



# TRANS-URBAN-EU-CHINA

Transition towards urban sustainability through socially integrative cities in the EU and in China

Deliverable

## D5.4 Exploitation and synergies plan

WP5 Living Labs, exploitation and dissemination

Task 5.4.2 Dissemination activities targeting other initiatives



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# 1 INTRODUCTION

## 1.1 ABOUT TRANS-URBAN-EU-CHINA

Cities are places of social innovation and engines of economic growth. This is true for European and Chinese urban development but especially relevant for China as, promoted by various levels of governments, the country is transitioning from a less urban to a more urbanised society with increasingly intensified land use and higher quality of life.

One of the greatest challenges facing Chinese urbanisation is how to best design and turn cities into intelligent, socially integrative and sustainable environments. TRANS-URBAN-EU-CHINA has aimed to help policy makers, urban authorities, real estate developers, public service providers and citizens in China and Europe to create socially integrative cities in an environmentally friendly and financially viable way. Moreover, it has helped urban stakeholders in Europe and China to reflect on and reconsider their approaches towards sustainable urbanisation.

The project has focused on four main strands of work: (a) community building and place-making in neighbourhoods; (b) bridging the planning-implementation gap in eco and smart cities; (c) land use planning and land management in new urban expansion and urban renewal areas, and (d) transition pathways to sustainable urban planning and governance.

A fifth strand of work has facilitated, coordinated, and documented interaction with urban stakeholders in European and Chinese cities, Living Labs, the URBAN-EU-CHINA project (UEC), and other urban stakeholder representatives of authorities, industry, research, and citizens. The objectives of this work have been to:

- Test, consolidate and transfer the project's research outcomes with a number of Chinese Living Labs.
- Promote and facilitate exchange of knowledge and good practices with selected cities in EU and China.
- Communicate project results to URBAN-EU-CHINA<sup>1</sup> project's Strategic R&I Agenda and Evidence Base.
- Communicate, disseminate, exploit and broker TRANS-URBAN-EU-CHINA results towards stakeholders organisations outside the project.

## 1.2 SCOPE AND RELEVANCE OF THE DOCUMENT

Less than half year before the end of TRANS-URBAN-EU-CHINA, this document defines the project's Exploitation and Synergies Plan.

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<sup>1</sup> The URBAN-EU-CHINA Innovation Platform on Sustainable Urbanisation is project funded under H2020-EU.3.6.2.4., Grant agreement ID: 733571, with an overall budget of €1,500,000 that ended in December 2019. More information can be found on: <http://www.urban-eu-china.eu/en/>

The first part describes what is the final “product” and “assets” of the project and, then, how the project partners will exploit the project’s outputs in accordance with EU laws and specific laws in the participating countries and with respect to the Consortium Agreement of the project.

Any final discussions and agreements that the project partners need to take among them will take place during the last project meeting and the respective Project Steering Board Meeting planned for November 2020.

In the second part, the document describes the organisations and stakeholders with which the project and its partners will try to maintain synergies after the end of the project at the end of 2020.

## 2 EXPLOITATION PLAN

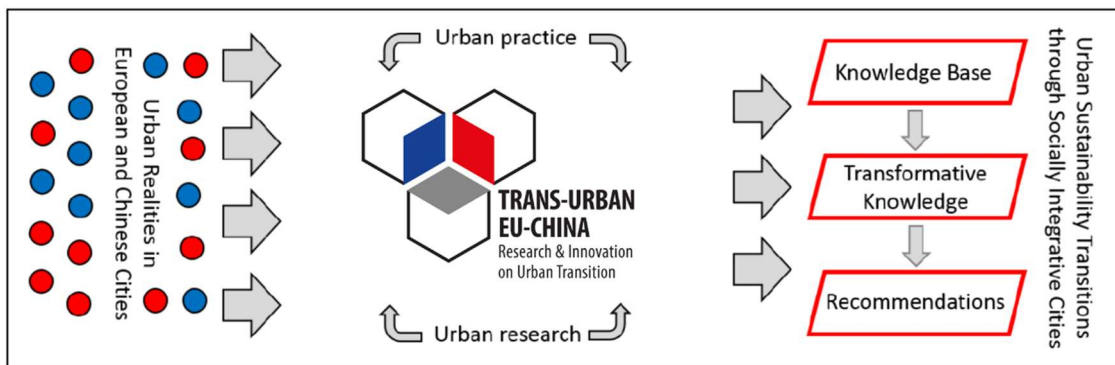
### 2.1 EXPLOITABLE ASSETS OF THE PROJECT

TRANS-URBAN-EU-CHINA aims to contribute to environmentally friendly and financially viable transition to socially integrative cities in China. This is achieved by co-creating and testing transition tools and measures; publishing an open access book on challenges<sup>2</sup>; an online compendium providing a comparative analysis of EU-China experiences and good practices; and disseminating the tested tools, such as policy briefs, and measures addressing policy makers, urban authorities, real estate developers, citizens and other urban stakeholders.

The next paragraphs identify the high-level exploitable results that TRANS-URBAN-EU-CHINA aims to obtain, which make up the project’s “product”. Due to the complementarities of the partners, a broad portfolio of exploitation areas has been achieved.

#### 2.1.1 KNOWLEDGE BASE AND TRANSITION PATHWAYS TO URBAN SUSTAINABILITY

TRANS-URBAN-EU-CHINA has developed a knowledge-based, evidence-based, robust, and bottom-up approach to produce knowledge and answer its research questions.



A significant knowledge base was built in the first months of the project around the activities of work packages (WPs) 1-4 (Deliverables 1.1, 2.1, 3.1 and 4.1). This includes (among other things) the review of the state-of-the-art literature, and mapping and analysing citizen perspectives to identify opportunities and challenges of public engagement. It also includes case studies on European and Chinese cities on the development process of their strategies for sustainable urbanisations, experiences of urban renewal and expansion, challenges, priorities, opportunities, planning approaches, governance and stories illustrating integrated pathways for urban transition.

Work in the same four WPs provided knowledge on pathways to urban sustainability (Deliverables 1.2, 2.2., 2.3, 3.2, 3.3, 4.2 and 4.3). This body of knowledge includes (among other things) experience of public and private institutions which provide networks for citizens living in urban areas, in Europe and in China. It pays specific attention to education systems; case studies on European and Chinese cities

<sup>2</sup> Müller, B., Cai, J., Schiappacasse, P., Neumann, M., & Yang, B., (Forthcoming, 2020). *Towards Socially Integrative Cities - Perspectives on Urban Sustainability in Europe and China*. MDPI.

on the implementation of integrated planning; and experiences with urban renewal and urban expansion areas. The information touches on challenges, priorities, opportunities, planning approaches and governance. It also covers experiences with negative externalities and social cost-benefit analysis (SCBA) in urban policy and decision-making.

### **2.1.2 POLICY BRIEFS AND RECOMMENDATIONS FOR THE CREATION OF SOCIALLY INTEGRATIVE CITIES IN CHINA**

WPs 1-4 will conclude in the last three months of the project by compiling specific policy recommendations for each challenge they have studied (Deliverables 1.3, 2.4, 3.4 and 4.4). This will include (among others) recommendations on active preservation of cultural heritage in Europe and China, with attention to population pressure; development policies of local economies; financial support for heritage sites; experiences in which place-making is influenced by the design quality of public spaces, including processes of negotiation of citizenship rights and social agreement. It will also include a list and description of mechanisms for implementation of integrative planning; experiences with land banking and land administration; challenges; priorities; opportunities; (technical and legal) approaches; governance; numerical, map, image and textual data on environments.

Task 5.3 will extract data, priorities, methods and good practices from WPs 1-5 for uptake by the URBAN-EU-CHINA Innovation Platform.

### **2.1.3 ONLINE COMPENDIUM OF TOOLS AND MEASURES**

WPs 1-4 are developing an online compendium on mechanisms and measures to support and accelerate transition towards sustainable urbanisation for each challenge they have studied (transformative knowledge and recommendations). The compendium is expected to be of special interest to urban designers, planning offices, public authorities, and academia.

### **2.1.4 WORK WITH URBAN LIVING LABS**

The three Living Labs that were initiated by TRANS-URBAN-EU-CHINA have brought together researchers involved in WPs 1-4 along with urban authorities, developers, planners, citizens and other stakeholders. New theories, definitions, working processes, business models, services and products have been presented, discussed, and refined through iterative processes between WPs 1-4 and the Living Labs. Thus, the Living Labs have built the potential to serve as testing grounds for theoretical ideas and innovative approaches created in WPs 1-4 (transformative research), as well as arenas for generating new ideas to be explored in WPs 1-4.

### **2.1.5 KNOWLEDGE SHARING BETWEEN EUROPEAN AND CHINESE CITIES**

WP5 has developed, used and tested knowledge sharing methodologies related to the content of the project and the stakeholders that have been involved. These methodologies are expected to be of special interest to urban designers and public authorities.

WP4 has worked with overarching support mechanisms such as stories (Task 4.1), Social Cost Benefit Analysis (Task 4.2) and digital platforms (Task 4.3), including an online 'Community of Communities' offering data, customised services and collaboration spaces for socially integrative cities. These methodologies are expected to be of special interest to policy makers, urban authorities, real estate developers, public service providers, and citizens.



### 2.1.6 WEBSITE OF THE PROJECT

The TRANS-URBAN-EU-CHINA website is the online communication and dissemination space where the project aims, developments and results are presented. The online compendium of tools and measures will be kept there as well.

### 2.1.7 BOOK ON SUSTAINABLE URBANISATION IN EUROPE AND CHINA

All WPs of the project have started compiling a number of scientific, peer-reviewed articles for each challenge they have studied. The results will be published in a book titled “Towards Socially Integrative Cities - Perspectives on Urban Sustainability in Europe and China,” to be published by MDPI in December 2020. This book will fertilise the academic discussion and to provide compiled knowledge for practice. Interest will come from urban designers, planning offices, public authorities, industry, academia, and students.

## 2.2 TARGET AUDIENCE

For the proper exploitation of the TRANS-URBAN-EU-CHINA outputs, the following main groups and key stakeholders have been identified as the final end-users to use, adopt or apply the results of the project, and potentially benefit from the knowledge produced.

*Table 1: Target audience for the TRANS-URBAN-EU-CHINA exploitation plan*

| Target audience   | Potential use  |
|---|--|
| European Commission   | DG Research and Innovation (RTD, European External Action Service and other European Commission services will benefit from the results of TRANS-URBAN-EU-CHINA project and its knowledge and recommendations on sustainable and socially integrative urbanisation. |
| European countries  | European countries will benefit by getting a better understanding of the urbanisation processes in China, how these processes can also be relevant to Europe, and the collaboration opportunities that these create.   |
| China   | The Chinese state and its agencies are a direct beneficiary of the results of the project and the knowledge that it will generate.   |
| Policy makers involved in the EU-China partnership on sustainable urbanisation and dialogue processes | Policy makers are a direct beneficiary of the project as they can use the knowledge base, the transformative knowledge, the policy briefs and recommendations, and the working methods of the project to deliver better processes, policies and decisions.         |

| Target audience  | Potential use  |
|--|--|
| European cities  | European cities will be able to better work with Chinese peers. The outputs of the project can be used to improve their urbanisation, sustainability and social inclusiveness.                                     |
| Chinese cities   | Chinese cities are a direct beneficiary of the project. Its outputs will help them learn from best practices in Europe and China and enter or enhance a pathway of sustainable and socially inclusive development. |
| Urban industry, such as real estate developers and public service providers  | The recommendations of the project will allow urban industry stakeholders to better understand and align their products and services to the needs of cities.   |
| Knowledge networks such as The European Network of Living Labs, JPI Urban Europe, The European Innovation Partnership on Smart Cities and Communities, DRAGON-STAR Plus, Urban Europe Research Alliance, European Energy Research Alliance, JP Smart Cities, Chinese Academy of Sciences | Knowledge networks, projects, platforms, etc. will exchange, collaborate and benefit from TRANS-URBAN-EU-CHINA, and jointly promote the pathways to more sustainable and inclusive cities.                         |
| Civil society stakeholders   | Through the project's Living Labs, dissemination activities and work with cities, civil society stakeholders will benefit from policy and project recommendations for more sustainable and inclusive cities.       |

## 2.3 GENERAL EXPLOITATION PLAN

In the last 2.5 years, the consortium of 8 European and 6 Chinese expert organisations has co-created, discussed, disseminated, and used the project's results with the main target groups of urban authorities, real estate developers, city planners and citizens. The Chinese team of partners from government agencies and academia have aspired to exert a direct impact on society through their national responsibilities for regional and urban planning, research and education. The European partners have aimed to play a similar role through their leading roles in European knowledge organisations.

The next paragraphs describe the aspirations and objectives, first of the whole consortium and second of each individual partner regarding the exploitation of the TRANS-URBAN-EU-CHINA "product" after the end of the project's lifetime.

### 2.3.1 THE PROJECT'S BRAND

All partners will have the right and are obliged to use the TRANS-URBAN-EU-CHINA name and brand when referring to the project's deliverables and outputs. Although some of the partners may use the project's knowledge and results to develop new knowledge, products and services, reference to the original results of TRANS-URBAN-EU-CHINA, if relevant, should be made.

### 2.3.2 PROJECT DATA

TRANS-URBAN-EU-CHINA handles and stores data according to all applicable laws and regulations in Europe and China, whichever is applicable each time. No personal data (apart from contact details of interested stakeholders as part of the communication and dissemination activities) has been gathered or published during the project.

The project participates in the Pilot on Open Research Data and has submitted a Data Management Plan. For all tasks, digital copies of all data will be stored for a minimum of three years after the conclusion of the project. Deliverables will be made available and archived on the website. The datasets will be backed up periodically so that they can be recovered (for re-use and/or verifications) easily in the future.

All partners will have access to the data gathered during the project's lifetime after the end of the project.

### 2.3.3 THE TRANS-URBAN-EU-CHINA "PRODUCT"

*Table 2: Exploitation of the project's results in conjunction to the target audience*

| Target audience     | Exploitation  |
|---------------------|---|
| European Commission | <p>The EU-China partnership on sustainable urbanisation is a horizontal initiative that involves many different EC services. DG Research and Innovation and the European External Action Service are directly involved. The Commission DGs for Communications Networks, Content and Technology; Mobility and Transport; and Energy can get involved via the The European Innovation Partnership on Smart Cities and Communities. DG Environment can use the Circular Economy strategy to liaise with China. DG Climate Action can use the Paris Agreement to liaise with China.</p> <p>The consortium has tried to promote all results of the project and especially the policy briefs and recommendations to the EC services. Additional themes that can be used to strengthen the EU-China partnership on sustainable urbanisation include the Sustainable Development Goals – and how they can be translated and implemented in the regional and local levels, the European "Urban Agenda for the EU" – as a tool of bottom-up policy making, and the Chinese "Ecological Civilisation" and "New Urbanisation Programme" – as an example of a holistic approach to sustainability and protection of the environment.</p> |
| European countries  | <p>European countries have well-established relations and cooperation with China. Urbanisation and city-to-city collaboration is an approach that allows European countries to develop and implement large projects in both Europe and China. The consortium is already working closely with various national authorities and institutes but also trans-national organisations</p>  |

| Target audience  | Exploitation   |
|--|--|
|  | (e.g. JPI Europe) to offer a scientific base and pathways for better urbanisation processes (and new joint projects).  |
| China  | EU-China partnership on sustainable urbanisation is a horizontal initiative that involves many different services of the Chinese government. The consortium, and especially the Chinese partners, have worked to promote the project results and recommendations in all relevant services of the Chinese government as well as local and regional authorities across the country.  |
| Policy makers involved in the EU-China partnership on sustainable urbanisation and dialogue processes        | The consortium has involved policy makers and stakeholders involved in the EU-China partnership on sustainable urbanisation through its Advisory Board, roundtables and workshops and synergies with other projects (e.g. URBAN-EU-CHINA) to promote its recommendations and transformative knowledge base.  |
| European cities  | European partners have a direct dialogue with more than 200 European cities and are already promoting the TRANS-URBAN-EU-CHINA project to them as well as the foreseen benefits from actively taking part in it. A group of 60 cities have already subscribed to receive information and participate in events organised by the project.   |
| Chinese cities   | <p>Chinese cities are a direct beneficiary of the project, thus, the Chinese partners and especially The China Centre for Urban Development and The China Academy of Urban Planning and Design have kept informing and mobilising their networks of demo cities to participate and benefit from the project.</p> <p>The consortium has also tried to reach the Chinese cities through additional channels, like European twin cities, industry stakeholders that implement projects in Chinese cities, universities, etc.</p>  |
| Urban industry, such as real estate developers and public service providers                                  | <p>Industry stakeholders have been reached through the project's events and meetings but also through the synergies that TRANS-URBAN-EU-CHINA developed with other projects and stakeholders (e.g. URBAN-EU-CHINA project, ENRICH project, JPI Europe funded projects, etc.).</p> <p>The project partners are aware of the importance private stakeholders have in shaping the cities of tomorrow. The results of TRANS-URBAN-EU-CHINA and especially the evidence base and the recommendations will be promoted to them both directly (through project events and dialogues) and indirectly (in third-party events or through EC and the Chinese government).</p> |
| Knowledge networks such as ENOLL, JPI UE, EIP SCC, DRAGON-STAR Plus, UERA, and EERA JP Smart Cities, Chinese | TRANS-URBAN-EU-CHINA has supported and promoted a full triple-helix approach to sustainable urbanisation. To this end, working closely with knowledge networks and universities has  |

| Target audience                             | Exploitation  |
|---|---|
| Academy of Sciences, URBAN-EU-CHINA project | <p>been a priority task for the consortium partners. TRANS-URBAN-EU-CHINA partners have good working relations with prominent stakeholders of the EU-China partnership on sustainable urbanisation and have involved these organisations to:</p> <ul style="list-style-type: none"> <li>• Gather input, best practices and lessons learned for WP1-4.</li> <li>• Ask for feedback on the policy briefs and recommendations.</li> <li>• Disseminate the guidebooks and methodologies produced.</li> <li>• Organise synergies and exploit their complementarities to achieve better results in the EU-China partnership on sustainable urbanisation.</li> </ul> |
| Civil society stakeholders                  | <p>TRANS-URBAN-EU-CHINA has worked with the civil society stakeholders, through local authorities and relevant stakeholders. In the case of the three Living Labs and the online Community of Communities, a more direct interaction and collaboration has been achieved. TRANS-URBAN-EU-CHINA will work with stakeholders like ENOLL, JPI Europe, etc. to promote the results of the work with the Living Labs, the online Community of Communities and the pathways to sustainable and socially inclusive cities to various civil society stakeholders in Europe and China.</p>   |

## 2.4 INDIVIDUAL PARTNERS' EXPLOITATION PLANS

Apart from the general exploitation strategy and options that all partners will pursue, each partner has specific plans on what elements and results of the "TRANS-URBAN-EU-CHINA product" it will be exploited and how after the end of the project.

### 2.4.1 TUD - TECHNISCHE UNIVERSITÄT DRESDEN

TU Dresden joined the project in pursuit of the following objectives:

- Research interests in sustainable urban development and land management.
- Potential areas of master and doctoral supervision.
- Join international research networks and associations.

The outcomes for TUD are:

- Gained knowledge and experience in understanding the path to urban sustainability and land management in Europe and China: Research articles have been and are being written in conjunction with Chinese colleagues. Fieldwork activities (including interviews with local stakeholders) conducted in Wuhan and Dresden have contributed extensively to understanding different realities.

- New research programmes, projects, and partnerships: CAS, Tsinghua and Tongji University colleagues have been in Dresden participating in conferences and workshops not directly associated with or financed by the project. Chinese professors are involved in joint supervision of doctoral dissertations. New collaboration in research and teaching has started with universities in Xi'an and Xuzhou. A new research project on a similar topic (Cooperation for Sustainable Urbanisation) and financed by the Humboldt Foundation has started in Indonesia.
- Cooperation with policy and non-governmental actors: The results are an added value for the sister city cooperation between Dresden and Hangzhou in the field of urban development. During the project, cooperation in this field has been initiated.

TUD foresees three opportunities for the exploitation of the project's results and outcomes after the latter's lifetime:

- Participation in congresses, conferences, and scientific publications.
- Integration into teaching and learning at university.
- Basis for other research projects.

#### **2.4.2 IOER - LEIBNIZ-INSTITUT FÜR ÖKOLOGISCHE RAUMENTWICKLUNG**

The Leibniz Institute of Ecological Urban and Regional Development (IOER) is always active in conducting international research. IOER attempts to explore and design tools and measures for sustainable urban and regional planning and land management (i.e. urban extension/ urban renewal approaches), to transferring and mutual learning good practice examples and urbanisation experiences in both the EU and China.

The specific interest in urban renewal is represented by the Interdisciplinary Centre for Ecological and Revitalising Urban Transformation (IZS), a joint research facility of IOER and TUD. The research activities are focusing on analysing social trends, urban politics and their repercussions on towns and cities. In this way the IZS supports municipalities and higher-level decision-makers to develop and test solutions. The focus is on instruments and processes to steer development at the level of towns, urban districts and between municipalities. Additionally, transfer activities address the regional, national and European level. The findings of the project widened the view on different European ideas and particularly on the Chinese understanding of urban renewal. The individual scientific work, the collaboration among the partners and the experiences in the urban living labs allowed us to gain detailed knowledge about different modes, practices and planning/implementation tools being used within urban renewal in different contexts. This knowledge base will be exploited in future research and transfer activities.

Since urban regeneration at the IOER is understood as a crucial part of the wider objective of sustainability transition, the project and its results are embedded in the research area "Sustainability Transitions in Cities and Regions", which investigates systemic and fundamental processes of transformation to help foster social change towards sustainable ways of life and business practices as well as ensure balanced spatial development. Thus, the findings regarding urban renewal experiences, challenges, but also innovative tools for steering in terms of socially integrative urban development and supporting sustainability transition will be both introduced in the scientific debate via journal and conference contributions and transdisciplinary debates about urban development. The latter are crucial for any

systemic and fundamental transition towards sustainability. Experiences with the role of various actors, institutions and policy levels, particularly civil society, will be reflected to provide tailored transfer strategies. The experiences within the urban living labs, used as instruments to generate knowledge, will be reflected and introduced to the scientific debate about new methodological approaches to transition research. The established network of partners from academia, policy, and practice within Europe and with China will be exploited to co-design future research activities in a transdisciplinary approach.

### **2.4.3 AIT - AUSTRIAN INSTITUTE OF TECHNOLOGY**

AIT's mission is to foster urban innovation in close collaboration with cities and industries in Europe and worldwide. The outcomes of the TRANS-URBAN-EU-CHINA project are a significant contribution to this mission. AIT's exploitation strategy comprises the following elements:

- AIT will disseminate the project results in its networks, especially within:
  - the Urban Europe Research Alliance (UERA)
  - the European Innovation Partnership on unities (EIP SCC)
  - the Group of the European Smart City Lighthouse Cities
  - the EERA Joint Programme Smart Cities
  - the Smart Cities Working Group of the Association for the Internet of Things AIOTI.
- AIT will continue presenting the project results at scientific conferences and publishing high quality articles:
  - So far, the project has led to one poster presentation, two conference talks and a book chapter that were brought forward by AIT researchers
  - For the remaining months, at least one more conference paper and one journal article are planned.
- AIT will use the results of the projects as stepstone for creating research networks and exploring business development in China.
  - AIT is aiming at strengthening their academic ties with China and is therefore exploring options to continue the successful collaboration with the Chinese Academy of Science and other partners.
  - The insights gained in TRANS-URBAN-EU-CHINA will allow AIT to prepare research proposals for upcoming Joint Calls prepared by JPI Urban Europe and its Chinese partner organisations.
  - Finally, AIT's international consulting and capacity building activities will benefit from the project results.

### **2.4.4 EUR - EURO CITIES**

EUROCITIES considers TRANS-URBAN-EU-CHINA as an important part of its "international cooperation" work. Thus, the organisation presents and promotes the project's results and will keep doing so

through its forums' and working groups' meetings and electronic media channels. EUROCIITIES cannot and will not develop further the research findings of TRANS-URBAN-EU-CHINA but will promote the project's outcomes to its members and, when relevant, use them in current and future project work. At the time of writing, this individual exploitation plan can be described as follows:

- EUROCIITIES will create synergies and try to use the project's results with other projects and initiatives like:
  - The Green Digital Charter, the European Covenant of Mayors, and the Global Covenant of Mayors.
  - The Integrating Cities charter.
  - The EIP-SCC marketplace and its action clusters.
  - The Green City Accord.
  - The network's SDG work with cities.
- It will specifically promote and use the two guidebooks and the "working with cities" report that TRANS-URBAN-EU-CHINA will compile. The two annual corporate events of EUROCIITIES (Annual Conference and Cooperation Platform) will be used for this purpose.
- It will use the policy briefs and contributions to the R&I agenda to promote identified priorities and pathways for more sustainable and socially inclusive urbanisation.
- It will participate in the efforts for a sustainable platform of cooperation between European and Chinese cities for a better, more sustainable, and socially inclusive urbanisation process around the world.

#### **2.4.5 ISCI - ISRAEL SMART CITIES INSTITUTE**

Thanks to the project, the relationships with the Chinese and Europeans have deepened and ISCI is already submitting joint proposals (with partners in China) to the Israeli Innovation Authority on the topics of communities and technology. In addition, ISCI is committed to continuing to create knowledge with stakeholders from the EU-CHINA project and the ecosystem that surrounds it. In this frame, the institute has decided to continue interviewing experts and sharing the results on the different platforms. These interviews will help make knowledge accessible and create a global dialogue with experts from various interests. Like it has done during the project, ISCI will be happy to help each of the partners organise online workshops and study tours and learn from the Tel Aviv Municipality as a smart and digital city.

#### **2.4.6 ISSINNOVA - ISTITUTO DI STUDI PER L'INTEGRAZIONE DEI SISTEMI**

ISSINNOVA has been active in the development and application of innovative methods and tools to support cities in their sustainability strategies for more than two decades. The effectiveness and comprehensiveness of their support services will be enriched and enhanced by the additional knowledge gained in the project, adding a comparative EU-China perspective and drawing from hands-on experiences in the living labs.

Adopting a forward-looking approach, ISSINNOVA will craft plausible and persuasive stories illustrating the main findings of the TRANS-URBAN-EU-CHINA project. The increased socio-technological complexity of global challenges demands more and more that researchers work in multi-disciplinary settings, communicate effectively and engage a wide range of actors in the search for potential solutions. However, research outcomes are often communicated within a structure and through channels which are



difficult for other stakeholders such practitioners, citizens as well as policy makers to access, understand and use. We intend to tailor the project results into online urban stories to improve the accessibility of research outputs to a non-scientific audience and society at large. To reach this goal, we use storytelling as an online communication tools that can facilitate<sup>3</sup>: (i) access to information; (ii) active reflection and elicitation of perspectives; (iii) and sharing of information and knowledge exchange.

In the area of negative externalities, including their valuation and their inclusion in Social Cost Benefit Analysis of urban sustainable policies and plans, the project is expected to generate new knowledge, specifically concerning social externalities, which are currently recognised to be insufficiently researched and documented. This new knowledge will complement the existing know-how available at ISINNOVA in the field and increase the value of the services ISINNOVA can provide to cities.

More specifically, as a follow-up on the webinar on social cost benefit analysis with the Wuhan stakeholders, the organisation of online sessions on methodologies and case studies on the application of social cost benefit analysis in the management of urbanisation is under way, in particular addressing the provision of transport infrastructure.

Moreover, the work carried out on the topic of replication, such as the circumstances under which it flounders and succeeds, has proved to be completely innovative. The newly developed methodology will be further elaborated and leveraged to be applied in future research activities in the context of international cooperation with China and with Europe.

The mathematical approach has been successfully tested during the project and will be adopted by ISINNOVA in future collaborations to support local authorities in the decision-making process.

The results obtained will be disseminated and spread Europe-wide and beyond with the ambition to create a common and recognised approach for assessing the replicability of urban solutions.

#### **2.4.7 NTNU - NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET**

NTNU makes its commitment to provide knowledge and solutions around making cities sustainable and smart, which can be achieved through open urban innovation, co-creation and public engagement, supporting public and private sectors, as well as civil society, with a unique merger of transformative, technological, artistic and practice-based research. Through the work on urban living labs, public-private partnerships and integrated design thinking, the ambition has been to support cities in Europe and China to become cities for people, cities of culture, green cities, digital cities and learning cities. NTNU has learned and benefited from work in TRANS-URBAN-EU-CHINA, and this knowledge will transfer to multiple activities and projects in the future such as:

- A set of topics such as urban living labs, historical district transformation, community building, public engagement and planning will be recommended to master's students as final assignments at the department of Architecture and Planning NTNU. TRANS-URBAN-EU-CHINA will serve as the major reference and resource pool to the master's students.
- The NTNU team has successfully applied for and received the URBAN-NORWAY-CHINA project, which is funded by the Research Council of Norway. URBAN-NORWAY-CHINA is using the

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<sup>3</sup> Maurel, P., Craps, M., Cernesson, F., Raymond, R., Valkering, P., & Ferrand, N. (2007). Concepts and methods for analysing the role of information and communication tools (IC-tools) in social learning processes for river basin management. *Environmental Modelling & Software*, 22(5), 630–639. doi: 10.1016/j.envsoft.2005.12.016

Living Labs of TRANS-URBAN-EU-CHINA and has also invited several Chinese partners to be partners. The project will continue the Urban Living Lab activities, which are inherited from TRANS-URBAN-EU-CHINA.

- NTNU, as the only academic partner of Nordic Edge, will promote the relevant results of TRANS-URBAN-EU-CHINA during the major events of Nordic Edge i.e. Nordic Edge Expo, the largest smart city expo in Norway, and Nordic Edge China, a large Nordic-China cooperation annual summit.
- NTNU has built a good connection with key stakeholders of the Wuhan Urban Living Lab such as Urban Innovation Lab Wuhan University and Wuhan Land Use and Spatial Planning Research Centre. The joint research work on Urban Living Lab Wuhan will be continued.
- NTNU has co-hosted an annual international and multidisciplinary summer school for master's students with the UN Habitat China office since 2019, and NTNU regards TRANS-URBAN-EU-CHINA as a necessary reference and resource pool for the participants of the summer school.
- TRANS-URBAN-EU-CHINA has forged new and stronger ties with Chinese scientific partners, such as with Tsinghua University, Wuhan University and Chinese Academy of Sciences, and scientific collaboration with these partners will continue, e.g. through research projects that are currently being assessed through the Norwegian Research Council.

NTNU has created and delivered a proposal with European and Indian partners: EU-India Local Energy Communities (EILIC) which has identified three urban living labs in India to test the concept of Local Energy Communities. In that project, the experience of the TRANS-URBAN-EU-CHINA Urban Living Lab was useful in the application phase and will be transferred should the project receive funding.

#### **2.4.8 POLITO - POLITECNICO DI TORINO**

The Department of Architecture and Design (DAD) and the Interuniversity Department of Regional and Urban Studies and Planning (DIST) of Politecnico di Torino have been engaging in activities with Chinese partners on research, teaching, and professional consulting assignments for more than ten years. The two major poles through which these activities are carried out are the Tsinghua University in Beijing and the South China University of Technology in Guangzhou. The Politecnico di Torino also develops research and teaching programmes with Tongji University in Shanghai and Southeast University in Nanjing.

On the occasion of the elaboration of the proposal for TRANS-URBAN-EU-CHINA, the University of Macerata was involved, as a third party, to expand the social science and humanities expertise to be involved in the proposal by Politecnico di Torino.

In this way, participation in TRANS-URBAN-EU-CHINA by the group headed by Politecnico di Torino can be read on several levels. First of all, after many years of experience in the field of Chinese urban and social phenomena, the research group has methodological, operational and scientific skills and knowledge to become part of a wider scientific community, able to study complex phenomena in a transdisciplinary and transnational way. The vast experience gained on several research topics and disciplines has made it possible to provide the entire consortium with high-level know-how. The transdisciplinary nature of the project also allowed us to become aware of new research frontiers to be developed and which have acted as a “knowledge base” phase for future research. The participation

to the project has allowed us to further consolidate institutional relations with European and Chinese partners and to create new cooperation opportunities with a view to future collaboration and research projects.

The first goal has been to increase the scientific knowledge linked to phenomena concerning social inclusion in the complex European and Chinese urban contexts. Scientific research topics and the methodologies developed during the project opened the way to new lines of research as well as to new collaborations with Chinese and European institutions for subsequent development of the topics identified in TRANS-URBAN-EU-CHINA. The scientific production conducted and diffused through the channels identified by the coordinators has also allowed us to give further visibility to our institutions within our reference scientific communities. The development of high-level research with new partners (Chinese and European) has also allowed the establishment of future institutional relationships with further concrete impact on the quality of research and teaching organised in partnership.

Moreover, for our working group, TRANS-URBAN-EU-CHINA has been an experimental experience of synergy research work that, we believe, can symbolise the only future way to obtain significant scientific results: since China will be increasingly compact, organised and strong, the efforts of individual institutions will serve little to achieve significant effects. We are convinced that working in synergy with the construction of a system of skills and knowledge across multiple institutions will therefore become the indispensable future condition for establishing consultancy and partnership relations with the Chinese institutional system.

The project's scientific results will be leveraged to engage in future research activities; the methodologies used, developed in a transdisciplinary fashion, will allow us to identify innovative issues and key readings for the setting of new projects. Moreover, the various specialisations of the different members of the consortium will allow us to have a sweeping view of contacts for future collaborations that include or require specific advice in the context of professional assignments or research projects. The scientific publications that were produced during the project are also expected to help increase the prestige of our departments and to their positive evaluation, at national and international level, by the research evaluation agencies.

In implementation of the previous points, three specific actions that POLITO and the University of Macerata will try to implement are:

- A Marie S. Curie (Ex. RISE) or Erasmus+ project boost researcher and/or student mobility between EU and China on the same topics as TRANS-URBAN-EU-CHINA project.
- Dissemination initiatives in Italy among policy makers to raise awareness on the EU-China partnership and its opportunities, organised with Isinnova.
- Signing Memorandums of Understanding with academic partners in China to explore the creation and awarding of double degree titles.

#### **2.4.9 CAUPD - CHINA ACADEMY OF URBAN PLANNING AND DESIGN**

As the only research institute directly under the Ministry of Housing and Urban-Rural Development, CAUPD has been committed to the research and practice of urbanisation and sustainable urban development for more than 60 years, actively exploring the research direction of international cities, especially the EU-China Horizon 2020 project. In recent years, CAUPD has paid particular attention to

the continuous tracking and analysis of cities in China and Europe from the perspective of social inclusion, so as to study the changes and future trends in the evolution of cities in China and Europe. The Trans-Urban-EU-China project provides CAUPD with a valuable opportunity to fully understand and absorb the experience of European cities in the establishment of standard systems, management systems and urban laboratories, and to further improve China's urban development policies and methods. In the future, CAUPD hopes to conduct in-depth cooperation with its European partners to jointly find innovative approaches and cooperation models for sustainable urbanisation between China and Europe and to provide decision making and management support for governments.

#### **2.4.10 CAS - CHINESE ACADEMY OF SCIENCES**

As one of the most important think-tanks for central government for sustainable development in a scientific way in China, IGSNRR (Institute of Geographical Sciences & Natural Resources Research) of the Chinese Academy of Sciences has played an active role in consulting and helping various levels of governments in their socio-economic plans and urban rural spatial plans. This extends to theoretical research on sustainable development, including mitigation and adaptation for climate change, ecological civilization, new urbanisation, resources carrying capacity, GIS application and spatial analysis, water and new energy utilisation, urban agriculture and regional food systems, eco-tourism and culture embeddedness, One-Road-One-Belt initiatives and regional cooperation, etc. Because of this position and function, IGSNRR has high enthusiasm for a wide spectrum of international collaboration for jointly applying and implementing many international research projects and programmes.

The current TRANS-URBAN-EU-CHINA project is just one of the good examples in this regard, which brings many benefits to both IGSNRR and the European partners at least in the following aspects: 1) Further consolidating the established partnerships, and establishing and extending the good relationship between new partners; 2) further solidifying the mutual understanding among partners on the commonalities and differences between EU and China in their development approach and the rationales behind it, which forms a better basis for a more effective collaboration in future both for identifying more appropriate research themes and establishing a more competitive consortium; 3) further widening the research scopes and enlarging the international research networks through involvement in the global events and activities organised by consortium partners; 4) further speeding up the exchange of students in the global research network through China's special international cooperation programmes. It is can be foreseen that, in the near future, more international research projects will be generated and implemented by similar consortium partners as more project applications on sustainable urbanisation and community building are being prepared and explored.

Three immediate opportunities for application of TRANS-URBAN-EU-CHINA outcomes into IGSNRR's practice can be identified: 1) Solidification of the policy implications of the research findings from current project for China's 14th Five Year Plan and New Urbanisation Programme; 2) sending more PH.D students to study abroad intensively for one year under the help of European consortium partners, especially in the areas of smart city development and urban governance, sustainable community building, etc.; 3) jointly applying for new projects from other international resources with EU partners.

#### **2.4.11 CASTED - CHINESE ACADEMY OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT**

Chinese academy of Science and Technology for Development is one of the National High-level Think Tanks of Science and Technology Innovation (STI) policy research in China. And CASTED is devoted to

meeting the demands of decision-making and STI development and reform. The research activities, conducted for national development and especially STI, address forward-looking, overarching and comprehensive issues. With such efforts, CASTED intends to become a national S&T strategic research base with the ability to support macro-level S&T innovation decision-making, management, and innovation communication.

In this project, CASTED cooperated with other partners of WP1, especially partners from Maccerrata University and finished the report of WP1 task 1.2 on the Educating City. We discussed the relationship between the socially inclusive city and the educating city. We also suggested a tool to activate concrete educational initiatives. A first test bench to explore the educating vocation of one community can be a festival of education. By networking various educational realities of the territory, it is possible to promote different educational workshops – in the internal and above all outside spaces of the city centre – and recreational activities dedicated to children, families, teachers, educators and citizens.

CASTED participated in all kinds of research activities organised by WP1 leaders and our project leaders. It is very important to get connected with other partners and to share knowledge about socially inclusive cities. In the next step, CASTED intends to make the result of this research widely disseminated in more ways. These include publishing more papers, reporting research results to the Ministry of Science and Technology and making suggestions on policy making.

#### **2.4.12 CCUD - CHINA CENTER FOR URBAN DEVELOPMENT**

No individual exploitation plan is foreseen by the organisation for the outcomes of the projects. Still, the organisation is committed to pursue the general exploitation plan that was detailed in Chapter 2.3 after the end of the TRANS-URBAN-EU-CHINA project in alignment and collaboration – whenever possible – with the rest of the partners.

#### **2.4.13 CIUC - TONGJI UNIVERSITY**

The CIUC – Tongji University has developed a software tool suite in order to determine long-term and short-term correlations between air quality indices and industry, traffic, and everyday activities of the city population. The air quality data is taken from official and public internet sources, as well as map data with associated attributes.

In addition, the CIUC – Tongji University developed two software models:

- A cost model to determine the cost for the improvement of the air quality index of a city.
- A model developed through machine/deep learning which enables a city to determine its future air quality.

The CIUC-Tongji University intends to build upon these results, offering interested Chinese and European cities in need and other interested parties the software tool suite, the cost model, and the air quality prediction model together with an initial workshop to train the prospective users.

The TRANS-URBAN-EU-CHINA project results will also constitute a research base for future research projects with Chinese and European cities concerned with environmental issues. A first project has started already with the city of Bremen, Germany, together with the Jacobs University Bremen.

#### 2.4.14 THSA - TSINGHUA UNIVERSITY

As an important base for China's higher education and academic research, Tsinghua University is one of the most prestigious universities in China. It was founded in 1911 and is now comprised of 20 schools and 54 departments with a variety of programmes in science, engineering, arts and literature, history, philosophy, economics and management, law, education and medicine. The School of Architecture is one of Tsinghua's 20 schools, which was founded in 1946 and has been the leading one in China in the fields of architecture and urban planning. In its development of 70 years, THSA has maintained its distinct characteristics and advantages in professional training, academic research, theoretical development, planning and design practice, and international cooperation. It is an important think-tank of urbanisation for both the central government and the local governments all over China.

For TRANS-URBAN-EU-CHINA, THSA has made the following contributions:

- Hosting the editorial department of China City Planning Review, THSA organised a special issue of China City Planning Review (Vol. 28, No.2, 2019) to publish the research outcomes of TRANS-URBAN-EU-CHINA WP1. The journal will remain an academic platform of exchange and communication between Europe and China regarding the issue of urbanisation after the end of the project.
- THSA chaired the community planning for Wenjiang District of Chengdu, Sichuan Province, which is a pioneering project. Based on this practice, THSA organised an international symposium and a living lab in Wenjiang, which attracted over 150,000 online visits as well as several hundred local participants. THSA joined the community planner initiative in Haidian District of Beijing, playing an active role in promoting community participation in planning issues, a common career which is still weak in China. Both practices involve some of the research outcomes of TRANS-URBAN-EU-CHINA. They will be both used again in the future for the creation and promotion of communities related to the cooperation between Europe and China in the topics that TRANS-URBAN-EU-CHINA worked with.
- THSA worked closely with several European partners, especially universities in Italy, France, Germany, Spain, and the Netherlands. The collaboration with all these European partners will continue in future.

#### 2.5 SYNERGIES PLAN

The project consortium has established itself as a knowledgeable stakeholder in the EU-China partnership on sustainable urbanisation. Most of the partners also carry the experience and knowledge gained in the URBAN-EU-CHINA project. Through the policy briefs and recommendations for the creation of socially integrative cities, meetings and workshops the project has brought together policy makers, cities, expert organisations and international organisations.

Based on both the general and the individual partners' exploitation plans, the project partners have also elaborated a synergies plan. This includes the stakeholders and the corresponding ways in which collaboration and dialogue that took place during the project will remain open and efficient.

Table 3: Synergies plan

| Target audience  | Exploitation  |
|--|---|
| European Commission  | The consortium (mainly European partners) will remain active in working with the European Commission in the definition of policy, research and collaboration priorities between Europe and China. In the frame of the coming Horizon Europe funding programme, the consortium will keep offering its knowledge and expertise for the successful implementation of the EU-China partnership on sustainable urbanisation.   |
| Chinese government and agencies  | The consortium (mainly Chinese partners) will remain active in working with the Chinese Government in the definition of policy, research and collaboration priorities between China and Europe. In the frame of the coming international R&I funding programmes, the consortium will keep offering its knowledge and expertise for the successful implementation of the EU-China partnership on sustainable urbanisation.   |
| International organisations relevant to sustainable organisation such as UN-Habitat, UNIDO, etc. | The consortium developed working relations with organisations like UN-Habitat (in the frame of the Wuhan Urban Living Lab) and UNIDO (in the frame of the annual Belt & Road events). The partners that have been involved in such high-level collaborations will pursue and keep these synergies working and, if possible, expand them towards the creation of socially more inclusive cities in Europe and China.   |
| Policy makers and stakeholders relevant to the EU-China partnership on sustainable urbanisation  | Representatives from national and regional governments and agencies, embassies, universities, private sector and civil society interacted regularly with the project through the project workshops, Advisory Board meetings, conferences, Urban Living Lab meetings, the Community of Communities and the online events. The consortium has taken stock of these synergies and will try to keep them alive after the end of the project.  |
| European cities  | European partners have a direct dialogue with more than 200 European cities and are already promoting the TRANS-URBAN-EU-CHINA project to them as well as the foreseen benefits from actively taking part in it. A group of 60 cities is already working with EUROCITIES as an 'informal working group' that meets twice per year. EUROCITIES will keep this working group running after the end of the project. Other European partners will also keep alive the synergies that were developed during the project (e.g. POLITO with the cities of Prato and Macerata). |
| Chinese cities   | Chinese partners have a direct dialogue with a large number of Chinese cities and are already promoting the TRANS-URBAN-EU-CHINA project to them as well as the foreseen benefits from actively taking part in it. Chinese partners will keep alive the synergies that were developed during the project. For example, CCUD has created the China International Cities Development Alliance, an initiative that will continue its work  |

| Target audience  | Exploitation  |
|--|---|
|  | after the end of the project. CAUPD has used findings from the TRANS-URBAN-EU-CHINA project in their update of the masterplan for the Xiong'An New Area development and will keep doing so for the development of future cities and districts.  |
| Urban Living Labs' participants  | The Urban Living Labs organised by the project gave the opportunity to experiment with ways and formats to convene groups of interest and have dialogues on the creation of socially inclusive cities in China. Partners involved in this process will try to keep this process running and work to create even more synergies both on the institutional level and on the ground for each Urban Living Lab.   |
| Knowledge networks such as ENOLL, JPI UE, EIP SCC, DRAGON-STAR Plus, UERA, and EERA JP Smart Cities, Chinese Academy of Sciences, URBAN-EU-CHINA project | TRANS-URBAN-EU-CHINA has supported and promoted a full triple-helix approach to sustainable urbanisation. To this end, working closely with knowledge networks and universities has been a priority task for the consortium partners. TRANS-URBAN-EU-CHINA partners have good working relations with prominent stakeholders of the EU-China partnership on sustainable urbanisation and have involved these organisations in a number of activities. These synergies will continue after the end of the project and will hopefully take the form of a future EU-China project or of a platform for cooperation on sustainable urbanisation. |