

Sustainable Urbanisation Global Initiative

Food-Water-Energy Nexus

Joint Call for Proposals

Submission deadline pre-proposals:

15 March 2017 at 1:00 p.m. EST / 6:00 p.m. UTC / 7:00 p.m. CET / 16 March 2017 3:00 a.m. JST

Submission deadline full proposals:

20 September 2017 at 1:00 p.m. EDT / 5:00 p.m. UTC / 7:00 p.m. CEST /

21 September 2017 2:00 a.m. JST

***Please note:** In this adapted version of the call text (as of Febr. 21, 2017), South Africa is no longer mentioned as participating country as NRF finally has not been able to allocate funds to participate in this call.*

www.sugi-nexus.org



Project no. 730254

Sustainable Urbanisation Global Initiative

The Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus, SUGI-FWE Nexus for short, was established by the Belmont Forum and the Joint Programming Initiative (JPI) Urban Europe in order to bring together the fragmented research and innovation expertise across the globe to find innovative new solutions to the Food-Water-Energy (FWE) Nexus challenge. SUGI-FWE Nexus aims to develop more resilient, applied urban solutions that build on research and innovation efforts from across the globe, and which will benefit a much wider range of global markets. SUGI-FWE Nexus is supported by the European Commission and funded under the Horizon 2020 ERA-NET Cofund scheme under grant agreement No 730254.

BELMONT FORUM

The Belmont Forum is a group of the world's major and emerging funders of global environmental change research. It aims to accelerate delivery of the environmental research needed to remove critical barriers to sustainability by aligning and mobilizing international resources.

The Belmont Forum pursues the goals set in the [Belmont Challenge](#) by adding value to existing national investments and supporting international partnerships in interdisciplinary and transdisciplinary scientific endeavours.

www.belmontforum.org

JPI - URBAN EUROPE

The aim of the JPI Urban Europe is to create attractive, sustainable and economically viable urban areas, in which European citizens, communities and their surroundings can thrive.

The JPI Urban Europe focuses on how to:

- Transform urban areas into centres of innovation and technology
- Ensure social cohesion and integration
- Reduce the ecological footprint and enhance climate neutrality
- Take advantage of technological solutions and realize efficient and sustainable urban systems and networks (mobility, energy, water, ICT, etc.)

www.jpi-urbaneurope.eu



Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Contents

1. Introduction	4
2. Scope	7
3. Guidelines for applicants	13
4. Assessment Procedure.....	18
5. Project Implementation	22
6. Contact details and other information	24
Annex A: Specific Funding Agencies’ Rules	25
Annex B: Research, development and innovation activities	57
Annex C: Urban Living Labs	60
Annex D: Data Management.....	62
Annex E: Glossary.....	62



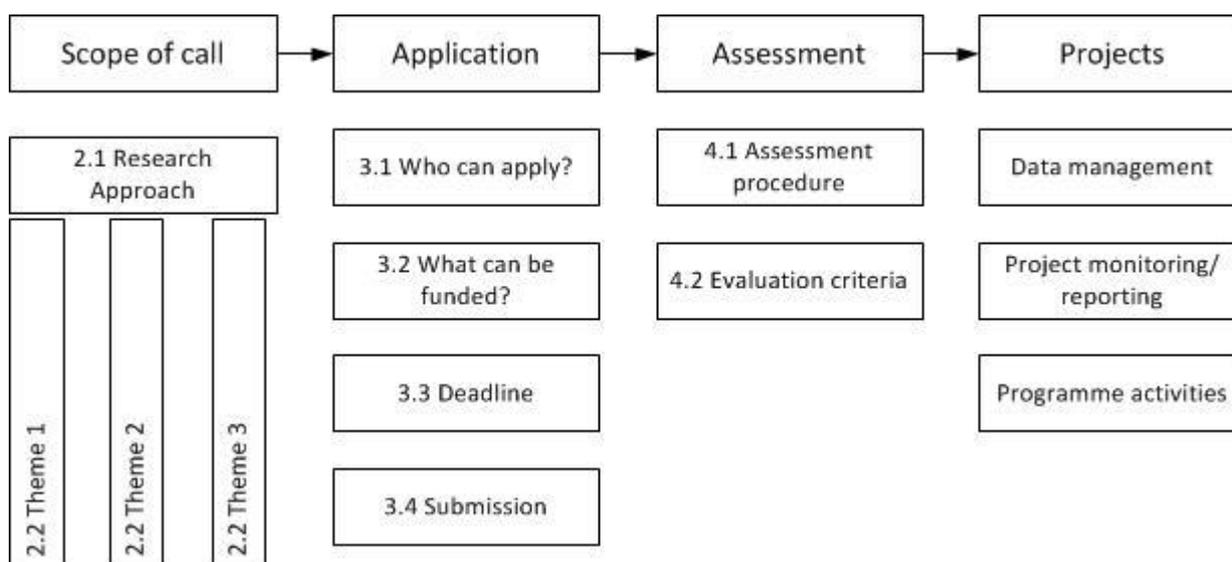
1. Introduction

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 the joint call can be found on the Belmont Forum (www.belmontforum.org) and JPI Urban Europe (<http://www.jpi-urbaneurope.eu>) websites.

1.1 Structure of call text

This call for proposals brings together the need for working on urban challenges in an interdisciplinary and transdisciplinary way with topics concerning the Food-Water-Energy Nexus. This call text for proposals is structured as follows (see also figure below): First the scope of the call is explained in chapter 2. While all projects are asked to combine an inter- and transdisciplinary research approach explained in 2.1, the projects can choose to focus on one or more of the three themes identified in 2.2.

In chapter 3, the eligibility criteria for an application are explained as well as the instructions for submission. In chapter 4, the assessment procedure and evaluation criteria are covered. Finally, in chapter 5 the implementation of the project with regards to project monitoring and programme activities is described.



1.2 Food-Water-Energy Nexus

The interactions between the food, water and energy sectors, both now and over the next few decades are of paramount interest to policy, science and society at large. By 2050, the world population is projected to increase to 9 billion and the number of people living in urban areas is expected to double. These trends in population density and movement, coupled with land use change, and climate variability will lead to major increases in demand for resources and hold important implications for security and social justice. The reciprocal and dynamic processes of urbanisation; physical movements of populations, the build-up of city

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

territories, transformation of economic structures, extension of suburban sprawl and reurbanisation result in increasing regional stress on the urban food-water-energy (FWE) system. Understanding the consequences of global urbanisation is central to understanding global change due to cities' and urban areas' links to material and energy use; land-use transformations; resource-intensive behaviors and consumption; impacts on ecosystem services; and changes driving social and cultural inequities. Many of these processes are common to cities across different regions, but there is also much specificity.

In this context, the FWE nexus approach offers a framework for developing goals, targets, and solutions that balance trade-offs and maximize synergies between the food, water and energy sectors in order to accelerate transitions to resilient climate compatible urban development and to Sustainable Consumption and Production (SCP) patterns across the rural-urban gradient.

A nexus approach coordinates action and reduces the risk that progress towards one goal will undermine progress towards another. In addition, the nexus approach can also play a pivotal role in fostering sustainable urbanisation, by proposing potential solutions to govern resource interdependencies through comprehensive spatial perspectives and multi-level governance strategies.

Urban FWE nexus is an approach to urban complex systems where the focus is on the intersections and potential synergies between sectors (“silos”) and fields commonly seen apart in business, policy and research: Urban governance, planning, and management; socio-economic development and cohesion; grey, green, and blue infrastructures; etc. The approach is devised to counteract wicked issues in urban sustainable development. The urban FWE nexus specifically describes where governance and socio-economic policy activities interact with the resource flows related to food, water, and energy (including feedbacks in coupled anthropogenic, biotic, abiotic, and engineered systems).

To date, we have a limited understanding of the FWE system's complexity, resilience and thresholds. Investigations of this complex system will produce discoveries that cannot emerge from research on food or water or energy systems alone. The synergy and linkages among these components will open new avenues of inquiry, produce new robust transdisciplinary knowledge, and generate new business models and opportunities. Multiple disciplines, including, inter alia, biology, chemistry, computational science, cyber infrastructure, engineering, geosciences, arts and humanities, social and behavioral sciences, and mathematics are needed to study these interacting systems.

Building on the global sustainability challenges identified by Future Earth's 2025 Vision, *the ultimate goal of the present call is to rapidly evolve the knowledge base, advance indicators and assessment tools that are needed for a comprehensive understanding of the urban FWE nexus, and develop practical new solutions to the FWE challenges.* The development of novel solutions for the complex challenges, including multi-level governance and management, and dynamic emerging risks and trade-offs, that urbanisation imposes on the FWE systems will contribute to the ability of populations to transition to sustainable consumption and production.



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Obtaining this knowledge requires inter- and transdisciplinary approaches that address the interconnections and interdependencies between the natural and human systems. Similarly, the application-oriented solutions would integrate systems across the FWE nexus, services, policy or operational silos, jurisdictions or social behaviors to help develop practical innovations and support practitioner decision-making towards sustainable planning and practices, strategies and policies. These proactive solutions would target balancing trade-offs and amplifying synergies between the food, water, and energy sectors while simultaneously preserving the environment and contributing to the creation of attractive, sustainable and economically viable urban areas. These interactions have been identified as of common interest to both the Belmont Forum and Joint Programming Initiative Urban Europe (JPI UE) and hence are the focus of this Joint Call for Proposals.

1.3 Available budget

The total available budget for this call is approx. 28.5 M€, including support from the European Commission through Horizon 2020. Funds will be used to support as many high quality projects as possible. Each national/regional funding agency will provide funds directly to their eligible investigators in accordance to the agencies' rules and regulations. Funds provided by the European Commission will be utilized to support eligible investigators in a maximum number of research projects. Table 1 provided in Annex A, shows the minimum national and regional contribution that is available for this call from each Funding Agency and identifies those agencies that are eligible for European Commission funds.



Project no. 730254

2. Scope

2.1 The Research Approach

Through this call, the Belmont Forum and the Joint Programming Initiative Urban Europe collectively seek to bring together integrated teams of natural scientists, engineers, social scientists, arts and humanities researchers, business, and urban stakeholders to develop projects requiring collaborative, international, inter- and transdisciplinary research and innovation. Projects should support collaboration that goes beyond individual national efforts and demonstrates sharing, operationalizing and transferring existing knowledge, resources, and research facilities to mutual benefit. All projects must integrate across the natural sciences (including engineering), arts and humanities, and social sciences and clearly engage stakeholders and demonstrate user needs relevant to the project goals. Projects should examine a variety of coupled interactions and feedbacks among relevant systems and include an interdisciplinary, multinational and multi-scalar approach. Establishment of potential long-term partnerships, leveraging of existing knowledge networks and project co-design between researchers and stakeholders are essential components of the proposed projects. Research outputs should be targeted towards decision-making (including public and private spheres as well as communities) and innovations (technological, organizational and institutional as well as social).

Proposals may include aspects of fundamental and/or applied research as well as innovation and/or implementation.¹ *Consult Annex A for a list of which agencies are able to support the various aspects of the research, development and innovation process.* Project proposals do not have to focus on the eligible countries as (a) research subject(s); case studies may be conducted anywhere in the world. Project proposals may also build upon previous projects and do not have to start research and innovation from scratch.

Broader impacts of the proposed activity

In developing projects, teams should clearly articulate the benefits of the proposed activities to society as well as specific plans for broadly disseminating the results to enhance scientific and technological understanding. Teams should also consider, where appropriate, how the proposed activities advance discovery and understanding while promoting teaching, training, and learning; broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.); and demonstrate how the project will enhance infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships.

¹ For the definition of the three stages of the research, development and innovation process see Annex B.

2.2 Objectives, Themes and Fundamental Questions

Recognizing the need for integrated solutions involving natural and social sciences, arts and humanities, engineering and stakeholders from all relevant fields, the Belmont Forum and JPI Urban Europe seek to foster research and innovation at the intersection of food, water, energy sustainable consumption and production, and urbanisation in this call. Understanding the regional/global FWE resource-flow connections and impacts on regional and global economies, natural and social systems necessitates transnational projects that connect not only multiple disciplines but also a variety of practitioners such as producers, farmers, other actors in supply chains and services, consumers, community groups, planners, and decision makers (e.g. city authorities).

Projects must address all three sectors food, water and energy by an integrative approach.

This collaborative research action seeks to advance research within the themes listed below:

Theme 1. Robust Knowledge, Indicators and Assessments

This theme focuses on the process of developing a relevant, accessible and global urban sustainability knowledge base for the FWE nexus framework. Ideally this knowledge base should help identify, assess and manage risks and uncertainties created by the process of urbanisation and aid in developing a rapid assessment process to scope and guide the development of knowledge platforms and user support tools. Development of this knowledge base requires efforts to gather, structure and synthesize existing knowledge, innovation practices, and potential systemic and applied solutions across the FWE nexus. This theme emphasizes the development of knowledge platforms, or tools that effectively connect researchers and stakeholders and provide clear conduits for knowledge to be used for decision-making and practical implementation. In addition to providing and discussing existing knowledge and experiences, these platforms should also serve as a hub for new research results emerging from projects addressing the themes 2 and 3.

Projects in this theme should identify transferable solutions through comparative analysis, define locally and globally relevant indicators and develop methodologies to evaluate and assess solutions in coupled complex socio-natural systems. Moreover, strategies for obtaining and estimating data, dealing with uncertainties and communication are desired. The knowledge platforms and tools should leverage information technology to connect multi-level stakeholders and partners with goals of identifying existing indicators and models, where appropriate. Knowledge of current synergies provides a framework for identifying new approaches in nexus issues.

Approaches may include but are not limited to:

- Explore, structure and synthesize the robust knowledge, relevant skills and technologies, and existing data on the urban FWE nexus;
- Design tools for the efficient collection, management, access, analysis, update and use of indicators and research on the urban FWE nexus;

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

- Coordinate, develop and assess the linkages and synergies between co-designed knowledge platforms, innovative social practice, and sustainable applied solutions in the context of FWE.

Focus areas may include but are not limited to:

- From resource efficiency to resource generation: how can the generation of resources in cities be stimulated (engineered solutions including nature-based solutions; waste as a resource; cities as material energy producers and consumers; different agricultural practices across the urban-rural gradient; water retention) and how does this contribute to climate adaptation, climate mitigation and sustainable production and consumption goals?
- Integrated impact modeling for FWEs resource management: water treatment quantity and quality (drinking water, electricity, food production, urbanising deltas, impact of climate change and extreme weather events, vulnerabilities), technologies and engineering approaches (conversion and adaptation of existing waste water treatment facilities, adapted energy technologies for rural/urban areas and upscaling wetland resources), consumption practices and changing demand, governance and financing (impact of water resource allocations on equitable access to and management of water, agriculture/aquaculture, food production and consumption, and energy usage/change due to urbanisation), design public communication and engagement pattern for transition for stakeholders (public and private companies, local and city governance);
- Quantify water and carbon footprint in global and local trade.

Theme 2. Multi-level Governance and Management of the Food-Water-Energy Nexus

This theme focuses on strategies, technological and social innovations and solutions/implementations in the realm of governance and effective management of the FWE nexus. Urban systems require resilience strategies and climate adaptation concerning sustainable development, landscape, residential areas, economy, society and infrastructure, taking into account technological, engineered, ecological, spatial, economic and social innovations and solutions. The interlinkages of all urban infrastructures (energy supply, urban water supply and consumption, traffic, biological “green” resources, etc.) need to be observed as part of an efficient energy and materials-flow management.

Key components for urban management are interfaces between existing and future infrastructural or built environments. Innovative interface technologies and platforms are drivers for a successful implementation of new solutions in urban infrastructure systems. Additionally the exchange of knowledge and experiences emerging from the results of funded projects under this theme 2, will offer an added value to the knowledge platforms of theme 1.

Some of the most significant stresses to urban systems may be indirect, emerging from distant changes that are translated into urban contexts through interlinked systems as a result of global markets, supply chains and wider infrastructure networks. Since applied solutions are context dependent (e.g. geographic, cultural and demographic), an important component is identifying effective models for the transfer and scaling of interventions across different regions and scales to contribute to a comprehensive spatial perspective. For



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

example, developing mitigation strategies to minimize the impacts of resource depletion will require different interventions and face distinct multi-scalar barriers, diverse management strategies, including institutional processes, capacity, and support, in different regions across the globe.

Key questions may include:

- What elements of FWE nexus solutions that respond to the process of urbanisation are transferable and scalable in various contexts?
- How do we co-design, co-develop and deploy FWE solutions that respond to the process of urbanisation in different contexts (nexus solutions from fast urbanizing cities and from slow urbanizing areas), and external urban dependencies?
- How do global institutions (regulations, trade, entrepreneurship, business, multi-national corporations) affect locally and regionally available food-water-energy nexus solutions?
- What are common, scalable, and/or transferable solutions (technical, nature-based, governance, social innovation, and financial mechanisms) to foster new green and sustainable circular economies?
- What role do geopolitical and economic dynamics at the global scale play in local and regional FWE nexus solutions?

Topics may include but are not limited to:

- Explore strategies for integrated, multi-level governance structures of the FWE nexus;
- Using the FWE framework to identify and manage new opportunities (new services, new value creation models, new planning governance, new financial mechanisms), and alternative urban economies for cities to create sustainable consumption and production systems across countries;
- New institutional and organizational governance mechanisms of investment and disinvestment directions for creating new infrastructure types the nexus links, such as financial models for green investments, and making them locally relevant;
- Investigations on potential operational frameworks for multi-level governance agreements on social and environmental standards for products and services, and the potential management impacts on local agriculture (water management), including studies on creative design solutions, participatory approaches and consumer behavior;
- The global consequences of failing to address nexus tensions at local and regional scale vs. effective nexus management (= global benefit or “value added” or net gain of effective action);
- How might global benefits be harnessed to support local capacity and action?
- Smart cities standardization and the impact of scaling up to a global level.

Theme 3. Managing Potential Strategies and Solutions to address emerging Risk and Tradeoffs at the intersection of Sustainable Urbanisation and the FWE Nexus

This theme focuses on identifying and developing integrative strategies to assess and manage risks and uncertainties at the intersection of the sustainable urbanisation and the FWE nexus, while balancing tradeoffs and minimizing social and cultural inequalities. For example, both industrial and agricultural



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

processes can optimize water use under different regulation and management strategies. This exacerbates competition, as well as fragmentation, and drives inequities between sectors. Projects in this theme could include identifying the specific drivers of social and economic inequalities arising from the process of urbanisation and developing tools for better stakeholder engagement, such as simulation systems and customizable capacity building interfaces.

Key questions may include:

- What are the merits of different options for identifying and managing risks and thresholds associated with urbanisation and FWE security and access issues?
- What opportunities are there for promoting inclusive and resilient communities, and addressing inequities, in the context of the urban FWE nexus?
- What are successful strategies (e.g. to meaningfully engage poor and otherwise marginalized communities) to minimize inequalities in the urban/rural intersection in the context of urbanisation resulting from the interactions and tradeoffs of urbanisation and the FWE nexus?

Topics may include but are not limited to:

- Investigate the potential combinations of urban circumstances that are likely to give rise to nexus opportunities and to test these with practical solutions;
- Map potential risks and uncertainties arising from socio-ecological systems and consider cultural, political and economic dynamics in balancing solutions and tradeoffs at the intersection of urbanisation and the FWE nexus;
- Identify and analyze differences between various cultural lenses and value systems and how these impact strategies and solutions to addressing risks;
- Identify and analyze induced/indirect/cascading/systems risks as well as cumulative impacts across activities;
- Identify both the nature and magnitude of impacts such as reduced volatility, reduced investor risk or insurance premiums, lower geopolitical tension;
- Explore equity and access in urban-rural connections and the FWE nexus;
- From the FWE framework, develop informed equitable socio-ecological models for green investments that improve economic growth and entrepreneurship, enhance ecosystem services, sustain cultural value, and drive nexus cohesion.

2.3 Types of research, development and innovation activities

This Call for proposals is open for projects referring to a broader range of research types from fundamental research to innovation. For more information on the different types of projects, see Annex B. Different funding agencies will have the possibility to fund different parts of the R&D landscape. Table 1 in Annex A indicates the kind of activity that will be funded by each funding agency. The combination of different of research approaches within one project (differentiation at work package level) is possible as long as involved funding agencies' eligibility rules are fulfilled.



Project no. 730254

2.4 Proposal Requirements

Each project proposal must be submitted by a project consortium consisting of at least three eligible applicants from at least three participating countries (see Annex A – Table 1). *(Note: To be eligible for funding provided by the European Commission, the transnational project must involve at least two independent entities from two different EU member states or associated countries. See also indication in Annex A – Table 1.)* Clear added value of the international consortium should be demonstrated and, if relevant, the added value for national investments.

All proposals must integrate across the natural sciences and social sciences and should include an interdisciplinary, multinational approach. They should identify and address clear user needs, and examine a variety of coupled interactions and feedbacks among relevant systems. Where relevant and applicable to funding agency guidelines, it is strongly recommended that consortia develop applied innovations as well as research solutions.

Proposals should also include end-users, policy-makers or other relevant stakeholders and should include science products, which are directly applicable, available and usable to relevant stakeholders. Engagement of community participants or other stakeholders in the planning, designing, and completing of the research is necessary.

3 Guidelines for applicants

Some requirements are common for all applicants and funding agencies. In addition to these *general requirements*, there are *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). The term “proposal” is used both for the pre-proposal in the first stage of the evaluation procedure and the full proposal in the second stage.

3.1 Who can participate and apply

Each project proposal must be submitted by a project consortium consisting of at least three eligible applicants from at least three participating countries. Each project consortium must have the interest and competence to undertake research, development and/or innovation within the specified themes. Clear added value of the international consortium should be demonstrated and, if relevant, the added value for national investments.

Applicants

An organisation/institution or a person of the lead organisation is the Main Applicant, depending on the specific eligibility rules of the different agencies. In addition, a proposal must have at least two Co-applicants. The proposal may also include Co-operation Partners, whose role is described below. If funding is granted to a person, each person may only participate in a maximum of two proposals, and only once as Main Applicant. In the proposal, the participation of all partners involved must be convincingly justified.

Only applicants located in the following countries are eligible to apply as Main Applicant or Co-applicant, irrespective of their nationality: Argentina, Australia (to be confirmed), Austria, Belgium, Brazil (state of São Paulo), Chinese Taipei, Cyprus, France, Germany, Japan, Latvia, the Netherlands, Norway, Poland, Qatar, Romania, Slovenia, Sweden, Turkey, the United Kingdom, and the United States. Applicants from other countries may participate as a Co-operation Partner.

Applicants can come from organisations such as:²

- Companies (from industry/large companies to SMEs)
- Cities, municipalities, regions
- Consumers (e.g. business enterprises, test households, etc.)
- Citizens’ representatives, NGOs
- Research organisations (universities, university colleges, research institutes or other authorities with research undertakings)

² Please note that a specific funding agency may not fund each type of organisation. If a partner is not eligible for funding, the partner can still participate as cooperation partner. For further information see Annex A.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Main Applicant's role

The Main Applicant will be responsible for running and managing the project. S/he will be the contact point with SUGI-FWE Nexus on behalf of the whole consortium and is responsible for the administrative management of the complete project, should it be awarded funding. In addition, the Main Applicant is responsible for leading the project activities at his/her own organisation. The Main Applicant must be affiliated with an organisation situated in one of the participating countries in this call. The specific eligibility rules of the respective funding agency apply.

Co-applicants' role

Each Co-applicant is responsible for leading the project activities at his/her own organisation. There may be more than one Co-applicant from any one country. If there is more than one Co-applicant from a country, one of them needs to be identified as the national consortium leader. Each Co-applicant should be affiliated with an organisation situated in a participating country. The specific eligibility rules of the respective funding agency apply.

Co-operation Partners

Partners from countries not participating in this call, or partners that are not eligible for funding from participating agencies, may be included in the projects as Co-operation Partners. Co-operation Partners can be included in the consortium if (a) they finance their activity from other sources and (b) the consortium in general fulfils the requirements on the number of applicants from participating countries. Project consortia involving Co-operation Partners must ensure that project results will be relevant for participating countries. Where appropriate, some co-operation partners could also support capacity building in developing countries and for early career researchers and technical staff. 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 paragraph 3.1.

Project consortium

The added value resulting from transnational cooperation must be addressed in the proposal. There is no limit to the total number of partners who may be involved in each project. However, proposals for medium-sized projects submitted by consortia comprising applicants from approximately 3-5 funding agencies are expected. Consortia need to be balanced between countries both in terms of number of partners and distribution of budget. No one partner may represent more than 70% of the activity in the project (some countries may also impose lower participation levels for their funding, so please check regional/national eligibility guidelines in Annex A).



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

While not mandatory to satisfy the 3-partner minimum, *it is strongly encouraged that consortia contain at least two independent applicants eligible for funding from two different EU member states or associated countries and at least one applicant from another country participating in this call* in order to be able to take advantage of the funds provided by the European Commission. Refer to Table 1 in Annex A for information on those agencies eligible to access the European Commission funds.

- Consortia may consist of partners from research organisations, companies, cities/municipalities, NGOs, etc. (see paragraph on “Applicants” above).
- Consortia may consist of 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, humanities, and engineering).
- Consortia may include partners representing stakeholder/user groups.
- In the case of an Innovation project (see Annex B), consortia are required to prove the interest and active involvement of project partners in the consortium, who will either within the project, or as a consequence of the project, implement the solutions developed by:
 - Including stakeholders or implementation partners in the consortium who are eligible for funding;
or
 - Having stakeholders or implementation partners not eligible for funding, who express their interest in the full proposal in a Letter of Intent. The letter must contain an explicit declaration about the financial or in-kind contribution agreed upon. In-kind contributions are contributions in person-hours of personnel or material contributions such as the use of specific software and access to facilities. In-kind contributions should be capitalised in the Letter of Intent and should be an integral component of the project plan. The amounts stated in the letter must agree with the amounts stated in the budget for the proposal.

Please also see Annex A for the specific Funding Agencies’ rules regarding eligible applicants.

3.2 What can be applied for

Project duration

Projects may be funded for a maximum of 3 years, and must start between December 2017 and March 2018. The starting date may depend on the budget allocation (rules) of the specific funding agencies. The end date of a project should be harmonised for all applicants in the same consortium.

Funding

The total funding available in this programme amounts up to approx. 28.5 M€ across all participating applicants. There are no fixed minimum or maximum limits for a project size. Medium-sized projects with total budgets requested from the funding organisations in the range of 1-2 M€ are typically expected, which allows approximately 15-20 projects to be awarded funding though total project costs can be higher.



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

There are, however, (national) funding limits for the respective partners. Table 1 in Annex A indicates the bandwidth of funds available from each of the respective national funding agencies. For more information on the specific funding agencies' rules, please see Annex A.

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 available (see Annex A). In case of doubt, applicants should consult their respective funding agencies to advise.

(Note: The European Commission, the European Court of Auditors [ECA] and the European Anti-fraud Office [OLAF] can exercise their rights to carry out checks, reviews, audits and investigations and evaluate the impact of the action also towards project partners of SUGI-FWE Nexus transnational projects if they receive financial support also from the European Commission.)

Funding agencies' rules and eligibility criteria

In addition to the general rules and procedures laid out in this document, there may be specific funding agencies' rules (e.g. funding agencies' eligibility criteria for certain organisations, co-funding requirements, national evaluation rules, etc.). It is strongly recommended that these are checked with the contact person at the respective funding agency (see Annex A) before submitting a proposal. Please note there are limitations regarding the types of activities different funding agencies are able to support.

3.3 When can applications be submitted

The **call for pre-proposals is open until 15 March 2017 (1:00 p.m. EST / 6:00 p.m. UTC / 7:00 p.m. CET / 16 March 2017 3:00 a.m. JST)**. In May 2017, applicants will be invited to enter the second stage of the procedure: the **call for full proposals will close on 20 September 2017 (1:00 p.m. EDT / 5:00 p.m. UTC / 7:00 p.m. CEST / 21 September 2017 2:00 a.m. JST)**.

3.4 Preparing and submitting an application

Language and form

Proposals must be prepared in English using the designated proposal form. Proposals written in other languages will not be accepted. The proposal form should be completely filled in; incomplete proposal forms will be ineligible.

Submission in eCall

Submission of a pre-proposal and a full proposal must be done by means of the FFG electronic submission system (<https://ecall.ffg.at>). An online help document for submission is provided via https://ecall.ffg.at/upload/medialib_cifs/eCall_Help_final.pdf. The pre-proposal/full proposal may only be submitted if all co-applicants/co-operation partners have previously completed and submitted their partner proposals in eCall. Therefore it is within the main applicant's duties to ensure timely submission of all partner proposals and of the pre-proposal/full proposal as a whole. The process of the invitation and



Project no. 730254

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

application of project partners (co-applicants or co-operation partners) is described in detail in chapters 6 and 11 of the eCall help document (see above). The terms "partner proposal" and "partner application" are used interchangeably. The "partner application" or "partner proposal" only includes the master data of the project partner and does not mean that the pre-proposal must be submitted several times. It is not possible to resubmit or revise the pre-proposal/full proposal after the submission deadline.

By transmitting your pre-proposal/full proposal, you agree that it is forwarded to your responsible funding agency as well as to all other participating funding agencies involved in this action.

If you still have technical questions about the use of the system, please contact the Call Secretariat at FFG (see section 6).



Project no. 730254

4 Assessment Procedure

4.1 Procedure

Eligibility check

The Call Secretariat will verify the eligibility of the proposals according to the transnational eligibility criteria below. The participating funding agencies will verify the suitability for national funding according to their respective eligibility criteria.

If either the Main Applicant or the proposal does not meet the eligibility requirements, the proposal will not be admitted to the evaluation procedure. In case a single Co-applicant is not eligible, the proposal may still be eligible without this partner if and when the eligibility criteria are met by the proposal. In both cases, this will be communicated to the Main Applicant.

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

Both transnational and funding agencies’ eligibility criteria must be met.

Pre-proposal stage

Within the framework of SUGI-FWE Nexus, a two-stage procedure will be adopted. In the first stage, consortia are invited to submit pre-proposals (description of consortium members, concise project description of no more than 12 pages, and a budget indication with limited detail and according to national requirements).

The pre-proposals will be assessed by an Expert Panel composed of international experts and a technical chairman. The Expert Panel will be established by the Call Secretariat. The Panel will consist of recognised experts in relevant fields, academics as well as practitioners and innovators, who can assess the scientific as well as the innovative and practical values of the submitted projects. The Panel will be appointed by the participating organisations. The Evaluation Panel will assess the pre-proposals using the evaluation criteria described in section 4.2. Applicants will have no possibility for rebuttal to the committee’s evaluation.

After the submission of the pre-proposals, a selection of approximately 50 pre-proposals will be made. The successful consortia will then be invited to elaborate their ideas to full proposals. Unsuccessful consortia will be provided with an overall assessment of the quality of their pre-proposals.

Full proposal stage

Eligible full proposals will be submitted to the Evaluation Panel. The Evaluation Panel draws up recommendations and qualifies the proposals with a score. Each full proposal will be evaluated by at least three independent experts. *(Note: To be eligible for funding provided by the European Commission, the*

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

eligible full proposals will be ranked according to the evaluation results and the selection will be made on the basis of this ranking.)

Based on the ranking by the Expert Panel, and taking into account the available (national) budgets, the participating national and regional funding agencies of SUGI will take funding decisions. Funding decisions are final, and cannot be appealed.

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.

Note: Each project recommended for funding is required to have a signed consortium agreement between all partners prior to the start of the project, at least addressing the following topics:

- Internal organisation and management of the consortium
- Intellectual Property arrangements
- Settlement of internal disputes

Time Schedule

15 March 2017	Deadline Submission of pre-proposals
March 2017	Eligibility check
May 2017	Meeting of Expert Panel to assess pre-proposals
May 2017	Invite applicants to submit full proposals
20 September 2017	Deadline Submission of full proposals
September 2017	Eligibility check
November 2017	Meeting of Expert Panel to assess full proposals
December 2017	Funding recommendation by the Steering Committee
December 2017	Announcement of results to Main Applicants
December 2017-March 2018	National funding decisions and contracts completed Start of projects
2018	Kick-off meeting Projects
2019	Mid-term Projects Event
2020	Final Projects Event

4.2 Evaluation criteria

Proposals will be evaluated according to the following criteria. The consortium is responsible for assigning a proposal to (a) specific project type(s). A proposal can be assigned to more than one project type (for example, different work packages or partners might fall under different project types); this will be taken into account during the evaluation.

**) Criteria used for both evaluating the pre-proposals and the full proposals. Criteria without asterisk are used only for the evaluation of full proposals.*

<i>Excellence – Intellectual Merit</i>	5 points
<ul style="list-style-type: none"> ▪ Originality, innovativeness and contribution to new strategic knowledge and breakthrough implementation *) ▪ Appropriateness of conceptual approach *) ▪ Added value of international co-operation *) ▪ Feasibility of aims and objectives of project ▪ Feasibility and suitability of project design and methods ▪ Handling of development risks 	
<i>Impact and User Engagement (societal and broader impacts of project results)</i>	5 points
<ul style="list-style-type: none"> ▪ Fit to objectives, aims and topics of the call text (see pp. 7-11) *) ▪ Engagement of research users worldwide (e.g. communities, cities, policy makers, regulators, NGOs, or industry) and the extent to which the project is likely to be of value to end users *) ▪ Potential of the project, e.g. societal impact or market potential *) ▪ Suitability of proposed arrangements for disseminating and communicating outcomes of the project. 	
<i>Quality (Inter-disciplinarity and Personnel) and Efficiency of project implementation</i>	5 points
<ul style="list-style-type: none"> ▪ Value for money *) ▪ Appropriateness of costing ▪ Feasibility and appropriateness of timescale *) ▪ Suitability of expertise, balance of substantial contributions of members to project consortium *) ▪ Composition of consortium compared to the topic’s needs and international relevance *) ▪ Interdisciplinary, cross-sectorial collaboration, and co-creation *) ▪ Appropriateness of governance/management arrangements for project (incl. risk management) ▪ Track record and/or other key expertise of consortium members 	

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Evaluation scores will be awarded for each main criterion and not for the various sub-criteria. For pre- and full proposals, each criterion will be scored by the Expert Panel, using the following scale: 0) Unacceptable, 1) Weak, 2) Average, 3) Good, 4) Very good, 5) Excellent. Half marks can be used. The threshold for individual criteria will be 3. The overall threshold, applying to the sum of the three individual scores, will be 10.



Project no. 730254

5 Project Implementation

This call is part of the Belmont Forum and Joint Programming Initiative Urban Europe which include various joint programme activities (e.g. knowledge sharing, networking) that are described in this section. Projects funded via this call will become part of the programme of the Belmont Forum and the JPI Urban Europe. 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.

Data management

Both the Belmont Forum and JPI Urban Europe wish to promote open, transparent and robust urban and global change research 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 Belmont Forum and JPI Urban Europe believe 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, the Belmont Forum and JPI Urban Europe also recognize that not all research 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. For detailed information on the requirements regarding data management within this call, please see Annex D.

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 short 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 twice per project (mid-term and final). This survey includes key performance indicators for project progress and their contribution to the overall aim of the call.

Furthermore, one project observer from one of the participating funding organisations will be assigned to each of the funded projects to monitor the progress in transnational cooperation on behalf of the participating funding organisations and to provide a communication link between the project, the Call Secretariat, the Belmont Forum, the JPI Urban Europe and the European Commission.

Programme activities

The coordination of the programme is seen as very important for creating added value to the researchers involved in the programme. Three project events are foreseen. A project kick-off will be organised in 2018, a mid-term event in 2019 and a final event in 2020. Active participation of the funded projects is obligatory, e.g. by preparing short project presentations and/or posters. Additional network events are foreseen.



Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

All consortia of funded projects are expected to prepare popular science summaries of the project contents for programme activities and JPI Urban Europe publications (e.g. for brochures, (digital) newsletters, the website etc.). *(Note: Projects receiving funding also from the European Commission must ensure that all outcomes [publications, etc.] of transnational SUGI-FWE Nexus projects include a proper acknowledgement of JPI Urban Europe, the European Commission, and the respective funding agencies.)*

Time and budget of a maximum of €20.000 should be reserved by the consortium as a whole for monitoring and programme activities.



Project no. 730254

6 Contact details and other information

General information on the joint call

Updated information on this joint call and all relevant documents/templates are published on www.belmontforum.org and www.jpi-urbaneurope.eu.

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

Belmont Forum

Susanna Ehlers
National Science Foundation (USA)
Telephone: +1 703 292 7583
E-mail: sehlers@nsf.gov

Maria Uhle
National Science Foundation (USA)
Telephone: +1 703 292 2250
E-mail: muhle@nsf.gov

JPI Urban Europe

Johannes Bockstefl
Austrian Research Promotion Agency (FFG)
Telephone: +43 5 7755 5042
E-mail: johannes.bockstefl@ffg.at

Hanna Scheck
Austrian Research Promotion Agency (FFG)
Telephone: +43 5 7755 5068
E-mail: johanna.scheck@ffg.at

Marcus van Leeuwen
NWO – Netherlands Organisation for Scientific Research
Telephone: +31 70 344 0931
E-mail: m.vanleeuwen@nwo.nl

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.



Annex A: Specific Funding Agencies' Budgets and Rules of Eligibility

Table 1: Participating Funding Agencies: Budgets and research foci

Country/ Region	Agency	Funding 2017- 2020 (3 years)	Funds may be used for the following stage(s) of the research, development and innovation process*		
			Innovation and implementation	Applied research	Fundamen- tal research
Argentina ¹⁾	MINCyT	0.1 M€	X	X	X
Australia (to be confirmed)	CSIRO	tba	tba	tba	tba
Austria ¹⁾	FFG	2.0 M€	XX	XX	
Belgium ¹⁾	FWO	0.3 M€			XX
	Innoviris	0.6 M€	XX	XX	X
Brazil (state of São Paulo)	FAFESP	1.0 M€	XX	XX	XX
Chinese Taipei	MOST	2.0 M€	XX	XX	XX
Cyprus ¹⁾	RPF	0.4 M€	X	XX	X
France ¹⁾	ANR	1.5 M€		XX	XX
Germany ^{1) 2)}	BMBF	1.5 M€	X		XX
Japan	JST	0.5 M€	XX	X	X
Latvia ¹⁾	VIAA	0.3 M€	X	X	X
Netherlands ¹⁾	NWO	1.0 M€	X	XX	XX
Norway ¹⁾	RCN	1.0 M€	XX	X	X
Poland ¹⁾	NCN	0.5 M€			XX
Qatar	QNRF	1.4 M€	XX	XX	XX
Romania ¹⁾	UEFISCDI	0.5 M€	XX	XX	
Slovenia ¹⁾	ARRS	0.3 M€			XX

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/ Region	Agency	Funding 2017- 2020 (3 years)	Funds may be used for the following stage(s) of the research, development and innovation process*		
			Innovation and implementation	Applied research	Fundamen- tal research
Sweden ¹⁾	Formas	1.5 M€	X	XX	XX
	Swedish Energy Agency	0.9 M€	XX	XX	X
Turkey ¹⁾	TÜBİTAK	0.35 M€	X	X	X
United Kingdom ¹⁾	AHRC / ESRC / Innovate UK (common pot)	1.7 M€	XX	XX	XX
United States of America	NSF	6.0 M€	XX	XX	XX

*For the definitions of “fundamental research”, “applied research” and “innovation and implementation” used in this call text, please see Annex B.

¹⁾ Country eligible to access the European Commission funds.

²⁾ Only projects focusing on theme 1 “Robust Knowledge, Indicators and Assessments” and/or theme 2 “Multi-level Governance and Management of the Food-Water-Energy Nexus” are eligible for funding.

XX = The funding agency is primarily focused on funding research in this stage.

X = The funding agency has the mandate to fund projects in this stage.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Table 2: Participating Funding Agencies: Funding opportunities for non-research organisations

Table 2 is drafted to give some guidance to the applicants in the consortium building process and to make it easier to read the specific Funding Agencies' rules in Table 3. It only serves as a reading guidance, please consult Table 3 for the detailed eligibility criteria per funding agency. If stated "YES", conditions apply that are also described in the national eligibility requirements in Table 3. This "YES" or "NO" only applies to being a main or co-applicant for this country. In every country it is possible for these organisations to join as a co-operation partner (see p. 14).

Country/ Region	Agency	Possibilities to provide funding to:		
		Cities	Companies	NGOs
Argentina	MINCyT	YES	YES	YES
Australia (to be confirmed)	CSIRO	tba	tba	tba
Austria	FFG	YES	YES	YES
Belgium	FWO	NO	NO	NO
	Innoviris	YES	YES	YES
Brazil (state of São Paulo)	FAPESP	NO	NO	YES
Chinese Taipei	MOST	NO	NO	NO
Cyprus	RPF	YES	YES	YES
France	ANR	NO	YES	YES
Germany	BMBF	YES	YES	YES
Japan	JST	YES	YES	YES
Latvia	VIAA	NO	YES	NO
Netherlands	NWO	NO	NO	NO
Norway	RCN	NO	YES	YES
Poland	NCN	YES	YES	YES
Qatar	QNRF	YES	YES	YES

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/ Region	Agency	Possibilities to provide funding to:		
		Cities	Companies	NGOs
Romania	UEFISCDI	YES	YES	YES
Slovenia	ARRS	NO	NO	NO
Sweden	Formas	NO	NO	NO
	Swedish Energy Agency	YES	YES	YES
Turkey	TUBITAK	YES	YES	NO
United Kingdom	AHRC	YES	YES	YES
	ESRC	YES	YES	YES
	Innovate UK	YES	YES	YES
United States	NSF	YES	YES	YES

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Table 3: Agency Funding Guidelines

Country/Region	Argentina
Funding organisation	MINCYT
National contact person	Monica Silenzi E-mail: msilenzi@mincyt.gob.ar Tel.: 00541148995000 ext: 4084 Agustina Velo E-mail: avelo@mincyt.gob.ar Tel.: 00541148995000 ext: 4150 Website: mincyt.gob.ar
Funding commitment	0.1 M€
Anticipated number of projects with Argentinian partners	-
Maximum funding per awarded project	0.05 M€ (TBC)
Eligibility of a partner as a beneficiary institution	- Universities - R&D national institutions - Small and Medium Enterprises - Cities (?)
Eligibility of costs	Direct Costs - Mobility (travel + accommodation) - Short-term exchange visits - Meeting, workshops and events organization - Publication, dissemination - Consumables - Small equipment (up to 15.000 euros) Indirect Costs - Only administration
Submission of the proposal at the national level	No. But the selected proposals must present institutional support letter.
Submission of financial and progress reports at the national level	Yes
Information available at	

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Other	We highly recommend contact MINCyT & NCP's for the preparation of the proposal. Cities participating in the call should contact MINCyT contact representative before preparing to the call.
--------------	---

Country/Region	Australia (to be confirmed)
Funding organisation	CSIRO
Details to be announced	

Country/Region	Austria
Funding organisation	FFG – Austrian Research Promotion Agency
National contact person	<p>Johannes Bockstefl E-mail: johannes.bockstefl@ffg.at Tel.: +43 (0)5 7755-5042</p> <p>Hanna Scheck E-mail: johanna.scheck@ffg.at Tel.: +43 (0)5 7755-5068 Website: www.ffg.at</p>
Funding commitment	2.0 M€
Anticipated number of projects with Austrian partners	---
Maximum funding per awarded project	1.5 M€
Eligibility of a partner as a beneficiary institution	The organisations which are eligible for funding as well as the eligibility criteria for cooperation are listed in the national guidelines available via https://www.ffg.at/ausschreibungen/sugi
Eligibility of costs	<p><u>Eligible costs</u></p> <ul style="list-style-type: none"> • Personnel costs • Overhead costs (as surcharge on all cost categories besides third-party costs) • Use of R&D infrastructure • Costs of materials • Third-party costs • Travel costs <p>For detailed information visit: https://www.ffg.at/sites/default/files/dok/kostenleitfaden_v_2_0.pdf</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Submission of the proposal at the national level	No, but specific national forms “Part C” necessary in the full proposal stage. Successful proposals in the full proposal stage must resubmit their national partner application via eCall for transfer into the national electronic submission system.
Submission of financial and progress reports at the national level	Yes, scientific and financial reporting carried out on an annual basis.
Information available at	https://www.ffg.at/ausschreibungen/sugi
Other	We highly recommend to contact the NCP during the preparation of the project.

Country/Region	Belgium, Flanders
Funding organisation	Research Foundation Flanders (FWO)
National contact person	dr. Olivier Boehme Science Policy Advisor Tel. +32 2 550 15 45 Toon Monbaliu Advisor Research Affairs Tel. +32 2 550 15 70 E-mail: eranet@fwo.be
Funding commitment	0.3 M €
Anticipated number of fundable research groups	2
Maximum funding per awarded project	0.15 M
Eligibility of a partner as a beneficiary institution	Article 9 from the research project regulation is applicable: http://www.fwo.be/nl/mandaten-financiering/onderzoeksprojecten/onderzoeksproject/reglement-inzake-de-onderzoeksprojecten/#_Contractuele_partijen
Eligibility of costs	Funding money can be used for staff, consumables and infrastructure. The minimal and maximal amounts of money allowed per cost category, as applicable for the regular FWO-projects, are not applicable for the projects funded by FWO in ERA-NET. Overhead is not an eligible cost. Notwithstanding, FWO pays the host institutions of a project 6% overhead on top of the funding amount.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Submission of the proposal at the national level	No
Submission of financial and scientific reports at the national level	Only financial reporting, according to the guidelines in the project regulations . (art. 23).
Information available at	Regulations: http://www.fwo.be/en/fellowships-funding/research-projects/research-project/regulations-for-research-projects/ ERA-NET at FWO (only in Dutch): http://www.fwo.be/nl/mandaten-financiering/europese-programmas/era-net/#sliding_2826
Other	Recommendation to contact FWO before submission with regard to eligibility.

Country/Region	Belgium, Brussels Capital Region
Funding organisation	Innoviris – The Brussels Institute for Research and Innovation
National contact person	Beata Bibrowska Senior Advisor-EU RDI programs and projects Unit- Strategic Research E-mail: bbibrowska@innoviris.irisnet.be Tel: +32 (0) 2 600 50 22 Website: www.innoviris.be
Funding commitment	0.6 Mio€
Anticipated number of fundable research groups	Not applicable
Maximum funding per awarded project	No specific limits
Eligibility of a partner as a beneficiary institution	<p>Eligibility criteria and funding :</p> <ul style="list-style-type: none"> ○ Private companies established in the Brussels Capital Region with a sustainable activity in this region based upon a sound business model. The entities have not received public funding for the same activities. ○ Brussels Capital Region universities and research organisations could participate alone or with regional enterprise, ○ Brussels based associations active in urban I sustainable development alone or with regional enterprise or university <p>Additionally to the general criteria developed by the SUGI program, Innoviris funded SUGI projects will fulfil some general regional criteria:</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<ul style="list-style-type: none"> ○ Each beneficiary develops entirely or partially its activities in Brussels Capital Region ○ Each beneficiary will perform a research or innovation activity in the project ○ The project will be innovative and will present the positive impact on regional economy and employment by valorization of results in the region <p>All applicants should demonstrate their viability and financial soundness regarding their own contribution to the project and the implementation of the results. Organisations that perform economic activities and are established in Flanders or Wallonia regions are excluded from Innoviris funding. Brussels municipalities and public utility organisations can benefit from funding in this call.</p>																				
Eligibility of costs	<table border="1"> <thead> <tr> <th></th> <th colspan="4"><u>Maximum funding rates</u></th> </tr> <tr> <th></th> <th>Large enterprises</th> <th>Medium size enterprises</th> <th>Small enterprises</th> <th>Research organisations, universities and associations without economic activity</th> </tr> </thead> <tbody> <tr> <td>Industrial research (applied research)</td> <td>50%</td> <td>60%</td> <td>70%</td> <td>100%</td> </tr> <tr> <td>Experimental development (innovation)</td> <td>25%</td> <td>35%</td> <td>45%</td> <td>100%</td> </tr> </tbody> </table> <p>15% of top up in each category of research and for each type of company in international/EU cooperation projects</p> <p>The associations with economic activities will be funded at the same conditions as private companies.</p> <p>Eligible costs:</p> <ul style="list-style-type: none"> ○ Personnel costs ○ Operational costs ○ Investments costs ○ Indirect costs (10% of personnel operational costs) ○ Subcontracting 		<u>Maximum funding rates</u>					Large enterprises	Medium size enterprises	Small enterprises	Research organisations, universities and associations without economic activity	Industrial research (applied research)	50%	60%	70%	100%	Experimental development (innovation)	25%	35%	45%	100%
	<u>Maximum funding rates</u>																				
	Large enterprises	Medium size enterprises	Small enterprises	Research organisations, universities and associations without economic activity																	
Industrial research (applied research)	50%	60%	70%	100%																	
Experimental development (innovation)	25%	35%	45%	100%																	

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Submission of the proposal at the national level	Yes, the Brussels participants will submit the regional template in the full proposal stage. A special web page and regional application template , other information's dedicated to the SUGI call will be developed at www.innoviris.be
Submission of financial and progress reports at the national level	Yes, scientific and financial reporting will be submitted at annual basis
Information available at	https://www.innoviris.be
Other	We invite all to contact the regional NCP for SUGI during the preparation of the projects.

Country/Region	Brazil (state of São Paulo)
Funding organisation	FAPESP - São Paulo Research Foundation
National contact person	Alexandre Roccoatto Science Manager E-mail: chamada_bf_sugi@fapesp.br Website: www.fapesp.br/en
Funding commitment	1.0 M€
Anticipated number of projects with partners from São Paulo	---
Maximum funding per awarded project	Depends on the chosen grant modality according the guidelines available at: www.fapesp.br/6857
Eligibility of a partner as a beneficiary institution	Usual rules applicable for the chosen grant modality; it is mandatory to consult FAPESP before submission of the Pre-proposal according the guidelines available at: www.fapesp.br/6857
Eligibility of costs	Usual rules applicable for the chosen grant modality with exceptions given in the guidelines available at: www.fapesp.br/6857
Submission of the proposal at the national level	No documents are to be submitted to FAPESP at the Pre-proposal phase, other than those requested for the eligibility (www.fapesp.br/6857) At the Full Proposal Stage, applicants to FAPESP must submit additional documentation according to individually given instructions.
Submission of financial and progress reports at the national level	Financial and progress reports shall be submitted annually to FAPESP according the rules applicable to the chosen grant modality. A copy of the periodic joint scientific reports should be sent to FAPESP along the annual report.
Information available at	www.fapesp.br/6857

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Other	We highly recommend potential applicants to contact FAPESP during the preparation of the project.
Country/Region	Chinese Taipei
Funding organisation	MOST – Ministry of Science and Technology
National contact person	<p>Yu-Pin Lin Ministry of Science and Technology, National Taiwan University Title/Position: Director of Taiwan Belmont Forum program Office/Distinguished Professor and Department Chair</p> <p>Tel.: +886-2-33663467 E-mail: yplin@ntu.edu.tw</p> <p>Tsair-Fuh Lin Ministry of Science and Technology, National Cheng Kung University Title/Position: Chair of Sustainable Development Discipline/Distinguished Professor</p> <p>Tel.: +886-62364455 E-mail: tflin@mail.ncku.edu.tw</p> <p>Website: https://www.most.gov.tw/nat/en/list?menu_id=a58368f5-b1f6-4484-a8f9-061e4bb7d136&view_mode=listView</p> <p>Website: https://belmontfroum.most.ntu.edu.tw/</p>
Funding commitment	2.0 M€
Anticipated number of projects with partners from Chinese Taipei	3 – 5
Maximum funding per awarded project	0.5 M€
Eligibility of a partner as a beneficiary institution	<p>Only institutions (Universities and research institutions) that fulfil the grant administrating organisation eligibility requirements of MOST are eligible to submit proposals. Applicants must be residents of Chinese Taipei (Taiwan).</p> <p>For more information, please visit: https://belmontfroum.most.ntu.edu.tw/</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Eligibility of costs	<ul style="list-style-type: none"> • Personnel cost • Overhead costs (as surcharge on all cost categories besides third-party costs) • Use of R&D infrastructure • Consumables • Travel costs <p>For detailed information on eligible costs, please refer to: https://belmontforum.most.ntu.edu.tw/</p>
Submission of the proposal at the national level	<p>Yes. Proposal submission to MOST is required only upon success of the full proposal evaluation by Belmont Forum.</p> <p>For more details, please refer to Website: https://belmontforum.most.ntu.edu.tw/</p>
Submission of financial and progress reports at the national level	<p>Yes, progress report and financial report are required annually.</p>
Information available at	<p>https://www.most.gov.tw</p>
Other	

Country/Region	Cyprus
Funding organisation	RPF – Research Promotion Foundation
National contact person	<p>Katerina Karakasidou Malla</p> <p>E-mail: kkarakasidou@research.org.cy</p> <p>Tel.: +357 22205036</p>
Funding commitment	0.4 M€
Anticipated number of projects with Cypriot partners	RPF expects to fund 2-3 projects
Maximum funding per awarded project	175.000 Euro (or 200.000 Euro if the Cypriot partner is the Coordinator of the International Consortium).
Eligibility of a partner as a beneficiary institution	<p>The RPF potentially supports, through its relevant national call, participation of Research Organisations, Enterprises and Other Organisations, as specified in the National Work Programme RESTART 2016 – 2020.</p> <p>The Cypriot Consortium can comprise of 1 to 3 partners.</p>
Eligibility of costs	<p>Please refer to the National call documents and the Work Programme RESTART 2016 – 2020 (available on RPF webpage: http://www.research.org.cy)</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Submission of the proposal at the national level	Please refer to the National call documents (available on RPF webpage: http://www.research.org.cy)
Submission of financial and scientific reports at the national level	The submission of an interim report (including both financial and scientific information) is anticipated, as well as a final report. Please refer to the National call documents and the Work Programme RESTART 2016 – 2020 (available on RPF webpage: http://www.research.org.cy)
Information available at	http://www.research.org.cy and https://iris.research.org.cy/
Other	Please refer to the National call documents and the Work Programme RESTART 2016 – 2020 (available on RPF webpage: http://www.research.org.cy) for further information.

Country/Region	France
Funding organisation	ANR – Agence Nationale de la Recherche
National contact person	Karine Delmouly E-mail: karine.delmouly@agencerecherche.fr Tel.: +33 (0)1 73 54 82 38 Website: www.agencerecherche.fr
Funding commitment	1.5 M€
Anticipated number of projects with French partners	---
Maximum funding per awarded project	No more than 300 000 € for a project coordinated by France and no more than 200 000 € for other projects.
Eligibility of a partner as a beneficiary institution	<p>Eligible applicants are French public research organisations (Universities, CNRS...), NGO and private companies (if companies or NGO are in a consortium with at least one public research organisation).</p> <p>For public research organisations, ANR grants cover only additional costs of the research projects, except for EPIC research organisations (CEA, BRGM, CSTB...) in consortium with at least one company, for which ANR covers 50% of the full cost;</p> <ul style="list-style-type: none"> • For SME, ANR grants cover 45% of the full cost; • For large and medium companies, ANR grants cover 30% of the full cost for basic and industrial research projects, 25% for experimental development;

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Eligibility of costs	<p>ANR funds basic and industrial research projects. Experimental development and innovation activities, if not excluded, should be minor activities compared to basic and industrial research activities.</p> <p>For detailed information on eligible costs, read: http://www.agence-nationale-recherche.fr/RF</p>
Submission of the proposal at the national level	No
Submission of financial and progress reports at the national level	<p>Financial reports shall be submitted annually to the ANR for the beneficiaries of the full cost funding model. A copy of the periodic joint scientific reports should be sent to the ANR.</p>
Information available at	http://www.agence-nationale-recherche.fr/en/funding-opportunities/current-calls/
Other	<p>Please note that ANR does not allow multiple funding; the principal investigator should clearly state how the proposed project differs from other granted projects.</p> <p>We highly recommend to contact the NCP during the preparation of the project.</p>

Country/Region	Germany
Funding organisation	BMBF - German Ministry of Education and Research
National contact person	<p>Evelyn Echeverria Projekträger Jülich / Project Management Jülich Nachhaltigkeit (UMW) / Sustainability (UMW) Nationale Kontaktstelle Umwelt / National Contact Point Forschungszentrum Juelich GmbH Zimmerstrasse 26-27 10969 Berlin, Germany Tel.: +49 30 20199-3134 Fax: +49 30 20199-430 E-mail: e.echeverria@fz-juelich.de</p>
Funding commitment	1.5 Million €
Anticipated number of projects with German partners	NA

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Maximum funding per awarded project	NA
Eligibility of a partner as a beneficiary institution	Companies, universities, research organizations, institutions of municipalities and federal states, associations, civil society organisations, enterprises, SMEs
Eligibility of costs	Salaries, subcontracting, consumables, travel expenses, expenditure on services, devices and equipment, overheads
<p>Submission of the proposal at the national level</p> <p>Eligibility Criteria for German applicants</p>	<p>Only projects focusing on theme 1 “Robust Knowledge, Indicators and Assessments” and/or theme 2 “Multi-level Governance and Management of the Food-Water-Energy Nexus” are eligible for funding.</p> <p>BMBF will prioritise projects which are in scope of the “Strategische Forschungs- und Innovationsagenda –Zukunftsstadt (FINA)”: https://www.fona.de/mediathek/pdf/Zukunftsstadt.pdf</p> <p>In theme 1, projects with a special focus on the creation of knowledge platforms for mutual learning from a global perspective are particularly encouraged to apply.</p> <p>Projects focusing on theme 2 “Multi-level Governance and Management of the Food-Energy-Water Nexus” should put thematic focus on the following Strategische Leitlinien (SLT) of FINA:</p> <ul style="list-style-type: none"> - SLT 4: Resilienz und Klimaanpassung - SLT 5: Energie, Ressourcen und Infrastruktursysteme - SLT 7: Schnittstellentechnologien für die Zukunftsstadt <p>Projects dealing with transdisciplinary approaches and integration of relevant stakeholders are required.</p> <p>The funding duration should not exceed 36 months.</p> <p>German applicants may be asked to submit a formal national application in addition to the full proposal. For this application, it is mandatory to use the electronic application system “easy-online” (https://foerderportal.bund.de/easyonline). Potential German applicants are requested to contact Projektträger Jülich before submitting their proposals.</p> <p>Applicants are strongly advised to consult the BMBF guidelines on eligible costs. This is because the budget details required at the full proposal stage may only include eligible costs as defined in the funding rules</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>specific to Germany: Richtlinien für Zuwendungsantraege auf Ausgabenbasis – AZA or Richtlinien für Zuwendungsantraege auf Kostenbasis – AZK. https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare&formularschrank=bmbf</p>
Submission of financial and scientific reports at the national level	Yes, scientific and financial reporting carried out on an annual basis
Information available at	www.fona.de
Other	We highly recommend contacting the German National Contact Person (NCP) during the preparation of the projects.

Country/Region	Japan
Funding organisation	JST
National contact person	<p>Shinji Kanayama Deputy Manager kanayama@jst.go.jp</p> <p>Clement Ng Program Coordinator clement.ng@jst.go.jp</p> <p>K's Gobancho, 7 Goban-cho, Chiyoda-ku, 102-0076, Tokyo, JAPAN +81 3 5214 7375 http://www.jst.go.jp/EN/index.html</p>
Funding commitment	0.5 M€
Anticipated number of projects with Japanese partners	---
Maximum funding per awarded project	10M yen/year
Eligibility of a partner as a beneficiary institution	<p>Any independent researcher personally affiliated with (and actively conducting research at) a domestic Japanese research institution, regardless of nationality, is eligible to apply.</p> <p>'Domestic Japanese research institution' refers to universities, independent administrative institutions, national/public testing and Research Institutions, specially authorized corporations, public-service corporations and enterprises, etc. that satisfy requirements predetermined by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). Please refer to the MEXT homepage</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	below for more information.
Eligibility of costs	Funding will be provided in support of research, travel and personnel expenses, as well as indirect costs (up to a maximum of 10% of direct costs). The scale of funding provided to successful proposals will depend on the budget of each fiscal year.
Submission of the proposal at the national level	<p>The official national call announcement for the Japan has been published on the JST website. Applicants are advised to contact their National Contact Point before starting to prepare proposals for application.</p> <p>In addition to the joint application process, Japanese applicants will have to register their applications on the Cross-Ministerial R&D Management System (e-Rad: https://www.e-rad.go.jp/index.html). The Japanese applicants must also complete a research ethics training program conducted by the research institute with which the PI is affiliated, and then declare the completion of the program to JST within 30 days after the deadline of the call for proposals. If it would be very difficult for the Japanese PI to undertake a program provided by his or her own affiliated institute, they should please contact JST. Please note that unless applicants complete a research ethics program, his / her application will be deemed ineligible. For more details, please refer to the call announce page below.</p>
Submission of financial and progress reports at the national level	Yes, submitted as per the e-rad system for proposals above.
Information available at	http://www.mext.go.jp/a_menu/kansa/houkoku/1301688.htm
Other	<p>JST participates in this joint program through the activities of the Belmont Forum. JST conducts inter- and trans-disciplinary research for society under its research programs. These activities have links to the Future Earth initiative.</p> <p>JST has experience of cooperation with EU in the CONCERT-Japan program as an ERA-NET project under the Seventh Framework Programme for Research and Technological Development (FP7) and participation in the open call in Horizon2020.</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/Region	Latvia
Funding organisation	VIAA – State Education Development Agency
National contact person	<p>Uldis Berkis E-mail: Uldis.Berkis@viaa.gov.lv Tel.: +371 29472349</p> <p>Maija Bundule E-mail: Maija.Bundule@viaa.gov.lv Tel.: +371 67785423 Website: www.viaa.gov.lv</p>
Funding commitment	0.3 M€
Anticipated number of projects with Latvian partners	1-2
Maximum funding per awarded project	0.21 M€, max 70 TEUR/year per Latvian partner
Eligibility of a partner as a beneficiary institution	<p>Only the following two types of partners are eligible for funding by VIAA:</p> <ul style="list-style-type: none"> • Research institutions: Universities, research institutes, other research institutions: must be listed in the Latvian register of research institutions. Must correspond to the status of Research and Knowledge Dissemination organisation (R651/2014). • Enterprises entered into the Latvian Commercial registry are eligible, assumed they are eligible to do the specific research and can prove possession of research resources in Latvia, and their main activity incl. research activity is located in Latvia. Limitations of EU legislation apply (R651/2014) together with financial reporting requirements. <p>Any other type of participants can participate on their own costs and are not covered by VIAA mandate.</p> <p>No more than two VIAA supported applicants per proposal allowed.</p> <p>Applicants are organisations and the funding limit holds per organisation, respecting also the total available funding.</p>
Eligibility of costs	<ol style="list-style-type: none"> 1. Personnel costs (researchers, technicians and other supporting staff to the extent employed on the research project) and relevant personnel taxes, maximum rates must be respected, 2. Other direct costs such as consumables, equipment (only depreciation costs), reagents 3. Subcontracting (up to 25% of total direct costs), with justification, includes also external patents and licenses

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>and all external services</p> <p>4. Travels and allowances according to travel plan</p> <p>5. Overheads can reach a maximum of 25% of the direct project costs exempt subcontracting, and must be shown to include only indirect cost categories.</p> <p>Core activities cannot be subcontracted.</p> <p>The projects should correspond to the priorities of the Call.</p> <p>Duration of the project - up to 3 years. The activities must correspond to “research” according to Latvian Law on Scientific Activity.</p>
Submission of the proposal at the national level	No, but applicants might be asked to provide additional information in order to assess their eligibility. Applicants are obliged to provide any information specified by Provisions of the Cabinet of ministers No 259, 26.05.2015 upon request.
Submission of financial and progress reports at the national level	Yes, submission of financial and scientific reports at national level is required in accordance with the rules of VIAA.
Information available at	www.viaa.gov.lv
Other	<ul style="list-style-type: none"> • We highly recommend to contact the NCP during the preparation of the project. • National funding will be provided according to the Provisions of the Cabinet of ministers No 259, 26.05.2015 http://likumi.lv/ta/id/274671-atbalsta-pieskirsanas-kartiba-dalibai-starptautiskas-sadarbibas-programmas-petniecibas-un-tehnologiju-joma • These provisions and limitations there must be respected without exception

Country/Region	The Netherlands
Funding organisation	NWO – Nederlandse Organisatie voor Wetenschappelijk Onderzoek
National contact person	Marcus van Leeuwen E-mail: m.vanleeuwen@nwo.nl Tel.: +31 70 344 0931
Funding commitment	1 M€
Anticipated number of projects with Dutch partners	4
Maximum funding per awarded project	€ 250.000
Eligibility of a partner as a beneficiary institution	Senior researchers who are employed at Dutch universities, NWO- and KNAW-institutes, TO2 institutes and HBO institutes may apply for funding and participate in a consortium as main applicant or as co-applicant.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Eligibility of costs	The funding rules and specific requirements for this call can be found at the following web address: www.nwo.nl/sugi
Submission of the proposal at the national level	Yes. After the Expert Panel evaluation, successful applications are required to submit their proposal at the national level.
Submission of financial and progress reports at the national level	Yes, submission of financial and scientific reports at national level is required in accordance with the rules of NWO.
Information available at	For full details of NWO funding rules, please refer to the JPI Urban Europe website of NWO, or www.nwo.nl
Other	-

Country/Region	Norway
Funding organisation	RCN - The Research Council of Norway
National contact person	Jonas Enge E-mail: jen@rcn.no Tel.: +47 40203416
Funding commitment	1.0 M€
Anticipated number of projects with Norwegian partners	3
Maximum funding per awarded project	Within a single project proposal, the Norwegian contribution requested cannot exceed €500.000
Eligibility of a partner as a beneficiary institution	Norwegian research institutions (see Definition and specification of the concept “research institution”) and Norwegian companies/organisations that have been officially issued an enterprise number under the Register of Business Enterprises.
Eligibility of costs	Relevant project costs such as payroll expenses, procurement of external R&D services, depreciation of equipment used under the project and one or more grants/fellowships and direct project expenses.
Submission of the proposal at the national level	Yes. This is a simplified procedure for registration into the RCN system for Norwegian project partners (after the funding decision).
Submission of financial and progress reports at the national level	Yes
Information available at	http://www.forskningradet.no/en/General_application_requirements/1184159007037
Other	-

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/Region	Poland
Funding organisation	NCN – Narodowe Centrum Nauki, National Science Centre
National contact person	<p>Joanna Komperda E-mail: joanna.komperda@ncn.gov.pl Tel.: +48 12 341 9138</p> <p>Kinga Sekerdej E-mail: kinga.sekerdej@ncn.gov.pl Tel.: + 48 12 341 9172</p>
Funding commitment	0.5 M€
Anticipated number of projects with Polish partners	N/A
Maximum funding per awarded project	---
Eligibility of a partner as a beneficiary institution	Any researcher, with a doctoral degree, employed at a Polish institution may act as a Principal Investigator.
Eligibility of costs	<p>We strongly encourage all applicants to read information on eligible costs included in the Annex to NCN Council’s Resolution on funding granted within calls for proposals for international research projects (UNISONO):</p> <p>https://ncn.gov.pl/sites/default/files/pliki/SUGI_NCN_requirements.pdf</p> <p>You can apply for funding for all costs relevant, necessary and directly connected to the proposed research project including:</p> <ul style="list-style-type: none"> • Personnel costs (please check NCN regulations); • Equipment – the cost of an individual item of equipment must not exceed PLN 150 000 for Arts, Humanities and Social Sciences and 500 000 for Life Sciences, Physical Sciences and Engineering; • Other costs such as: <ul style="list-style-type: none"> ➤ Devices and software: costs of devices other than research equipment, as well as the cost of purchasing software instrumental ➤ Materials ➤ Outsourcing ➤ Business trips (travel and subsistence costs) ➤ Visits and consultations ➤ Costs for knowledge transfer ➤ Publication costs (incl. editing and translation costs) ➤ Other consumables

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>Please note:</p> <ul style="list-style-type: none"> • administrative personnel costs have to be covered from overheads, • costs of organisation of conferences must be covered from overheads, • overhead costs must not exceed a maximum of 40% of the total eligible costs (excl. equipment) and may not be increased during the course of a research project, • project duration: 24 or 36 months • if one international project includes partners from two different Polish Host Institutions, these institutions must apply as a consortium. Each Host Institution comprising the consortium has a separate budget, but the limit on the remuneration applies to the consortium as a whole. Please see UNISONO: eligible costs (Katalog kosztów kwalifikowalnych).
Submission of the proposal at the national level	<p>On the full proposal stage all Polish applicants must register their applications in the OSF submission system (UNISONO application). This application includes the following budget table. Budget of the Polish part of the research project in the OSF system should be given in PLN (1 EUR= 4,3334 PLN).</p>
Submission of financial and progress reports at the national level	<p>Submission of financial and scientific annual reports at national level is required.</p>
Information available at	<p>Applicants are obliged to adhere to the rules included in Annex to NCN Council's Resolution on funding granted within calls for proposals for international research projects:</p> <p>https://ncn.gov.pl/sites/default/files/pliki/SUGI_NCN_requirements.pdf</p>
Other	<p>Only proposals involving basic research may be submitted in response to the call for proposals. Basic research is defined as experimental or theoretical endeavours undertaken to gain new knowledge of the foundations of phenomena and observable facts, without any direct commercial use.</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/Region	Qatar
Funding organisation	Qatar National Research Fund
National contact person	<p>Administrative enquiries: Dr. Sadim Jawhar, Grand Challenge Program Officer, http://support.qnrf.org/index.php?/Tickets/Submit</p> <p>Scientific enquiries: Dr. Mohammad Alsheyab, Program Manager Civil and environmental engineering, malsheyab@qf.org.qa Dr. Michael Reksulak, Director Social Sciences, Arts and Humanities, mreksulak@qnrf.org</p>
Funding commitment	1.5 M US\$
Anticipated number of projects with Qatari partners	QNRF expects to fund 2-3 projects
Maximum funding per awarded project	750,000 US\$
Eligibility of a partner as a beneficiary institution	<p>Only institutions inside Qatar with an approved Research Office are eligible to submit proposals. Applicants must be residents of Qatar. Proposals aligned with themes 1, 2 and 3 as described in the call are eligible for QNRF funding. For further details, see Qatar National Annex at link (http://www.qnrf.org/en-us/Funding/Research-Programs/Thematic-and-Grand-Challenges-Research-Program/Belmont-Forum).</p>
Eligibility of costs	<ol style="list-style-type: none"> 1. Budget categories constitute the overall budget of an awarded project. The budget categories include “personnel category”, “capital equipment, consumables and materials category”, “travel category”, “miscellaneous category” and the “indirect cost category.”³ 2. Expenses related directly to the performance of the project research activities are called direct costs. Direct cost includes the “Personnel” cost, the “Equipment” cost, the “Travel” cost and the “Miscellaneous” cost. 3. 100% of the proposed QNRF funded portion of research budget must be expended inside Qatar. <p>For further details, see Qatar National Annex at link (http://www.qnrf.org/en-us/Funding/Research-Programs/Thematic-and-Grand-Challenges-Research-Program/Belmont-Forum).</p>

³ Indirect cost is institutional expenses that are not readily identified with a research project implementation, yet necessary for the general support of this project by the institution where it is being performed.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Submission of the proposal at the national level	Proposal submission to QNRF is required only upon success of the full proposal evaluation by Belmont forum. For further details, see Qatar National Annex at link (http://www.qnrf.org/en-us/Funding/Research-Programs/Thematic-and-Grand-Challenges-Research-Program/Belmont-Forum).
Submission of financial and scientific reports at the national level	Awardees shall comply with both the monitoring procedures of Belmont Forum and QNRF as per the Master Research Funding Agreement.
Information available at	http://www.qnrf.org/en-us/Funding/Research-Programs/Thematic-and-Grand-Challenges-Research-Program/Belmont-Forum
Other	

Country/Region	Romania
Funding organisation	UEFISCDI
National contact person	Mircea Segarceanu E-mail: mircea.segarceanu@uefiscdi.ro Tel.: +4021 302 38 83
Funding commitment	0.5 M€
Anticipated number of projects with Romanian partners	2-3
Maximum funding per awarded project	250.000 EUR if Romanian coordinator 200.000 EUR otherwise
Eligibility of a partner as a beneficiary institution	Legal entities established in Romania are eligible to get funding - public and private accredited universities, national R&D institutes, other research organisations, SME' s, large industrial enterprises
Eligibility of costs	Personnel costs, consumables, equipment, subcontracting, travel, overhead.
Submission of the proposal at the national level	Not required
Submission of financial and scientific reports at the national level	Yearly basis
Information available at	http://uefiscdi.gov.ro/articole/4536/Pachet-de-informatii-ERANETERANET-Cofund.html
Other	Additional documents might be required from Romanian participants for determining national eligibility after the submission of pre-proposal.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Country/Region	Slovenia
Funding organisation	ARRS – Slovenian Research Agency
National contact person	Tina Vuga E-mail: tina.vuga@arrs.si Tel.: +386 1 400 59 43 Website: http://www.arrs.gov.si/sl/
Funding commitment	0.3 M€
Anticipated number of projects with Slovenian partners	---
Maximum funding per awarded project	0.3 M€
Eligibility of a partner as a beneficiary institution	<p>Researchers holding a PhD degree who:</p> <ul style="list-style-type: none"> - meet the requirements for a project manager of a basic or applicative project, - are registered at Slovenian Research Agency (ARRS) and - are employed at Slovenian higher education or research institutions or will be employed at the research institution by signing of SUGI grant contract at the latest. <p>Higher education or research institutions of the applicant need to be registered at ARRS research organisations records and shall not be business sector entities. Business sector entities may apply, however they need to ensure their own funding for participation. Eligible entities may participate in SUGI consortium as Main Applicant or Co-Applicants.</p>
Eligibility of costs	<ul style="list-style-type: none"> ➤ Personnel costs , PhD student (those funded as young researchers by ARRS are excluded), post-doc) ➤ Social security, health, pension and other contributions according to national legislation, ➤ Material costs (Travel and meeting costs, Consumables, Dissemination and knowledge exchange costs, Other costs) ➤ Depreciation costs <p>Slovenian teams will be financed as the price category A, B, C or D projects. Total sum of research hours is calculated by dividing total grant sum by the value of research full time equivalent for chosen price category of the project (A, B, C or D).</p> <p>Overhead is calculated up to 20% of all eligible costs calculated at the level of chosen project category (without subcontracting costs) being a consistent part of the total grant sum. The calculation of overhead thus lowers individual category of eligible costs in a proportional manner.</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	Overhead costs are used for covering the running costs of the institution which are related to implementation of the SUGI project.
Submission of the proposal at the national level	All Slovenian applicants at the Outline and Full Proposal stage are invited to contact ARRS as the proposed budget is recommended to be examined by ARRS prior to official submission. Additionally, names and research organisations of all Slovenian participants should be forwarded to ARRS with planned budgets for each year of the project (max. 3 years).
Submission of financial and progress reports at the national level	Yes, financial reporting carried out on an annual basis according to national rules.
Information available at	http://www.arrs.gov.si/sl/medn/urbana/; http://www.arrs.gov.si/sl/akti/ured-normstand-rd-jan16.asp
Other	

Country/Region	Sweden
Funding organisation	The Swedish Research Council Formas
National contact person	Ann Rodenstedt E-mail: ann.rodenstedt@formas.se Mobile: +46 (0)72-554 94 77
Funding commitment	15 million SEK, approximately 1.5 M€
Anticipated number of projects with Swedish partners (funded by Formas)	2-4
Maximum funding per awarded project	---
Eligibility of a partner as a beneficiary institution	Grants for research projects can only be administered by a Swedish university, university college or other Swedish public organisation that fulfils the grant administrating organisation eligibility requirements of Formas. Please see: http://www.formas.se/en/Financing/General-instructions/Grant-administrating-organisation/
Eligibility of costs	Project grants from Formas may be used for the financing of salary for researchers, doctoral students and technical staff (including social-security contributions). Grants may also be used to finance running costs (e.g. consumables, equipment under 500 kSEK, travel, conferences, publications in open access journals), equipment depreciation costs and premises costs. For existing employment positions, the current salary at the time of application (including social-security contributions) must be used for

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>each of the subsequent years. For new employment positions, the starting salary at the grant administrating organisation must be used for each subsequent year. Note that the total salary costs awarded by Formas for an individual researcher, doctoral student or other member of the project may never exceed 100 per cent of a full-time position. Please see also “Guidelines for use of funding”: http://www.formas.se/en/Financing/General-instructions/</p>
Submission of the proposal at the national level	<p>Following the second stage of the international expert panel evaluation, the Swedish PIs in the projects recommended for funding will be invited to submit the same proposal to Formas (via Prisma). Information about the submission will be provided in the invitation.</p>
Submission of financial and progress reports at the national level	<p>Each Swedish PI awarded funding must submit a financial and scientific report to Formas when the project has ended.</p>
Information available at	<p>https://www.formas.se or https://www.formas.se/en</p>
Other	<p>To be eligible to apply for grants at Formas, the main applicants and participating researchers must have a doctoral degree. Other people participating in the project (e.g. doctoral students, technicians, lab assistants) do not need to have a doctoral degree. There is no age limit for applicants, but fully retired researchers cannot obtain funds for their salary from Formas. The research focus of the proposal must be within Formas’ areas of responsibility.</p>

Country/Region	Sweden
Funding organisation	Swedish Energy Agency
National contact person	<p>Maria Alm E-mail: maria.alm@energimyndigheten.se Tel.: +46 16 544 21 43</p>
Funding commitment	0.9 M€
Anticipated number of projects with Swedish partners (funded by SWEA)	Appr. 3-4
Maximum funding per awarded project	-
Eligibility of a partner as a beneficiary institution	<p>All Swedish organisations (juridisk person) are eligible for funding. (For example cities/municipalities and civil sector can receive grants as well as public research organisations/institutions, large, medium sized and small enterprises).</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Eligibility of costs	Funding of enterprise RTD and other applicants are subject to Swedish legislations <i>Förordning om statligt stöd till forskning och utveckling samt innovation inom energiområdet</i> (SFS2008:761).
Submission of the proposal at the national level	National application forms required in the full proposal phase. Further information can be obtained from the website or by national contact person. http://www.energimyndigheten.se/Forskning/Sok-stod-for-forskning-och-teknikutveckling/
Submission of financial and progress reports at the national level	A one financial and project report annually, following plan in the national project decision.
Information available at	www.energimyndigheten.se or www.swedishenergyagency.se
Other	The Swedish Energy Agency funds Research and Innovation that supports the transition to a sustainable energy system. Focusing on a resource effective and renewable energy system.

Country/Region	Turkey
Funding organisation	The Scientific and Technological Research Council of Turkey (TÜBİTAK)
National contact persons	Alperen KARATAŞ E-Mail: alperen.karatas@tubitak.gov.tr , Tel: +90 312 298 1276
Funding commitment	0.35 M€
Anticipated number of projects with Turkish partners	4
Maximum funding per awarded project	360.000 TL (as of 2016) excluding payments to the principal investigator (PI), Co-PI's and overhead costs.
Eligibility of a partner as a beneficiary institution	Applicants from universities, R&D institutes, public and private corporations settled in Turkey; please click for further information
Eligibility of costs	Scholarships, travel and subsistence, equipment/tool/software and materials, consultancy/other services, dissemination and field study costs
Submission of the proposal at the national level	Electronic application is required (pre-proposal form and attachments to be filled), please click for the application system
Submission of financial and progress reports at the national level	First financial and scientific report is taken after a year, and other reporting periods may vary depending on the duration of the project; please click for further information

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Information available at	1001-The Support Program for Scientific and Technological Research Projects
Other	-

Country/Region	United Kingdom
Funding organisation	<p>Three funding agencies from the UK are collaborating to jointly fund projects through the SUGI call. These are:</p> <ul style="list-style-type: none"> • Innovate UK (lead agency for the UK Funding Agencies) • The Arts and Humanities Research Council (AHRC) • The Economic and Social Research Council (ESRC)
National contact person	<p>For all general enquiries: james.taplin@innovateuk.gov.uk</p> <p>For science or innovation queries within the remit of a single UK funder please contact:</p> <p>Innovate UK – James Taplin, james.taplin@innovateuk.gov.uk, +44 (0)7748111254 AHRC – Katherine Warren, K.Warren@ahrc.ac.uk, +44 (0)1793 416086 ESRC – Douglas Walton, douglas.walton@esrc.ac.uk, +44 (0) 1793 413054</p>
Funding commitment	1.7 M€ (approximately £1.6m)
Anticipated number of projects with UK partners	6-7
Maximum funding per awarded project	300,000 EUR (at 100 percent Full Economic Costs (fEC))
Eligibility of a partner as a beneficiary institution	All UK academic investigators (whether principle or co-investigators) must be associated with an eligible Research Organisation. Applicants are encouraged to consult the RCUK eligibility guidelines for further information. Businesses partnering in this call must meet Innovate UK eligibility rules for funding.
Eligibility of costs	<p>The payment of Awards to the Beneficiary shall be made in accordance with the standard terms and conditions of the UK agencies.</p> <p>"Eligible Costs" shall be limited to the Full Economic Costs of a Project, as per the Research Council standard terms and conditions. Guidance can be found on Je-S, and in the TRAC Guidance.</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>Applicants must take account of the percentages at which the UK agencies fund research. The UK agencies will only provide funding for 80% of the Full Economic Cost (FEC) of research, and applicants should consult the ESRC Research Funding Guide for more information on this.</p> <p>All proposals with the UK component must embed interdisciplinary approaches (including expertise, methodologies and thematic focus) and include a balance of disciplines from arts and humanities and social sciences.</p> <p>The UK component of a consortium must include a business/industry partner(s). The business(es) partnering the UK component of consortia must meet the Innovate UK eligibility rules for funding and the business/industry partner(s) funding must account for 30 – 40 percent of the UK consortium project.</p> <p>The cost figures included in applications should be at 100% of the Full Economic Cost of the Research. Because of the funders’ cost eligibility regulations the total cost of a project will be greater than the amount of funding allocated.</p> <p>The UK component for any consortium project must not exceed more than 50 percent of the overall contribution to the consortia project.</p>
Submission of the proposal at the national level	This is only required if successful at the full proposal stage. Full guidance will be provided to the successful applicants.
Submission of financial and progress reports at the national level	The UK funding agencies use ‘Researchfish’, a research outcomes collection and evaluation system, to collect information on the inputs, activities, outputs and outcomes that have resulted from the research that they fund. Award holders will be expected to provide information through this system during the course of the award. More information on the required information is available here .
Information available at	
Other	<p>Please see the UK Eligibility Criteria (insert hyperlink) before planning your project.</p> <p>To be eligible for funding the UK contribution must be in collaboration with relevant stakeholders and sectors (business collaboration is an essential eligibility criteria). The Businesses partnering the UK component of consortia must meet the Innovate UK eligibility rules for</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>funding and the business/industry partner funding must account for 30 – 40 percent of the total UK consortium project costs.</p> <p>The UK contribution must embed interdisciplinary (including expertise, methodologies and thematic focus) approaches, bringing together the arts, humanities and social sciences.</p>
--	---

Country/Region	United States of America
Funding organisation	NSF
National contact person	<p>Maria Uhle E-mail: muhle@nsf.gov Tel.: 01 703 292 2250</p> <p>Susanna Ehlers E-mail: sehlers@nsf.gov Tel.: 01 703 292 7583 Website: www.nsf.gov</p>
Funding commitment	Approximately 6.5M USD
Anticipated number of projects with US partners	8-10
Maximum funding per awarded project	750,000 USD
Eligibility of a partner as a beneficiary institution	All institutions eligible to receive US federal funds through the National Science Foundation. U.S. investigators may only be part of one consortium. Accordingly, U.S. investigators may be listed as either Lead PI, Co-PI (Partner PI) or Senior Personnel on only one proposal. In accordance with NSF policy, proposals cannot list more than 4 Co-PI's (Partner-PI's) from U.S. institutions. Additional U.S. collaborators must be listed as Senior Personnel.
Eligibility of costs	All costs including indirect are included in the maximum amount listed above.
Submission of the proposal at the national level	<p>For U.S. investigators that are part of a consortium and are NOT the Lead PI, all proposals (pre- and full) will be submitted to the Program Office by the consortium's Lead PI in accordance with the Agency's or Country's procedures.</p> <p>In accordance with NSF policy, proposals (pre- and full) that have U.S. Lead PI's must be submitted to the on-line SUGI FEW Nexus call portal system by the Lead PI's office of sponsored research or equivalent. No proposals submitted directly to the Belmont on-line system by a U.S. Lead PI will be accepted; In addition, NO proposals submitted directly to</p>

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>FASTLANE will be accepted.</p> <p>In accordance with NSF policy, a proposal cannot list more than 4 Co-PI's from U.S. institutions. Additional U.S. collaborators must be listed as Senior Personnel.</p> <p>Once the review process is complete, the U.S. Lead PI will be contacted by the NSF point of contact with further instructions on how to upload the proposal information into FASTLANE. In addition, U.S. investigators that are part of a consortium and are NOT the Lead PI, will be contacted by NSF point of contact to upload proposal information into FASTLANE.</p>
Submission of financial and progress reports at the national level	In the event that an award is made to an institution, all NSF reporting requirements must be satisfied.
Information available at	www.belmontforum.org
Other	



Annex B: Research, development and innovation activities

SUGI-FWE Nexus gathers a wide range of funding agencies, each with its own history, ministerial instructions, and strategic focus. This diversity offers ample opportunities for sharing experiences and learning from each other, but it also comes with some administrative and conceptual challenges when planning a joint call. One simple but important component in managing our differences is to establish a common terminology for the various stages in the Research and Development system.

The key characteristics of the three stages of RDI activities are defined as follows:

- While fundamental and applied urban research are both focused on producing knowledge, “urban innovation and implementation” take 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 takes place during the project. 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 is always carried out in close collaboration with practitioners or other target audience.
- Understanding of how cities function is required to influence policy and intervention. Achieving this influence 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 representatives from non-academic institutions 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.
- The term “fundamental urban research” is defined as that which is driven by the desire to know, understand, and explain how cities function and interact across domains and sectors. Fundamental 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 an individual aspect of a city or a city in its entirety, or even a network of related cities. Fundamental urban research can be theoretical, comparative or case specific. For fundamental urban research, 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 high ranking peer reviewed journals.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Table 2 provides examples of key characteristics of the three positions in the Research and Development system.

Table 2: Definitions of fundamental research, applied research, and innovation

	Fundamental research	Applied research	Innovation
Desired impact	Advance towards answering the question <i>“How do cities really function?”</i> 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 question <i>“What works, when attempting to improve cities?”</i> in a way that can be generalised enough to serve as useful knowledge for decision-makers and practitioners.	Advance towards the implementation, demonstration, testing 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 fitting for publication in reputable academic journals	Highest importance	Very important	Encouraged
Methodological approach	Rigorous scientific method including methodological advancement	Scientific method including methodological advancement	Systematic approach
Foundation of work on evaluation and analysis of empirical observations	Encouraged	Encouraged	Required
Involvement of practitioners and/or target audience	Accepted	Encouraged	Required
Role for applying <i>Urban Living Labs</i>	Rarely fits	Welcome	Encouraged

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

Role for policy research	Rarely fits	Fits well	May fit
Role of inter-disciplinarity	Encouraged		
Academic disciplines expected in project	All welcome		
Preference for qualitative or quantitative methods	Both welcome		
Background of evaluators for project assessment	Well-respected university researchers, well-respected researchers with strong experience on utilization of research results, representatives of companies, cities and other relevant stakeholders.		

Annex C: Urban Living Labs

Projects with SUGI-FWE Nexus may employ an approach to research we have chosen to call *Urban Living Labs*. This concept can be defined as follows: It is a forum for innovation, applied to the development of new products, systems, services, and processes, 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 real contexts.

In the first two pilot calls of the JPI Urban Europe a number of projects which will employ Living Labs were granted funding. For more information and the abstracts of these projects, see the results of the pilot calls:

<http://jpi-urbaneurope.eu/activities/calls/>

The following points describe the characteristics of Urban Living Labs:

- An Urban Living Lab brings in expertise from several academic disciplines, and integrates them deeply together. The research process is designed not only to add the result 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 than the simple serial connection of a process from one discipline being followed by a process from another discipline.
- While embracing the fluidity, the openness to serendipity, and the iterative nature of working across disciplines, organisations and sectors, an Urban Living Lab 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 transferable to new areas and new markets.
- An Urban Living Lab may contain activities representing all the steps from fundamental research to innovation. The major part of its effort is however at the later stages of the innovation process, in innovation and to some extent applied research.
- An Urban Living Lab involves partners representing more than one sector of society other than academia, e.g. a municipal government, a private company, or a non-governmental organization. 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.
- An Urban Living Lab is based on users and other stakeholders being co-creator in a systematic way in the innovation process. The users involved are those who are or would be affected in a real 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 users to a traditional research project. In a Smart Cities Living Lab, users 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 users involved.
- Users in an Urban Living Lab may refer to both end users of a product or service or other relevant stakeholders, or those involved in service provision. The needs of end users resp. other relevant stakeholders and the working conditions of service providers are both recognized, in their respective context.

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

- An Urban Living Lab is located right where the process being addressed takes place, in real time and in the real context of the process. When presented with the results from an Smart Cities Living Lab, nobody will have to ask “But will it work in reality?” because it is already taking place in reality.

The Living Lab concept has successfully been tested in the ICT sector, and is used, for example by the Massachusetts Institute of Technology, in fields such as poverty, health, energy and creative work. As a method, the Urban Living Labs concept is applied to urban areas to design a Research and Innovation system, which deals with the multi-dimensional challenges in urban areas.

If successfully implemented, an Urban Living Lab helps promote close collaboration between scientists, politicians, business and civil society. Its innovative approach gives different actors the opportunity to influence and change the current arena through research involving interaction and learning processes. In this way sustainable urban development can be concretized, tested and translated into real life situations where questions about what constitutes social, cultural and ecological sustainability are included.

Annex D: Data Management

Why the Belmont Forum and JPI Urban Europe require Data Management Plans

Both the Belmont Forum and JPI Urban Europe wish to promote open, transparent and robust urban and global change research 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 Belmont Forum and JPI Urban Europe believe 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, the Belmont Forum and JPI Urban Europe also recognize that not all research 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 Belmont Forum and JPI Urban Europe consider that the production and implementation of project specific data management plans 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 data management plans should be in accordance with relevant standards and community best practice, and 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 Data Management Plan (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 any 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; and
- plans for archiving data, samples, and other research products, and for preservation of access to them via an institutionally-supported repository.

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, 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
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. The integration of technologies needed to manage the Energy-Food-Water Nexus offers the potential to optimise the efficiency and effectiveness of the resources involved.
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

Sustainable Urbanisation Global Initiative – Food-Water-Energy Nexus

	<p>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).</p>
Urban Living Lab	<p>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.</p>