

# PROMOTING URBAN AGRICULTURE

A catalyst for social, environmental and economic sustainability

## North America: Dortmund (DE) - Pittsburgh (US)

Thematic Network: Ecological Transition- Green Deal

Thematic Cluster: Sustainable Urban Agriculture

Cross-cutting issues:



Climate Change & Energy Transition



Integrating Dortmund's KlineGarten model with Pittsburgh's Adopt-a-Lot program will provide both pathways of employment and land stewardship, community building as well as climate change adaptation and mitigation methods to address current and future shocks and stressors.

The city partners with the most vulnerable and disenfranchised communities to build resiliency to solve for the shocks and threats to residents, while building pathways for economic independence, cultural preservation, and social capital.



### Challenges

Our post-industrial cities are seeking a just and inclusive transition for a sustainable future.

Both cities have identified urban gardens as an effective way to tackle long-standing environmental, economic and social challenges.

### Solutions identified

The cities of Pittsburgh and Dortmund are partnering on a variety of pilots including the KlineGarten model which will include young Black women's participation in urban gardening and farming and building strong communities. The pilot program will aim to provide opportunities for residents returning to their communities from incarceration to learn and create programs and policies that advance urban agriculture and sustainable land management to address storm water issues.

### Next Steps

The cities through their Urban Cooperation Action Plan process will develop and deliver a series of technical sessions and small working groups aimed at knowledge sharing of expertise and experience to further develop the pilot.

# ZERO WASTE MARKET

## Asia & Australasia: *Famalicão (PT) - Penang (MY)*

Thematic Network: Ecological Transition – Green Deal

Thematic Cluster: Circular Economy

Cross-cutting issues:



Climate Change & Energy Transition

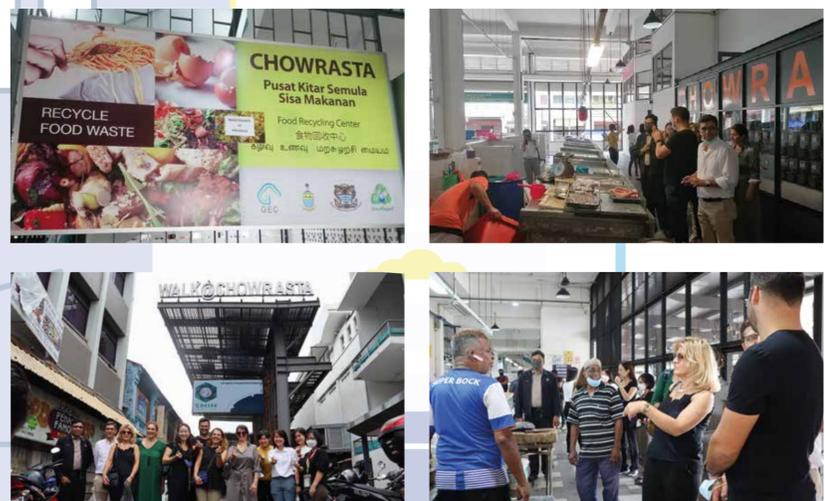


Penang Delegation visit Famalicão Municipal Market (24-26 April 2022)

- Waste Room & Waste Management
- Circular Closet
- Circular Square - Qualification and Environmental Education

Famalicão Municipal Delegation visit CHOWRASTA Market (12 - 15 september 2022)

- Food Waste (Biodigester organic waste)
- Water reuse
- Communication



### Challenges

- Organic waste management model (wet waste)
- Communication (citizen centric campaigns)
- Awareness and education for circularity

### Solutions identified

- Sharing management models
- Communication tool kit centry ( Impactful campaigns)
- Cooperation in the field of education and environmental awareness (Eco Schools Program)

### Next Steps

- Management tools for biowaste
- Online cooperation between 2 eco schools (Famalicão & SBS)
- Cooperation between community projects to promote the circular economy

# FLOOD MANAGEMENT VISUALIZATION

## Toolkit for Open and Sustainable City Analysis and Planning (TOSCA) for Water Management

Asia & Australasia: *Messina (IT) – Kochi (IN)*

Thematic Network: Ecological Transition- Green Deal

Thematic Cluster: Nature Based Solutions, Water Magement

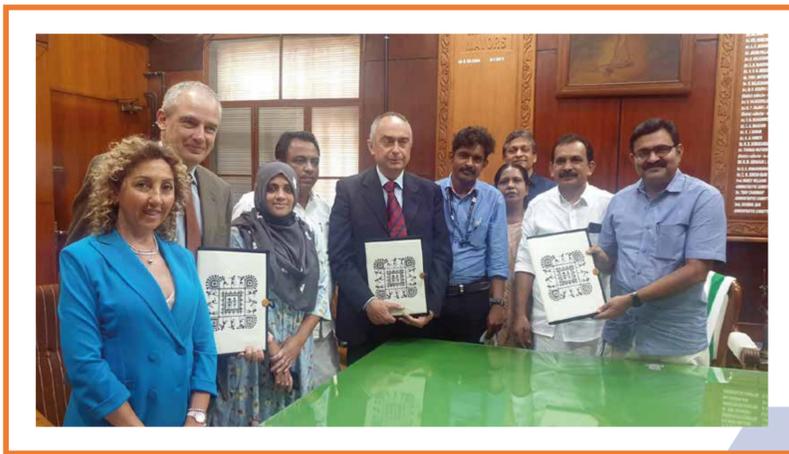
Cross-cutting issues:



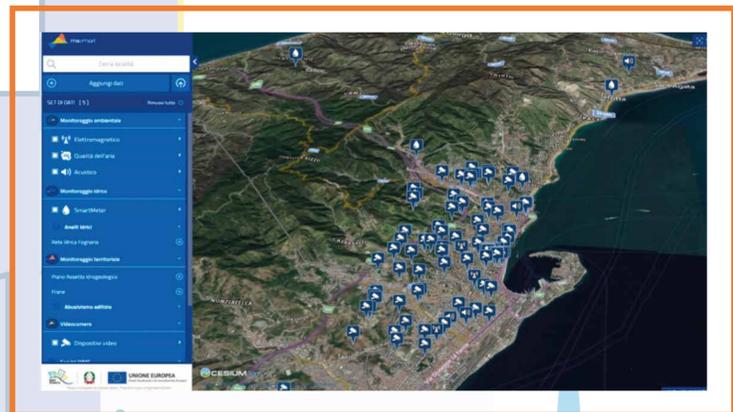
Climate Change & Energy Transition



Smart City & Digital Transition



Develop TOSCA (with the support of Hafen City University in Hamburg which has developed this tool) specifically for flood planning and emergency management in Kochi in order to map flood prone areas, identify risks, prevent disasters, facilitate decision making and increase awareness.



### Challenges

Flood planning is one of the key areas of urban and infrastructure planning for the water-based city of Kochi. Almost 10% of the city's total area is categorised as 'very high' and 'high vulnerable zones' for urban flooding, thus representing a significant urban risk.

Messina has suffered from landslides that have led to loss of life and property. In 2009, at least 37 persons died and several more were injured from mud slides that followed heavy rains.

### Solutions identified

Introduction of innovative tools and methodologies supported by context specific dataset.

The objectives are to:

1. Optimise data processing and action through a single platform.
2. Develop TOSCA for planning and analysis of flood management.
3. Support the transfer of knowledge to Messina and other cities through the implementation of TOSCA for the specified use cases.

### Next Steps

As part of IURC a pilot project will be developed for a specific flood related parameter in Kochi. This will involve:

- 1: Workshop on minimum viable case;
2. Assessment and collection of data;
3. Creation of an alert system for the flooded area and possible visualisation of a specific parameter; and
4. Assessment of expanding implementation for more parameters or other cities, such as Messina.

# FORMULATION OF A SUSTAINABLE CAMPUS CONCEPT

## Asia & Australasia: Trier (DE) – Chennai (IN)

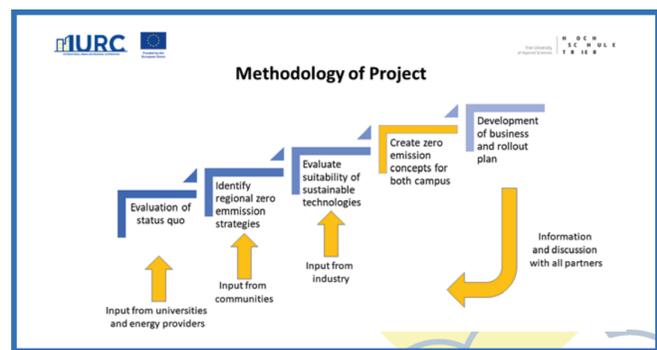
Thematic Network: Urban & Regional Renewal

Thematic Cluster: Urban Planning

Cross-cutting issues:



Climate Change & Energy Transition



### Challenges

Resource waste and inefficiencies; Lack of awareness; Challenges in implementing the circular economy concept; Inadequate legal framework; Cost and technology considerations.

### Solutions identified

Develop a circular economy campus where the efficient use of resources, including water, energy, waste, etc. maximizes the benefits for the economy, society and the environment. The results should be replicated to larger institutional or city areas/districts, campuses, and other areas in India and Germany.

### Next Steps

Development of material and energy flows for the Hindustan Institute of Technology & Science campus; Identification of institutional environment for a sustainable campus; Formulation of sustainability concept; Identification of relevant technologies for management of resources/waste/energy, and where possible cost estimation; Assessment of replicability in city areas/districts.

# URBAN TRANSFORMATIONS FOR CLIMATE RESILIENCE

Climate resilience, community engagement, innovation, regenerative urban design, sustainable transport and green infrastructure

## Asia & Australasia: Malaga (ES) - Christchurch (NZ)

Thematic Network: Urban & Regional Renewal

Thematic Cluster: Urban Planning & Social Cohesion

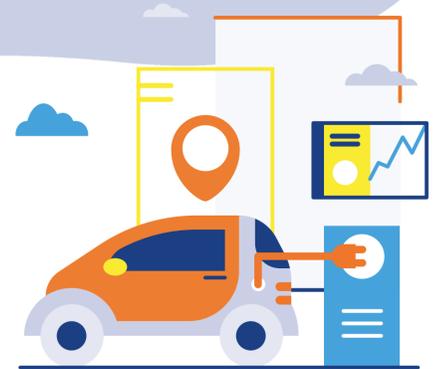
Cross-cutting issues:



Climate Change & Energy Transition



Smart City & Digital Transition



Malaga has the challenge of adapting its production and consumption systems, while enhancing social cohesion and resilience to the climate crisis.

Change will be necessary in institutions, urban policies, businesses and lifestyles.

Christchurch is at risk of rising seas, floods, drought and fires. We need to rapidly transition to a resilient and low carbon city.

Engaging our community, fostering our innovation ecosystems and sustainable urban design and mobility are key opportunities.



### Challenges

- Community and youth engagement
- Transition to a low carbon and innovative economy
- Zero emission mobility
- Inclusive and proactive responses to local climate impacts

### Solutions identified

- Engaging our communities about climate resilience
- Fostering our innovation ecosystems
- Enabling active, public, shared and electrified mobility
- Green and resilient infrastructure

### Next Steps

- Explore synergies for community engagement
- Globally connect our innovation ecosystems
- Explore urban transformations that support climate resilience



# SUSTAINABLE URBAN REGENERATION

## Developing a green, inclusive, and polycentric city

### Latin America: *Milan (IT) - Sao Paulo (BR)*

Thematic Network: Urban & Regional Renewal

Thematic Cluster: Urban Planning & Urban Poverty-Social Cohesion

Cross-cutting issues:



Climate Change & Energy Transition



Post Covid recovery



Implementing the IMM methodology for the prioritization of interventions and promoting participatory initiatives for urban regeneration in the promotion of a polycentric city model, by transforming brownfield sites and underused spaces in vibrant, inclusive urban areas.



Both cities are collaborating on the development of Nature Based Solutions into various regeneration projects and seeking to integrate sustainability and inclusivity objectives into their urban development models.



### Challenges

Milan and Sao Paulo, despite the difference in scale, share many common challenges, such as the relevance of Nature Based Solutions to promote sustainable urban development, the need to reduce urban sprawl by creating a polycentric city through the regeneration of brownfield sites and underused spaces in the city center employing participatory methodologies for social inclusion.

### Solutions identified

The cities are focused of the exchange knowledge and expertise on land-use adaptation strategies and urban regeneration projects through the application of the IMM methodologies with a specific focus on the Dom Pedro Park project and the Bras Area in Sao Paulo.



### Next Steps

A representative from Sao Paulo has been invited participate in a lecture series at the Politecnico di Milano. Both cities will also organize technical sessions and webinars about similar urban regeneration projects, as preliminary steps for the development of concrete pilots.

# INNOVATION ECOSYSTEMS & RIS4

## Towards a new governance model for a successful Science, Technology and Innovation (STI) ecosystem

### Latin America: *Extremadura (ES)-Piura Region (PE)*

Thematic Network: Innovation Ecosystems

Thematic Cluster: Regional Innovation & RIS4

Cross-cutting issues:



Climate Change & Energy Transition



Post Covid recovery



Digital Transition



The Foundation Scientific and Technological Park of Extremadura (FUNDECYT-PCTEX) is an agent of change in the process of co-creation of public policies, in the design of the Smart Specialisation Strategy, and other processes aimed at increasing the quality and impact of research.



Piura's Regional Institute of Science and Technology (IRCTI) is in charge of the creation, construction, and implementation of the Scientific-Technological Park of Piura.




### Challenges

Both regions are seeking to strengthen research, innovation, technological development, human capital in research, technology transfer, and use of emerging technologies; as well as improve productivity and business competitiveness to transform their regions.

### Solutions identified

The Region of Piura and FUNDECYT-PCTEx signed a cooperation agreement for the creation of a governance model in Piura's regional ecosystem of STI and the creation of a network of science parks and technology in the region with the objective to generate investment opportunities, exchange of knowledge and talent, and trade.

### Next Steps

The regions through their R-CAP are developing a series of technical sessions where FUNDECYT-PCTEx is supporting Piura Regional Government in the definition and management of a governance model that would lead the operations of its first Science and Technology Park.

# THE CITY AS A LABORATORY FOR OPEN INNOVATION

## Asia & Australasia: Turin (IT)-Nagoya (JP)

Thematic Network: Innovation Ecosystems

Thematic Cluster: Innovation Centres, Business Clusters

Cross-cutting issues:



Smart City & Digital Transition



Cities, a living lab to test the innovative solutions for the urban future



The city, as local authority, should be the enabler for the local ecosystem of innovation. Nagoya city @ Turin Open Living Lab Days 2022.



### Challenges

The goal of the cooperation between Nagoya and Turin is to create favourable and attractive places for the settlement of companies and start-ups interested in developing, testing, and demonstrating innovative tech solutions in the urban field, or developing projects with a high social impact.



### Solutions identified

The two cities already have relevant experiences and want to boost new collaboration through mutual exchanges. Such experiences include Torino City Lab and Torino Social Impact, the Central Japan Startup Ecosystem Consortium and the Nagoya Innovator's Garage.

Entrepreneurial education was identified a topic for further exchange.

### Next Steps

Both cities have already been working together to strengthen and expand their leading actions, such as Nagoya's participation in the "Turin Open Living Lab Days 2022".

In a spirit of open innovation, Turin and Nagoya will take advantage of this collaboration with the relevant stakeholders in the two territories.

# BOOSTING ECONOMIC REACTIVATION

## Natural and cultural assets, gastronomy, and valorization of agricultural goods

### Latin America: Coimbra (PT) - Valle del Cauca (CO)

Thematic Network: Innovation Ecosystems

Thematic Cluster: Tourism & Culture, Diversification & Education, Jobs & Skills

Cross-cutting issues:



Climate Change & Energy Transition



Post Covid recovery



Digital Transition



Regions seek to boost economic reactivation and improve people's lives around common strategic sectors through training and employment opportunities for Valle del Cauca, and talent attraction for Coimbra.

Agroindustry and tourism with a focus on gastronomy are common paths for their long-term regional development.



### Challenges

The labour force in the Coimbra region is scarce. VdC students and professionals are looking for work opportunities. VdC to incorporate marketing and digitalization strategies for tourism promotion - incorporation of quality and sustainability certificates. Need to identify new market for wine producers from Coimbra.

### Solutions identified

The mobility of workers from VdC to Coimbra. Knowledge and tool transfer in tourism promotion, gastronomy, natural heritage, sports and reduction of physical barriers. Exploring the possibility of providing training and coaching to VdC and the possibility of internships in Portugal. Wine producers in Coimbra are pursuing new markets to export to VdC.

### Next Steps

They achieved homologation of Colombian Engineering qualifying titles in Portugal and to promote mobility of temporary workers and employment opportunities to Coimbra on prioritized sectors. Commercial mission where CEO of Portuguese companies can meet VdC agrifood producers. Hybrid networking event on tourism to connect different tourism services providers.