an assessment report for each full-proposal and ranking lists of full-proposals recommended to be considered for funding to the Funding Agencies.

The outcome of the Expert Panel will be six ranking lists, as in stage 1, each ranking list corresponding to a specific Transition Pathway and a specific R&I approach (ROA or IOA).

Decision for funding

Based on the ranking lists made by the Expert Panel, the Funding Agencies meeting in a Call Steering Committee (CSC) will jointly decide which projects will be recommended for funding. The final formal funding decision will be taken by each Funding Agency afterward, following its national/regional procedure.

Taking into account the available budgets of the Funding Agencies, this CSC recommendation will be based on the identification of the optimal choice of projects to be funded, arbitrating between projects from different ranking lists, and also between any projects equally ranked within the same ranking list²², according to the following objectives:

- optimising both the total number of projects funded and the total number of participating countries/regions involved in these projects;
- ensuring both a good representation (in terms of the number of projects) and not too dissimilar success rates between the three TPs and between the two R&I approaches;
- ensuring that the EC co-funding will be used as efficiently as possible but also distributed as fairly as possible among the participating countries eligible for EC co-funding.

A written statement on the evaluation of each full-proposal will be sent by the Call Secretariat to the Main Applicants. The Call Secretariat will inform the Main Applicants of projects that have been recommended for funding on the subsequent contracting procedure.

4.3 Right to object a decision, redress procedure

LOGO DUT



Page **33** of **105**

²² No gap will be left in each ranking list. When going down the ranking list, if a project cannot be funded with the available budget, no project ranked below will be funded.

Applicants will have no possibility to rebut and appeal against, at a transnational level, the Expert Panel's evaluation or the decision taken by the Call Steering Committee.

However, the Call does not preclude rules and legal frameworks that prevail at national/regional level. Therefore, even though the objection on a transnational level is not possible, it may be possible on a national level, depending on the national/regional legal framework.

If the decision were to be challenged by a project partner, it will be dealt by the concerned Funding Agency at the national/regional level according to its applicable domestic law on the matter.

The result of the redress procedure is not Partnership-wide.

4.4 Time schedule

21 November 2022	Deadline Submission of pre-proposals
December 2022	Eligibility check
February 2023	Meeting of Expert Panel to assess pre-proposals
March 2023	Invite applicants to submit full-proposals
3 May 2023	Deadline Submission of full-proposals
May 2023	Eligibility check
June 2023	Meeting of Expert Panel to assess full-proposals
July 2023	Funding recommendation by the Call Steering Committee
July 2023	National funding decisions and announcement of results to Main Applicants
September 2023-January 2024	Start of the projects
2024	Kick-off meeting

4.5 Evaluation criteria

Pre-proposals and full-proposals will be assessed according to specific evaluation criteria by using a common evaluation form. Some sub-criteria are specific to the R&I approach (ROA or IOA). Each consortium is responsible for choosing the approach that best fits the objectives and positioning of their proposal.

* The criteria will be used for both evaluating the pre-proposals and the full-proposals. Criteria with asterisk (*) are used only for the evaluation of full-proposals.

Excellence – Intellectual Merit		5 points
 Clarity and pertinence of the objectives Credibility of the proposed approach and soundness of the concept Added value of transnational co-operation Clarity and feasibility of the project design and of the proposed methodology (*) Identification of risks and mitigation plan (*) 		
Sub-criteria adapted to ROA	Sub-criteria adapted to IOA	

LOGO DUT



Page **34** of **105**

- Originality, contribution to new strategic knowledge, progress beyond the state-of-theart
- Innovativeness of the approach compared to existing solutions

Impact and User Engagement (societal and broader impacts of project results)

5 points

- Relevance to the call topics
- Integration of diversity and gender perspectives in the project plan and goals when applicable
- Engagement of stakeholders (e.g. communities, cities, policy makers, regulators, NGOs, or industry)
- Effectiveness of the proposed measures for the dissemination and/or exploitation of project results (*)

Sub-criteria adapted to ROA

 Potential of the project to provide insights to an important societal issue and produce useful knowledge for stakeholders (*)

Sub-criteria adapted to IOA

 Market potential of the project and/or capacity to respond to a demand or a need (*)

Quality and Efficiency of project implementation

5 points

- Composition, quality, and suitability of experience and expertise of the consortium to address the project goals (including interdisciplinarity, cross-sectorial collaboration, and co-creation aspects where relevant)
- Complementarity and balance of substantial contributions of partners of the consortium
- Feasibility and appropriateness of timescale
- Global value for money (costs are realistic and reasonable with respect to the ambition of the project and the expected results and impact)
- Appropriateness of costs allocation and justification of requested resources (staff, equipment, etc...) (*)
- Appropriateness of the allocation of tasks and workloads, ensuring that all participants have a valid role
 and adequate resources in the project to fulfil that role (*)
- Appropriateness of the management structures and procedures, including risk, quality, and innovation management (*)
- Consideration of regulatory and ethics issues, when necessary (*)

Evaluation scores will be awarded for each of the three main criteria and not for the individual sub-criteria. Sub-criteria are aspects that the experts will consider in the assessment of that criterion.

A scoring system from 0 to 5 will be used to evaluate each proposal with respect to each evaluation criterion, using the following definitions for the scores:

- **5: Excellent**. The proposal successfully addresses all aspects of the criterion.
- **4: Very good**. The proposal addresses the criterion very well, but small improvements are possible.
- **3: Good**. The proposal addresses the criterion in question well, but certain improvements are necessary.
- **2: Fair**. The proposal generally addresses the criterion, but there are significant weaknesses that need corrections.
- **1: Poor**. The proposal shows serious weaknesses in relation to the criterion.
- **0: Failure**. The proposal fails to address the criterion in question, or cannot be assessed because of missing or incomplete information.

The Expert Panel will have the ability to use half marks in their evaluation.



The thresholds for a project to be considered for funding will be 3 for individual criteria and 10 for the overall score.

4.6 Conflicts of interest (Expert Panel)

All necessary measures will be taken by the Call Secretariat to ensure the absence of conflict of interests (CoIs) of Expert Panel members with respect to the proposals they will have to assess.

The Expert Panel members (reviewers) will be asked to formally declare that no CoIs exist at any time of their evaluation duty and will sign a non-disclosure agreement concerning all documents and the entire process. In case of breaching the rule of no CoI, the member will be discharged from participation in the Expert Panel.

The Call Secretariat will perform a first check of potential Cols before sending the proposals to the reviewers. Reviewers are bound to indicate after receiving the proposals whether there is a Col with any of the consortium partners of the proposals they have been asked to assess. Reviewers will sign a formal declaration that they do not participate in the Call nor have any conflicting interests regarding the consortium partners of the projects that they reviewed.

LOGO DUT



Page **36** of **105**

5 Project implementation

This Call is part of the DUT Partnership that includes various joint programme activities (e.g. knowledge sharing, networking) described in this section.

Projects funded via this Call will become part of the DUT Partnership R&I portfolio. Participants of projects funded via this Call are expected to actively participate in the programme activities and to consider this in the planning of their project proposal by including budget to participate in the programme activities.

5.1 Consortium Agreement

Each funded project is required to have a signed consortium agreement (CA) between all partners within six months following the start of the project.

For projects involving enterprises, the signature of the CA is needed prior to the start of the project: see https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0627(01)&from=EN, par. 27.

The CA must address, as a minimum, the following topics:

- Internal organisation and management of the consortium
- Sharing of risks and results
- Dissemination and exploitation of results
- Intellectual Property arrangements
- Settlement of internal disputes

Additional national/regional Funding Agencies regulations concerning the requirement for a CA, including the date of the signature, may also apply.

The DESCA model (http://www.desca-agreement.eu/) may be a helpful starting point in designing the CA. Please note that the DESCA model CA was written for Horizon Europe projects with the EC acting as the sole Funding Agency. Thus, several of the paragraphs need to be adapted as DUT Joint Call projects have different Funding Agencies for the respective project parts carried out in the different countries.

5.2 Project monitoring and reporting

Project monitoring and reporting will be in accordance with the respective Funding Agency's rules.

In addition to the Funding Agency's requirements, the consortia are expected to deliver progress reports to the Call Secretariat, in English, on an annual basis, including a description of their transnational cooperation and a publishable summary of the project status. A reporting template will be provided on the programme website.

A detailed survey must be completed by the Main Applicant together with the annual joint reports. This survey includes key performance indicators for project progress and their contribution to the overall aim of the Call.

The Call Secretariat will publish detailed guidelines to assist projects with their transnational reporting duties.

5.3 Programme activities



To foster exchange between the projects, dissemination and communication to stakeholders, decision makers and the general public, and to refine and identify challenges and objectives for future calls, the DUT Partnership has established a multi-layered scheme of mandatory activities, opportunities and support for projects.

Time and budget (including travel expenses) of a maximum of € 30,000 should be reserved by the consortium as a whole for these programme activities.

5.3.1 Mandatory project events

Three project events are foreseen to foster exchange between all projects of this call. A project kick-off will be organised in 2024, a mid-term event in 2025 and a final event in 2027. Active participation of the funded projects is mandatory, e.g. by preparing short project presentations and/or posters.

In addition, funded projects should plan to contribute to at least one DUT event per year. Examples of such events includes: cross-project meetings to deepen reflections on project results; participation in stakeholder dialogues; workshops to reflect research results; conference sessions to promote and discuss science-policy issues regarding sustainable urbanisation.

5.3.2 Reports and summaries for the general public

All consortia of funded projects are expected to prepare regular popular science summaries of the project contents and updates for programme activities and publications by the EC and the DUT Partnership (e.g. for brochures, (digital) newsletters, websites).

At the end of each project, projects are expected to submit an additional publishable report, meant for the general public. A template for this report will be provided by the Call Secretariat.

Information on the projects and its partners, including summaries, abstracts, contact information, publishable reports and general information on the project may be published by the DUT Partnership, its partners, the EC or any entity contracted by them. All partners of a consortium grant rights of use to the aforementioned entities.

The Call Secretariat will publish detailed guidelines and templates to assist projects with these duties.

5.4 Publications and dissemination

5.4.1 Acknowledgements

Projects must ensure that all outcomes (e.g. publications) of transnational projects include a proper acknowledgement of DUT Partnership, the EC, and the respective Funding Agencies.

The Call Secretariat will publish detailed guidelines and templates to assist projects with these duties.

5.4.2 Open science practices, data management and data sharing

The DUT Partnership strongly promotes open science and communicating the open science principles to the research community as well as to other stakeholder communities.



DUT encourages funded projects to openly share research data and digital outputs to stimulate new approaches to the collection, reuse, analysis, validation and management of data and information, thus, increasing the transparency of the research and innovation process and robustness of the results.

However, the DUT Partnership also recognises that not all data can be shared openly, and that there will be legitimate reasons to constrain access. For detailed information on the requirements regarding data management within this Call, please see Annex B.

Wherever possible funded projects are expected and obliged to provide open access to research outputs (e.g., publications, data, software, models, algorithms, and workflows) through deposition in trusted repositories.

Project are expected and obliged to share either a link to a trusted repository or the files themselves of their research outputs with the Call Secretariat.

Costs of open access publications are eligible costs for many Funding Agencies involved in this Call and therefore sufficient budget should be reserved for open access publications where eligible.

5.5 Personal data protection

The provisions of the General Data Protection Regulation (GDPR) shall be complied with by the Call Secretariat and the Funding Agencies participating in the organisation of this Call with respect to the processing of personal data. Depending on the country and the participating Funding Agency, different national laws might apply, and different electronic systems will be used regarding the processing of personal data.

By submitting an application, the Applicants consent to the use, processing and retention of their personal data²³, in accordance with article 6.1 (e) and (c) of the General Data Protection Regulation (GDPR) (2016/679) and for the purposes of:

- processing and evaluating the application where processing shall be lawful only if and to the extent that
 processing is necessary for the performance of a task carried out in the public interest or in the exercise
 of official authority vested in the controller;
- administering any subsequent funding award;
- managing the relationship between the Applicants and the Funding Agencies;
- analysing and evaluating the Call;
- providing aggregate data to national and European surveys and analyses on the funded projects;
- and complying with audits that may be initiated by the Funding Agencies and the EC (or its agencies).

In addition, by submitting an application, the Applicants agree to share their personal data with funders based outside the European Economic Area and with Reviewers (some of which may be based outside the European Economic Area) in relation to the above activities.

Funders and Reviewers may link the data that Applicants provide in the application with national, bibliographic or external research funding data which is available through public subscription-based databases (e.g. Scopus, Web of Science, etc.) or other national / open datasets.

LOGO DUT



Page **39** of **105**

²³ Last name, first name of the persons involved, date of birth, professional contact information, degree(s), position (current and previous), fields of activity, place of work, organisation, address(es), curriculum vitae, ORCID number, name and reference of projects, pre-proposals, project proposals (scientific document, administrative and financial appendix).

5.6 "Do No Significant Harm" (DNSH) principle

The research and innovation activities and projects funded within the DUT Partnership are obliged not to support or carry out activities that make a significant harm to any of the six environmental objectives as defined in Article 17 on the establishment of a framework to facilitate sustainable investment (EU Taxonomy Regulation).



LOGO DUT



Page **40** of **105**

6 Contact details and other information

General information on the Call

Updated information on this Call and all relevant documents/templates are published on XXXXX.

If you have questions on the general call process and proposal submission, please contact the Call Secretariat.

Elena Simion

UEFISCDI – Executive Agency for Higher Education, Research, Development and Innovation Funding Email: elena.simion@uefiscdi.ro

Tel.: +40 21 307 19 93

Aurélien Gaufrès

Agence Nationale de la Recherche (ANR)

E-mail: aurelien.gaufres@anr.fr

Pascal Bain

Agence Nationale de la Recherche (ANR)

E-mail: pascal.bain@anr.fr

Contact points of participating Funding Agencies

For questions regarding specific Funding Agencies' rules and additional forms please check "Annex A: Specific Funding Agencies' Budgets and Rules of Eligibility" first. Additional information can be obtained by contacting the indicated national contact persons at the participating Funding Agencies.

LOGO DUT



Project no. 101069506

Annex B: Data Management

Why the DUT Partnership requires Data Management Plans (DMPs)

The DUT Partnership wishes to promote open, transparent and robust urban and global change research and innovation/implementation by encouraging more open sharing of research data, leading to wider data analysis, more data re-use, and the combination of datasets from multiple sources. The DUT Partnership believes that an increased emphasis on the open sharing of research data has the potential to stimulate new approaches to the collection, analysis, validation and management of data, and to the transparency of the research process. However, DUT also recognises that not all data can be shared openly, and that there will be legitimate reasons to constrain access, for example the risks to the privacy of individuals must always be considered where data arise from, or are derived from, personally identifiable data.

The DUT Partnership considers that the production and implementation of a project-specific data management plan (DMP) is an essential requirement to enable the sharing of research data. Research data includes:

- digital information created directly from research activities such as experiments, analysis, surveys, measurements, instrumentation and observations;
- data resulting from automated or manual data reduction and analysis including the inputs and outputs of simulations and models.

Project-specific DMPs should be in accordance with relevant standards and community best practice, which may vary by subject and disciplinary area. Research data should normally be open by default, unless there are legitimate reasons to constrain access, and the data must be made available with minimum time delay, including being discoverable through catalogues and search engines. Data with acknowledged long-term value should be preserved, protected from loss and remain accessible and usable for future research in sustainable and trustworthy repositories.

To enable research data to be discoverable and effectively re-used by others, including those outside the discipline of origin, sufficient metadata should be recorded and made openly available to enable other researchers to understand the research and re-use potential of the data. Published results should always include information on how to access the supporting data and other research materials. Researchers should ensure that metadata created to support research datasets retained for the long-term is sufficient to allow other researchers a reasonable understanding of those datasets and thereby minimise unintentional misuse, misinterpretation or confusion.

Data Management Plan Requirements

A DMP describes the data management life cycle for the data to be collected, processed and/or generated by a research project funded within this Call. As part of making research data findable, accessible, interoperable and re-usable (FAIR), a DMP should include information on:

- the handling of research data during and after the end of the project;
- the types of data, samples, physical collections, software, curriculum materials, and other materials to be collected, processed and/or generated in the course of the project;



- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with proposed solutions or remedies);
- policies for broad access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- policies and provisions for re-use, re-distribution, and the production of derivatives;
- plans for archiving data, samples, and other research products, and for preservation of access to them via an institutionally-supported repository.

Annex C: Definitions of strategic and applied research, and innovation

	Strategic research	Applied research	Innovation
	_		
Desired impact	Advance towards answering the question "How do cities really function?", in a way that can be generalised and add to the universal body of knowledge about cities and serve as a foundation for future research.	Advance towards answering the questions: - "How do cities really function?" in a way that can be generalised and add to the universal body of knowledge about cities and serve as a foundation for future research. - "What works, when attempting to improve cities?" in a way that can be generalised enough to serve as useful knowledge for decision makers and practitioners.	Advance towards the development, implementation, demonstration, testing, evaluation, and uptake of approaches for new products, services, policies, practices, and processes, with potential for improving sustainability in cities.
Importance of generating results fitting for publication in reputable academic journals	Highest importance	Very important	Encouraged
Methodological approach	Rigorous scientific and experimental method including methodological advancement	Rigorous scientific and experimental methods including methodological advancement	Systematic, proven approach

LOGO DUT



Page **101** of **105**

Foundation of work on evaluation and analysis of empirical observations	Encouraged	Encouraged	Required
Involvement of stakeholders	Involved at least as knowledge co- creators/co-designers	Involved at least as knowledge co- creators/co-designers	Directly involved in the workload
Role for applying <i>Urban Living Labs</i>	Encouraged	Encouraged	Encouraged
Role for policy research	Encouraged	Fits well	May fit
Valorisation of project results	Provision of insights to an important societal issue, production of useful knowledge for stakeholders	Provision of insights to an important societal issue, production of useful knowledge for stakeholders	Market potential of the project or capacity to respond to a demand or need
Background of Expert Panel for project assessment	Knowledgeable researchers from universities and RTOs with topic-relevant disciplinary background and expertise, representatives from commercial actors in industry and business, government authorities, civil society organisations and innovators, and other relevant stakeholders.		





Page **102** of **105**

Annex D: Urban Living Labs

Projects may employ the approach to R&I called Urban Living Labs (ULL).

The DUT Partnership uses this notion to describe methods, approaches and projects that involve a high level of stakeholder participation, co-creation, co-production, learning-loops, and experimental approaches to improve urban life. It is hence an umbrella notion for methodological tools when the challenge at hand is understood to benefit from or even require experimental approaches and substantial co-creation between stakeholders and urban actors. Participants in ULLs shoulder the role of co-creators to explore, examine, experiment, test and evaluate ideas, scenarios, processes, systems, concepts and creative solutions in complex everyday life settings. When more societal functions are involved in a project, it is aimed to ensure a robust knowledge creation. If successfully implemented, an ULL helps promote capacity building through close collaboration between scientists, politicians, business and civil society in response to challenges and dilemmas in urban settings. As a multi-stakeholder and innovative approach, it offers different actors the opportunity to influence and change current urban settings through research and explorative activities that involves interaction and learning processes. In this way, sustainable urban development can be concretised, tested and translated into everyday life situations, and includes how to best achieve sustainability objectives. The typical outcome of ULLs tend to be processes, services, systems or products employing working methods that integrate inhabitants and other actors into the entire development process.

Over the recent decade, ULLs have become common to tackle urban challenges in Europe, offering the opportunity to research and innovate on a wide variety of issues in everyday settings as well as to test hypotheses and elements to pathways towards urban sustainability and liveability transformations.

An ULL will typically run for the length of a project (usually three years) - although there are examples of longer-term lab settings. After this period data is collected, knowledge is shaped, results are drawn together, and learning occur whereby, in some situations, changes in the wider urban context happen. Systematic integration of the outcomes in urban governance might be key to assure long-term impact and contribution of the urban living lab to sustainable and liveable urban transformations in cities and urban areas.

In general, the ULL concept is applied to urban areas to institutionally densify the urban innovation ecosystems that deal with the multi-dimensional challenges in urban areas. About half of all the projects granted funding by JPI Urban Europe since 2012 have employed ULLs in one way or another.

The following points further characterise urban living labs:

• STAKEHOLDER ENGAGEMENT: From the point of view of academic research, an ULL is transdisciplinary and profoundly integrates expertise not just from several academic disciplines but more widely from stakeholders in their everyday urban settings. Stakeholders here are those who are or would be affected in an everyday life situation, with all their experience and expectations available and made useful in the project. Note that this goes far beyond what might be achieved by adding a reference group or panel of so-called users to a traditional research project. In an ULL, stakeholders are deeply and actively involved from the early stages of the project, and the research is by its design open for surprises and learning that originates from the stakeholders involved. ULLs go beyond occasional and periodic consultation and workshops: the research process is designed not only to add the results from the various disciplines, but also to connect them together to form cycles of learning and feedback. This



enables more learning for all parties involved, including non-academic partners, than the simple serial connection of a process from one discipline being followed by a process from another discipline. An ULL hence involves partners representing more than one sector of society other than academia, e.g. a municipal government, private companies and non-governmental organisations. It is a forum for research and discovery, that by its design is open for learning and exploration in any direction, between any combination of participants who consider participation mutually beneficial and where the terminology adopted is inclusive and understandable. The learning outcomes should aim to contribute to capacity building on tackling urban challenges. This is one of the ways in which ULLs aim for long-term value-creation and sustainability after project funding ends.

- PURPOSE. The purpose of ULLs is not necessarily to produce new and original knowledge, but to
 respond to challenges, create value and explore ways to shape synergies out of urban dilemmas and
 achieve sustainability goals. This may include the recycling or adaptation (i.e. implementation) of
 already existing knowledges and innovations and collaboration with its changemakers and initiators:
 scaling-across and capacity building rather than scaling-up by streamlining with successfully realised or
 ongoing projects.
- METHOD FOR INNOVATION. While embracing the flexibility, the openness to serendipity, and the iterative nature of working across disciplines, organisations and sectors, an ULL maintains the rigour and orderliness characteristic for scientific method. Constituted by the appropriate methods, knowledge and expertise, the methods applied facilitate the creation of knowledge which is translatable to new contexts. An ULL may contain activities representing all areas of an urban innovation ecosystem. The urban living lab method is in this sense response-attentive and challenge-driven; processes and initial targets may change depending on participants feedbacks or external circumstances.
- **LOCATION**. An ULL is located right where the process and challenge being addressed take place, in everyday urban life, typically but not exclusively on a neighbourhood scale. In this way, the outcomes can demonstrate a clear practical outcome. There are ethical considerations as to when to apply it and how. If the ULL involves digital tools, the reasons for this needs to be carefully evaluated and thought of in relation to context.

Annex E: Glossary

Co-creation	an approach where heterogenous actors collaborate to produce knowledge, instruments, technology, artefacts, policy, know-how, etc.
Innovation	A process in which new ideas (technologies, designs, procedures, etc.), and combinations of them, bring about changes in (sub)systems like supply chains, markets, urban regions, etc. This process can be incremental, radical or even disruptive.
Interdisciplinarity	A collaboration spanning multiple academic disciplines (e.g. natural sciences, social sciences, arts and humanities, engineering sciences, technological sciences, medical sciences) and involving the application of complementary methodologies to more innovatively and comprehensively tackle a common problem than would otherwise be possible.
Open data	Data that can be freely used, re-used and distributed by anyone.

LOGO DUT



Page **104** of **105**

Smart City	Refers to cities in which ICT is increasingly pervasive and ubiquitous. Cities whose knowledge economy and governance is being progressively driven by innovation, creativity and entrepreneurship; and in which digital technologies can be used to efficiently and effectively run cities and the services provided by them.
Sustainability	A multifaceted property that describes the extent to which social, economic and environmental objectives are in balance; that economic activity is not declining, that non-renewable resource throughputs are minimised and that society has high capital and is cohesive, equitable and inclusive.
Transdisciplinarity	A collaboration spanning multiple partners, both academic and non-academic, to solve a common problem. Non-academic partners may include city officials, (non-) governmental agencies and offices, charitable organisations, companies, civil society, grassroots movements etc.
Urban innovation ecosystems	Relational assemblages of stakeholders, researchers and initiatives which together make up an integrated effort for implementation and validation of approaches and solutions.
Urban area	From a morphological perspective: an area encompassing one or more cities plus its built-up environs, irrespective of local body administrative boundaries, often subject to a minimum built-up density threshold and a minimum population size (e.g. clusters of contiguous grid cells of at least 300 inhabitants per km² and a minimum population of 5 000).
	From a functional perspective: a continuous area including one or several urban centre(s) and all population settlements in which a significant proportion of the employed population works in the urban centre(s) or in localities connected to the urban centre(s).
Urban Living Lab	A forum for innovation, applied to the development of new products, systems, services, and processes in an urban area; employing working methods to integrate people into the entire development process as users and co-creators to explore, examine, experiment, test and evaluate new ideas, scenarios, processes, systems, concepts and creative solutions in complex and everyday contexts.

