



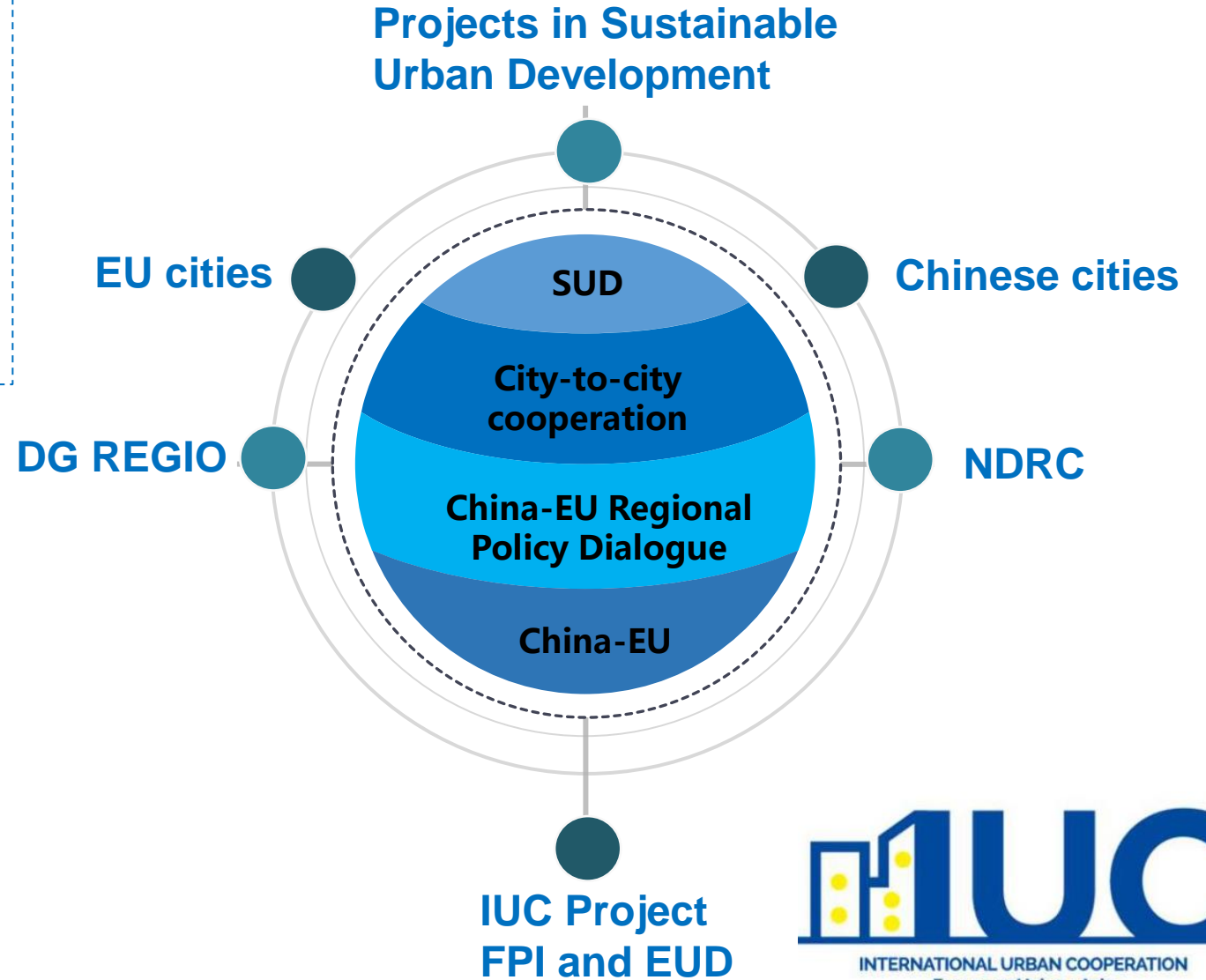
Brief Introduction to the IUC Asia Programme – Focus China

**Pablo Gándara, Team Leader, IUC ASIA
Tuscia (Rome/Lazio) - Yantai University Meeting, 30th October 2020**

IUC Project Introduction

Component 1:

Promote city-to-city cooperation in sustainable urban development within the *EU-China Regional Policy Dialogue (DG REGIO-NDRC)*



13th EU-China High Level Seminar – Zhengzhou, July 2018

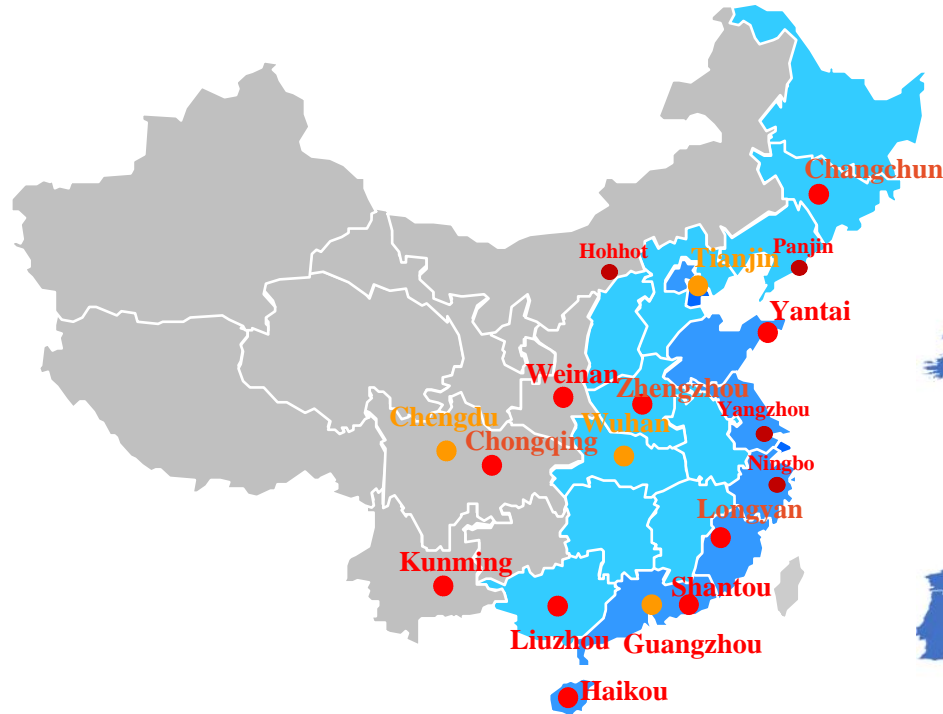


14th EU-China High Level Seminar – Brussels, April 2019



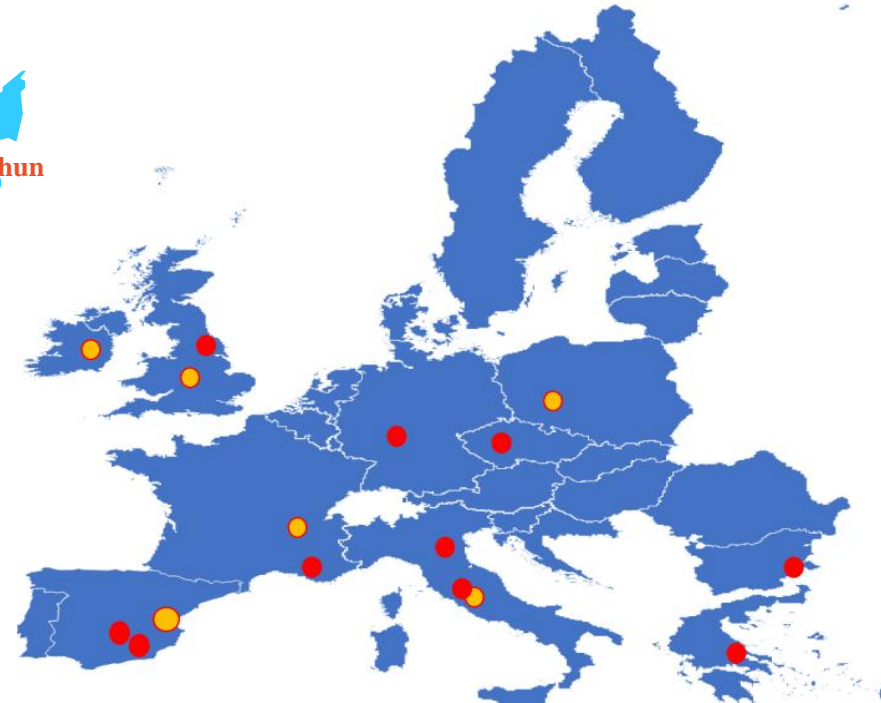
Pilot Cities for IUC Cooperation between the EU and China

Chinese Pilot Cities 2014-20



Chongqing, Longyan, Zhengzhou, Shantou, Haikou,
Changchun, Kunming, Liuzhou, **Yantai**, Weinan, Tianjin,
Chengdu, Wuhan, Guangzhou, Hohhot, Panjin, Ningbo,
Yangzhou

Selected EU Pilot Cities 2017-2020 (IUC)



Málaga (Spain), **Rome** (Italy), Granada (Spain)
Nice (France), Barnsley (UK)
Reggio Emilia (Italy), Stuttgart Region (Germany)
Mannheim (Germany), AAK (Greece), Málaga (Spain)
Burgas (Bulgaria), Bologna (Italy), Barcelona (Spain)
Greater Manchester (UK)

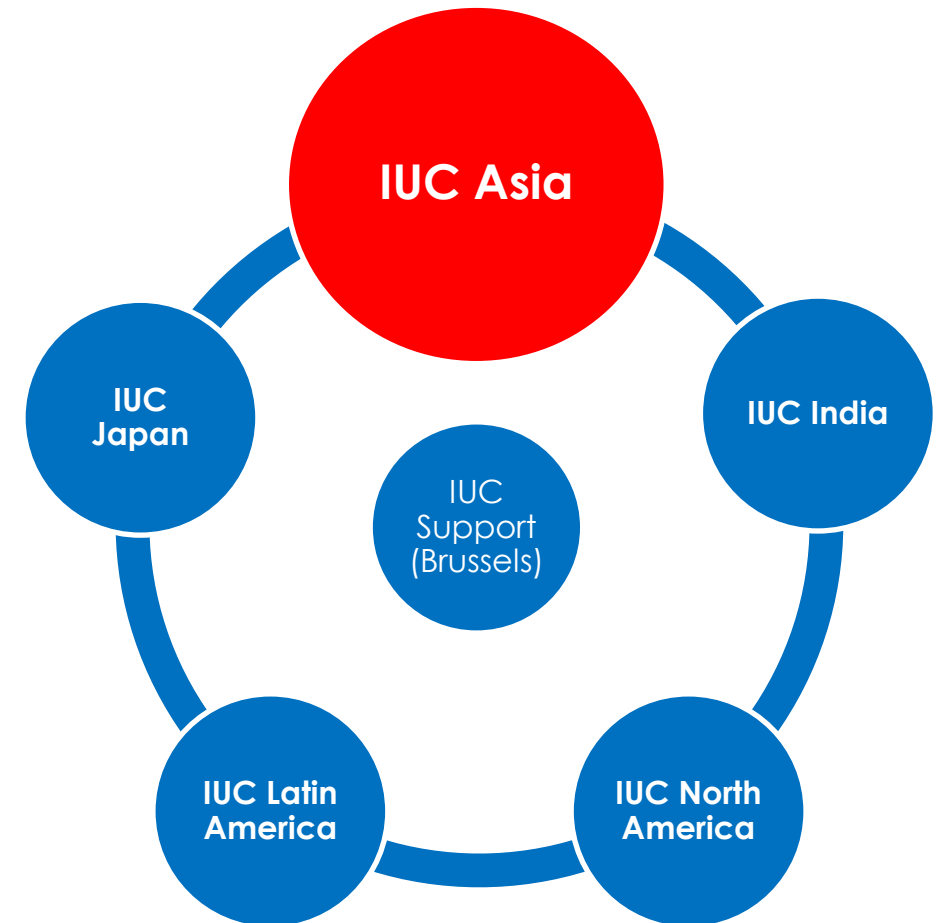
The EU's IUC Programme at a Glance – Focus C1 EU-China

Global EU Programme launched 2017 managed by the **Foreign Policy Instrument (FPI)**. Aims to support:

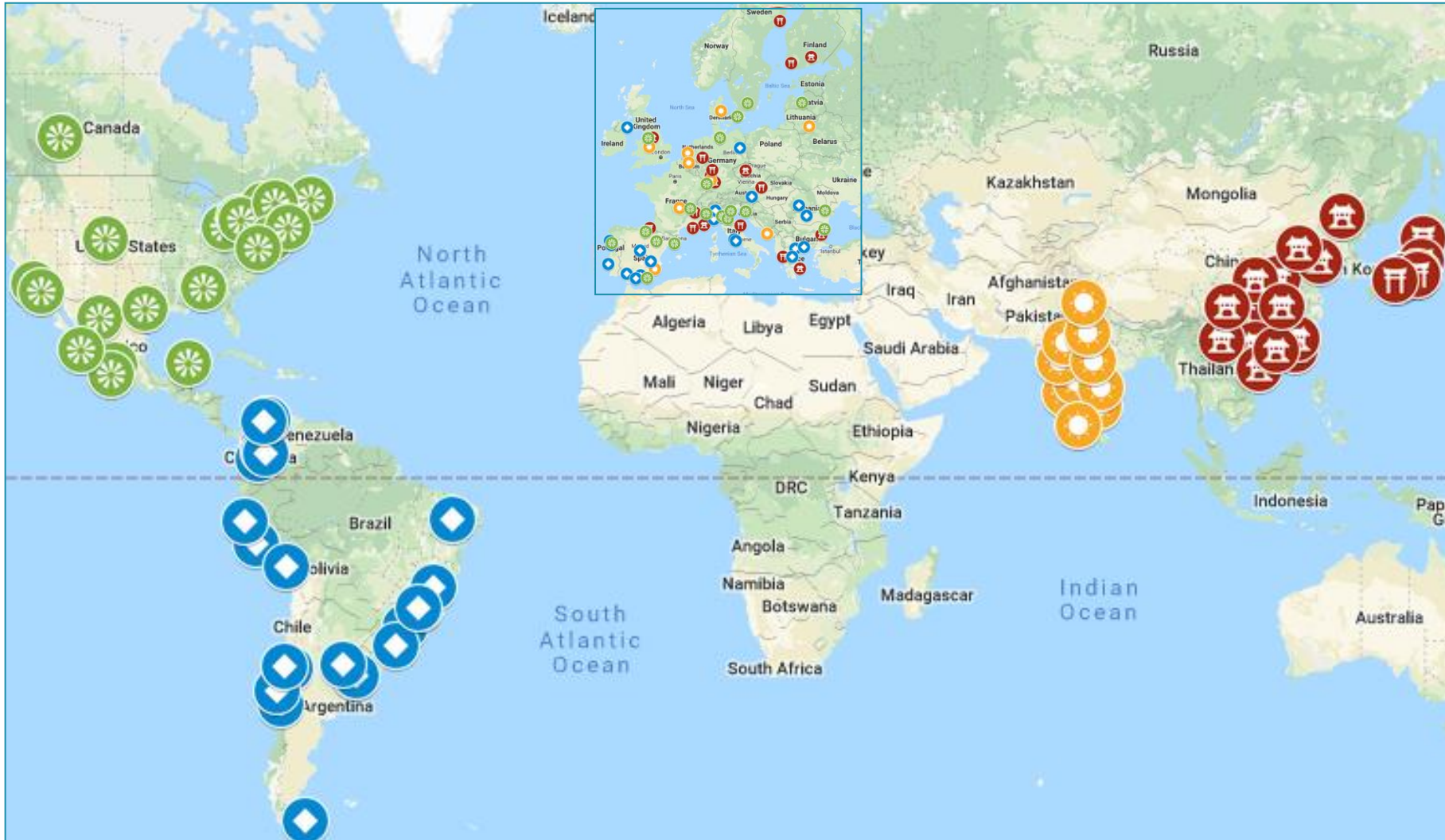
- Bilateral EU policy objectives;
- Implementation of UN Urban Agenda, the UN Sustainable Development Goals, and the Paris Climate Change Agreement

In Asia, the IUC is working in two main areas:

1. **Component 1: Multi-City Cooperation on Sustainable Urban Development**
 2. **Component 2: Support Cities in Asia on Climate Change** Mitigation, Adaptation and Clean Energy Access (especially within the Global Covenant of Mayors - GCoM)
- Timeline: 2017 – 2020 (1st Phase)
 - Team based in Beijing and Indonesia



EU's IUC Multi-city Engagement: Global Networks



Over **150** cities already involved

- From the **European Union:**
 - **75** cities from 21 Member States
- From **Asia**
 - **18 Chinese** cities
 - **9 Japanese** cities
 - **12 Indian** cities

Urban Agenda of the EU – Connecting the UN' s SDGs to Cities

EU's 14 partnership areas



Culture/Cultural Heritage

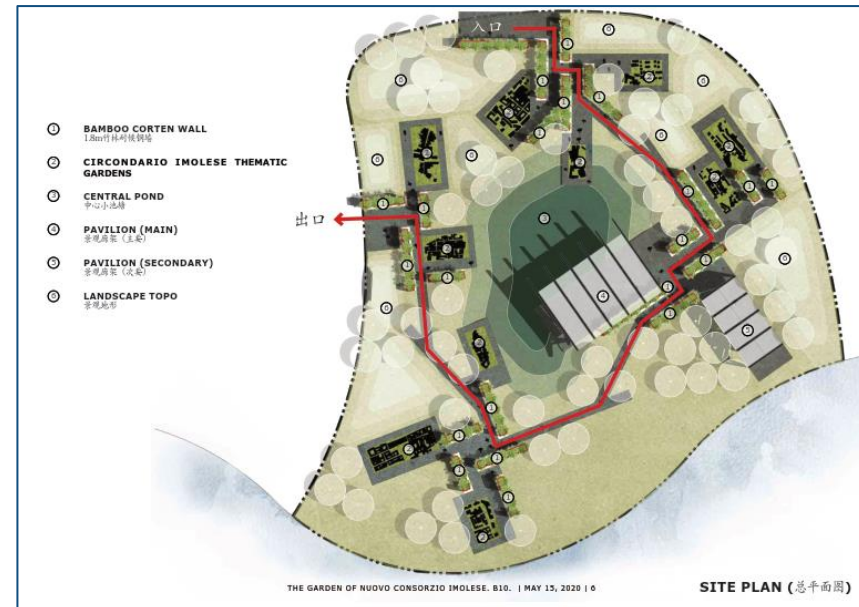
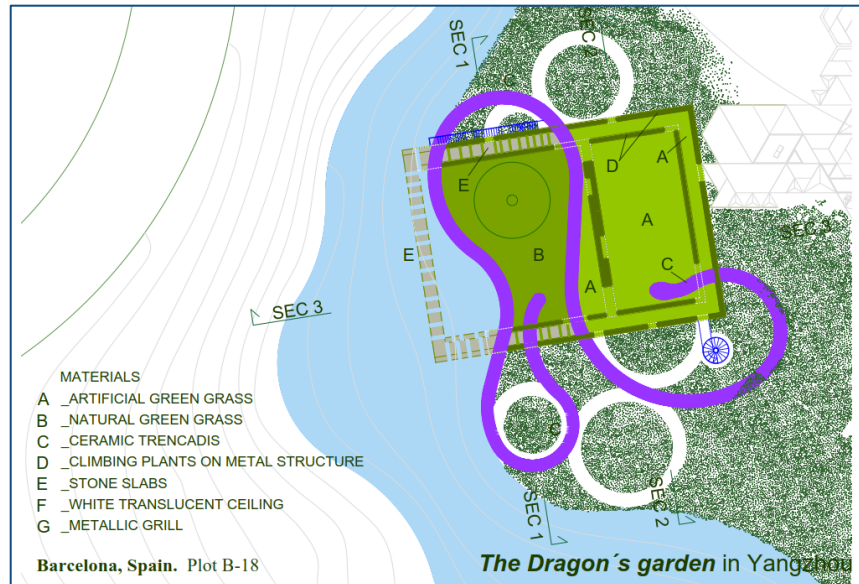
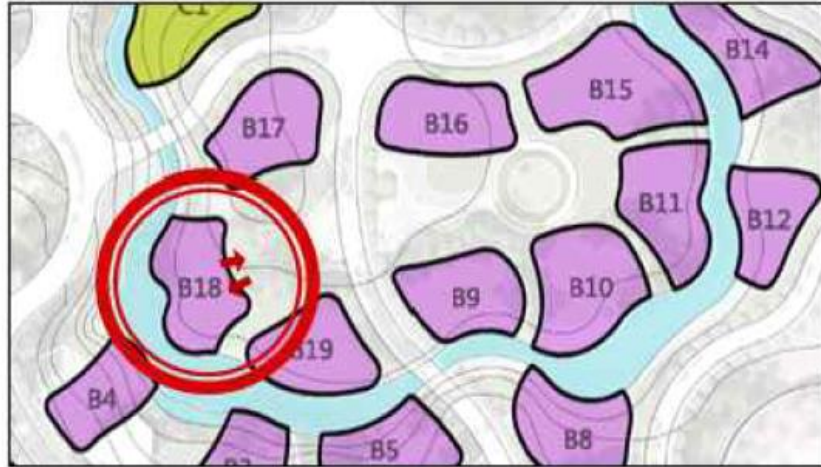


Security in Public Spaces

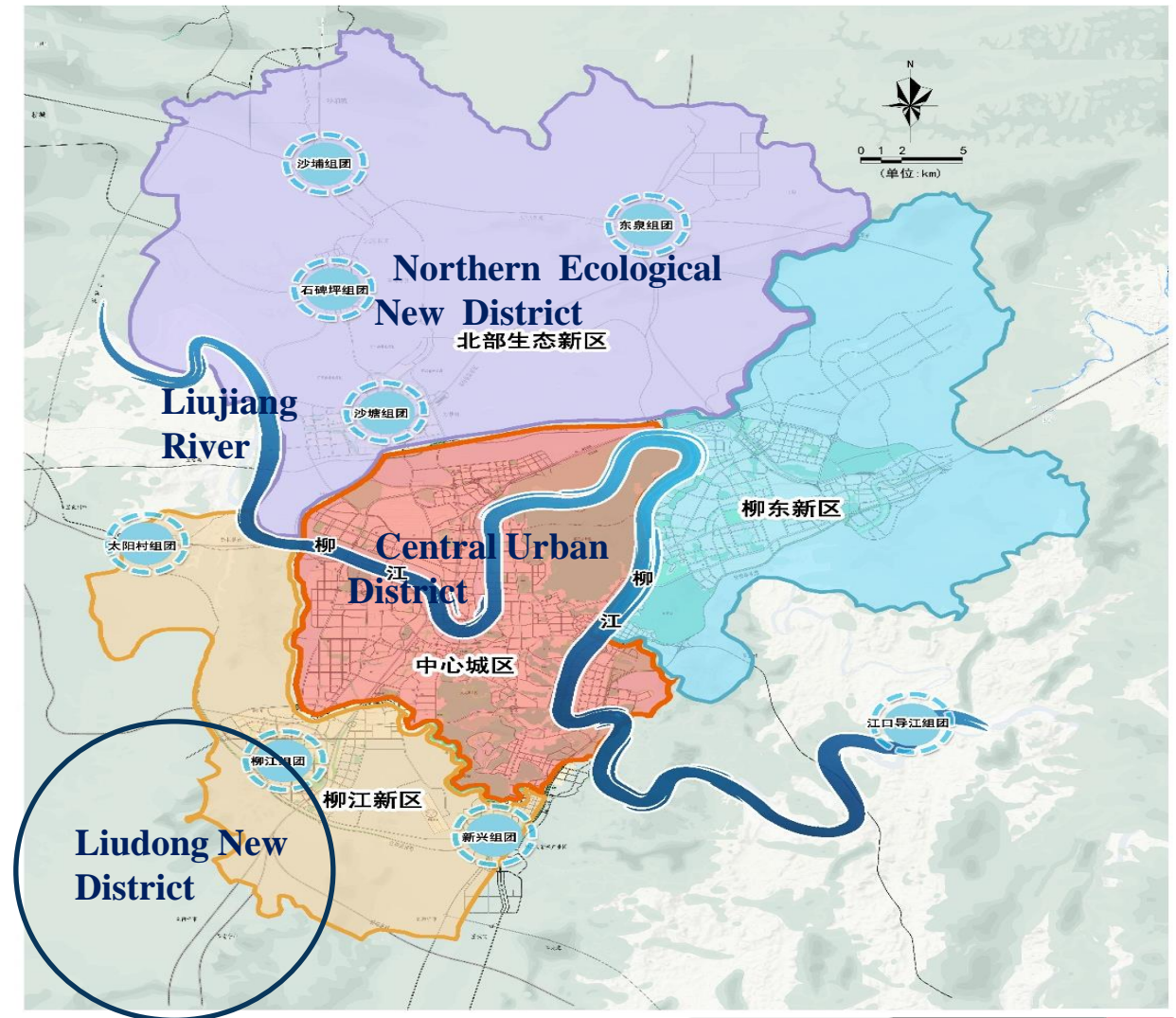
United Nations 17 Sustainable Development Goals (SDGs)



Pilot example 1 – Barcelona, Bologna & Rome in Yangzhou



Pilot Example 2: Barcelona and Liuzhou (Guangxi) – S&T Park



Pilot Example 3: Mannheim – Chongqing Cargo Railway



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EU's IUC Pilot Project Started: Cargo Railway Connection between Mannheim and Chongqing



University Cooperation (1): Manchester – Rome - Chengdu

- Several meetings on renewable energy cooperation were organised with representatives from **Manchester**, **Rome** and **Chengdu**-based Sichuan Energy Internet Research Institute (EIRI) of **Tsinghua** University, including experts from the Manchester **Fuel Cell** Innovation Centre (MFCIC) of Manchester Metropolitan University (MMU), Sapienza University and the Stuttgart Region.
- Main cooperation topics are:
 - SME and start-ups exchanges between MMU and EIRI,
 - the EXCEL Acceleration Program of EIRI;
 - technology exchanges and joint POC/pilot projects with local industry partners;
 - joint R&D,
 - expert exchanges under the framework of Smart Hydrogen System Lab in Chengdu

Manchester, Rome and Chengdu



V2G/ VPP (cArbitrage)

- Tesla S85 (90kWh,225m) (~ consumption of 10 UK households, see links 1&2 below)
- The key to realising the economic values of V2X is EV control to dispatch energy according to the grid conditions.

The diagram illustrates a V2G/VPP system. It shows a central 'Control centre' connected to a 'Vehicle' (represented by a car icon) and a 'Power plant' (represented by a wind turbine icon). The 'Control centre' also connects to a 'Grid' (represented by a power line icon). The 'Vehicle' is shown with a 'Battery' and a 'Charging station'.

1. https://www.ukpower.co.uk/home_energy/average-household-gas-and-electricity-usage

2. https://batteryuniversity.com/learn/article/electric_vehicle_ev

• M. Rozman, in B Adebisi (2019) *Smart Wireless Power Transmission System for Autonomous EV Charging*, IEEE Access, 7, pp.112240-112248

• Y. Sha'aban, A. Ikpehai, B. Adebisi, K. Rabie (2017). *Bi-Directional Coordination of Plug-In Electric Vehicles with Economic Model Predictive Control*, Energies, 10(10), pp.1507-1507.

zoom.us Meeting View Edit Window Help

You are viewing Amer Gaffar - Man... 's screen View Options

FangXuanbo Yagya Regmi Bamidele Adebisi Rebecca Drakeford Ilc Pablo Gándara

Manchester Fuel Cell Innovation Centre

Manchester Metropolitan University

Manchester Fuel Cell Innovation Centre

Amer Gaffar, Director

Unmute Stop Video Participants Chat Share Screen Record Reactions Leave

Zoom Meeting

Flavio Rosa Yanlan Song Benedetto Nastasi

3 CloudIEPS – Cloud Based Integrated Energy Planning Studio

3.4 Software Development

Based on the above simulation method, a cloud-computing platform is developed. An editable environment for network topology is provided so that the Energy-Integrated system can be **visualized**. There are up to **25 types of device** are supported in this platform, such as **gas turbine, heat recovery boiler, wind-power generator, absorption chiller**, etc, so users could design the energy cascade utilization system as what they want.

The screenshot shows the CloudIEPS software interface. It features a network topology diagram on the left and a bar chart on the right. The bar chart displays energy flow data for different components, with the y-axis labeled 'Energy (kWh)' and the x-axis labeled 'Component'. The components include 'Gas turbine', 'Heat recovery boiler', 'Wind-power generator', and 'Absorption chiller'.

University Cooperation (2): Rome Summer School 2020

31 august h: 09.00

MODULE 1
Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)

Prof. Francesco Ruperto

01 september h: 09.00

MODULE 2
The integrated management of sustainable processes of requalification and recovery in the architectural and environmental heritage.

Prof. Tommaso Empler

02 september h: 09.00

MODULE 3
Geographic Information Systems and its integration with BIM methodologies.
Why to integrate GIS with the BIM methodologies, tools and procedures? Beyond the 3D modelling: geography and GIS multi-thematic environment, additional dimensions of BIM data.

Ing. Patrick Maurelli

03 september h: 09.00

MODULE 4a
Digital methods and tools in the construction process for an efficient project management workflow: case histories

Prof. Sofia Agostinelli

04 september h: 09.00

MODULE 4b
Analysis of integrated models and applicative case studies within the digital approach for planning and programming the activities through the process phases.

Dott. Stefano Amista

07 september h: 09.00


MODULE 5
Analysis of integrated models and applicative case studies within the digital approach for planning and programming the activities through the process phases.

Prof. Xing Shi
(College of Architecture and Urban Planning, Tongji University)

11 september h: 09.00

FINAL TEST
Final report for work groups to discuss in specific workshops with the teaching staff of the ISS.

The 40 hours online activities will take place on a dedicated e-learning platform in english.



Director Prof. Marco Casini
Coordinator Prof. Flavio Rosa
flavio.rosa@uniroma1.it

Zoom Meeting

Recording...

Speaker View

Find a participant

YF Yating Fu

YF Yating Fu

YL Yating Liu

Invite Mute

Zoo

From simiao ZHANG got it

From Min XU to Ever yes

From Shuang LIANG so, should we star

From Elisa Pennacchia thank you

From Qianqian ZHANG yes

To: Everyone

Type message here

End

Zoom Meeting

Recording...

Participants (25)

Find a participant

Jingnan Jin (Host, me)

DZ Dian Zhuang

CL Chuci Li

EP Elisa Pennacchia

FG Federica Giustini

FR Francesca Romana Curreli

JT Jiahuan Tan

LY La Yan

LV Laura Vollmer

LZ Lin Zhou

LM Luca Martelli

MV maria valse

MX Min XU

Invite Mute All Unmute All

Performance Analysis in Revit

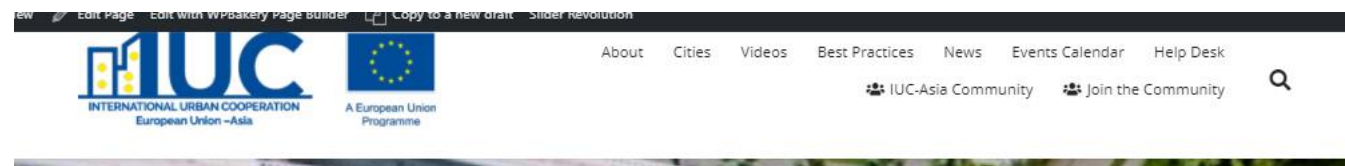
1. Fast Heating and Cooling Loads Analysis (Local)
2. Heating and Cooling Loads using Cloud EnergyPlus Engine (Cloud)
3. Multiple Light Analysis in the cloud (Cloud)
4. Solar Analysis on model surfaces (Local)

Tianjin City Leaders in Viterbo – EU World Cities 2015



International Events: APUF (Malaysia), October 2019





IUC Asia News

[Read all news →](#)



OCTOBER 30, 2020

VLRs: IUC Asia participates in UNESCAP meeting on Asia-Pacific Regional Guidelines on Voluntary Local Reviews

Today the IUC Asia participated in the Virtual Discussion Session on Asia-Pacific Regional Guidelines on Voluntary Local Reviews organized by UNESCAP with the objective to raise awareness on the guidelines, discuss its coherence with other global guidance on VLRs, and generate interest amongst stakeholders to conduct local and sub-national reviews of SDG progress. The session brought [...]

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OCTOBER 30, 2020

Virtual signing ceremony of MoU between Yantai (China) and Tuscia (Italy) Universities

This morning, the IUC Asia held a Memorandum of Understanding virtual signing ceremony between Yantai University (YTU) in China and Tuscia University (UNITUS) in Italy, to engage in cooperative educational and research activities for the mutual benefits of both institutions. Opening words were delivered by Ronald Hall, Active Senior Advisor, European Commission, Directorate General on [...]

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OCTOBER 30, 2020

Climate: IUC Asia participates in UNESCAP meeting on Vertical Integration of Climate Action in Asia and the Pacific

Today the IUC Asia participated in the Virtual Expert Group Meeting on Vertical Integration of Climate Action in Asia and the Pacific organized by UNESCAP with the objective to identify priority policies, actions and desired futures for Asia and the Pacific. UNESCAP is the United Nations Economic and Social Commission for Asia and the Pacific. [...]

[READ MORE >](#)



Where can I obtain more information on EU China Regional and Urban Cooperation?

IUC ASIA Project Website: www.iuc-asia.eu

EU Foreign Policy Instruments https://ec.europa.eu/fpi/home_en

EU Commission DG Regional and Urban Policy http://ec.europa.eu/regional_policy/cooperate/international/index_en.cfm

IUC Global Website: www.iuc.eu