



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心



# BRIDGE FOR CITIES

Belt & Road Initiative:  
Developing Green  
Economies for Cities

## 3<sup>rd</sup> “BRIDGE for Cities” Event

9 to 11 October 2018  
Vienna International Centre  
Vienna, Austria

# EVENT REPORT

Activity-Level Partners:





The views and opinion expressed herein do not imply the expression of any opinion whatsoever on the part of the United Nations Industrial Development Organization. This document has not been formally edited.

© United Nations Industrial Development Organization, 2018



## TABLE OF CONTENTS

<b>FOREWORD.....</b>	<b>4</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>8</b>
<b>SUMMARY OF PROCEEDINGS.....</b>	<b>12</b>
<b>PROCEEDINGS.....</b>	<b>16</b>
Welcoming Address and Opening Remarks.....	16
High-Level Policy Dialogue - Opening Ceremony.....	22
Signing Ceremony.....	26
Session 1 - Global Goals for Local Impact.....	30
Open Debate .....	34
Session 2 – Financing the Future.....	36
Session 3 – Cities of Tomorrow.....	42
Mayor and Ambassador Breakfast.....	48
Urban Issue Hub (I) – Sustainable City   Case City: Trieste.....	52
Urban Issue Hub (II) – Smart City   Case City: Shanghai.....	56
Innovation, Business Development and Entrepreneurship: Future Perspectives.....	60
Urban Issue Hub (III) – Liveable City   Case City: Vienna.....	62
Urban Issue Hub (IV) – Park City   Case City: Chengdu.....	68
Workshop on Industrial Policy along the Belt and Road.....	73
Matchmaking of SMEs along the Belt and Road (Part I).....	78
Matchmaking of SMEs Along the Belt and Road (Part 2).....	81
BRIDGE for Cities Closing Lunch.....	82
Event Activities.....	84
<b>ANNEX 1 - AGENDA &amp; BIOGRAPHIES.....</b>	<b>90</b>
<b>ANNEX 2 - CITY CASE BOOKLET.....</b>	<b>136</b>
<b>ANNEX 3 - ISSUE PAPER #4.....</b>	<b>170</b>



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



# FOREWORD



**BRIDGE  
FOR CITIES**  
3<sup>rd</sup> “BRIDGE for Cities” E

9-10 October 2018  
Vienna International Centre  
Vienna, Austria

ISSUE PAPER NO.



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心



**E**  
**S**  
Event

Belt & Road Initiative:  
Developing Green  
Economies for Cities



Since its launch in 2016, the “BRIDGE for Cities” event is now UNIDO’s flagship platform for multidisciplinary dialogue on urban-industrial development.

In line with UNIDO’s mission to promote and accelerate Inclusive and Sustainable Industrial Development, the “BRIDGE for Cities” event advocates and supports the implementation of the 2030 Agenda for Sustainable Development and SDG 9 via the Belt and Road Initiative (BRI), with which it shares many similarities, and in particular, the role of cities in participating countries.

The importance of cities and urban development in the advancement of the 2030 Agenda cannot be overstated, as cities not only generate more than 70 per cent of global wealth, but also produce 80 per cent of global greenhouse gas emissions. As the international community comes together to accelerate the pace of change, UNIDO stands ready to foster the positive sides of urbanization while proposing solutions for a green and sustainable growth.

The “BRIDGE for Cities” event has been designed to address both the challenges and the opportunities deriving from rapid urbanization. Policymakers and key development stakeholders from international organizations, financial institutions, governments, academia, and business sector gather at the “BRIDGE for Cities” event to share their vision, knowledge and experiences on the different aspects of urban-industrial development: from access to finance to policy coordination, always taking into consideration technological innovation as the driving force of industrial progress.

Recognizing the fact that the benefits of knowledge sharing are fully reaped when translated into concrete actions, the “BRIDGE for Cities” event goes beyond the dialogues.

In 2018, four case cities were selected – Trieste, Italy; Shanghai, China; Vienna, Austria and Chengdu, China – and were matched with a specific UNIDO technical department. In the months leading up to the event, in-depth city assessments, followed by roadshows and urban development Business Plan competitions, were conducted in each case city to identify and highlight ongoing and future projects. The aim of these activities, beyond the establishment of a solid base for technical cooperation between UNIDO and the cities, is to assist cities in their efforts to promote and facilitate investments in their priority sectors.

Through this innovative feature, UNIDO will follow up, through the network of cities established by the event and its related activities to build partnerships and facilitate technical cooperation, as well as to replicate the success stories identified.

**LI Yong**

**Director General of United Nations Industrial Development Organization**



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



The Finance Center for South-South Cooperation (FCSSC) strongly pursues its mandate to provide experience, knowledge, productivity and finance support for South-South Cooperation with an aim at promoting pragmatic cooperation and partnerships among governments of developing countries, private enterprises, and multilateral development assistance institutions.

To achieve our goals, we have established a strong and fruitful cooperation with UNIDO, reinforced and institutionalized by the signing of a Joint Declaration and of a Memorandum of Understanding in 2016 and 2017 respectively.

UNIDO and the FCSSC share a strong commitment towards the achievement of Inclusive and Sustainable Industrial Development and the 2030 Agenda for Sustainable Development by the means of enhanced South-South and Triangular Cooperation.

One of the most successful platforms for collaboration between UNIDO and the FCSSC is the “BRIDGE for Cities – Belt and Road Initiative: Development Green Economies for Cities” event. FCSSC has been the sponsor and co-organizer of all the first three editions of the event and we are extremely glad and proud to see how this initiative is gaining momentum and attention every year among cities and countries along the Belt and Road Initiative but also well beyond, as testified by the ever growing participation, both in terms of sheer numbers and from a geographical point of view.

FCSSC welcomed the innovative elements introduced the 3<sup>rd</sup> edition of the event. The identification, selection of participation of the case cities is extremely promising for the establishment of new partnerships, as well as for the promotion and mainstreaming of South-South and Triangular Cooperation and the establishment of concrete projects in the involved cities.

We strongly support UNIDO’s goal of enlarging the network of case cities during the future events, so to reach additional potential partners and diversify our field of action.

The Finance Center for South-South Cooperation will continue its collaboration with UNIDO in order to contribute to the achievement of ISID and the SDGs via the Belt and Road Initiative and South-South and Triangular Industrial Cooperation, as foreseen in the groundbreaking Memorandum of Understanding that links our organizations.

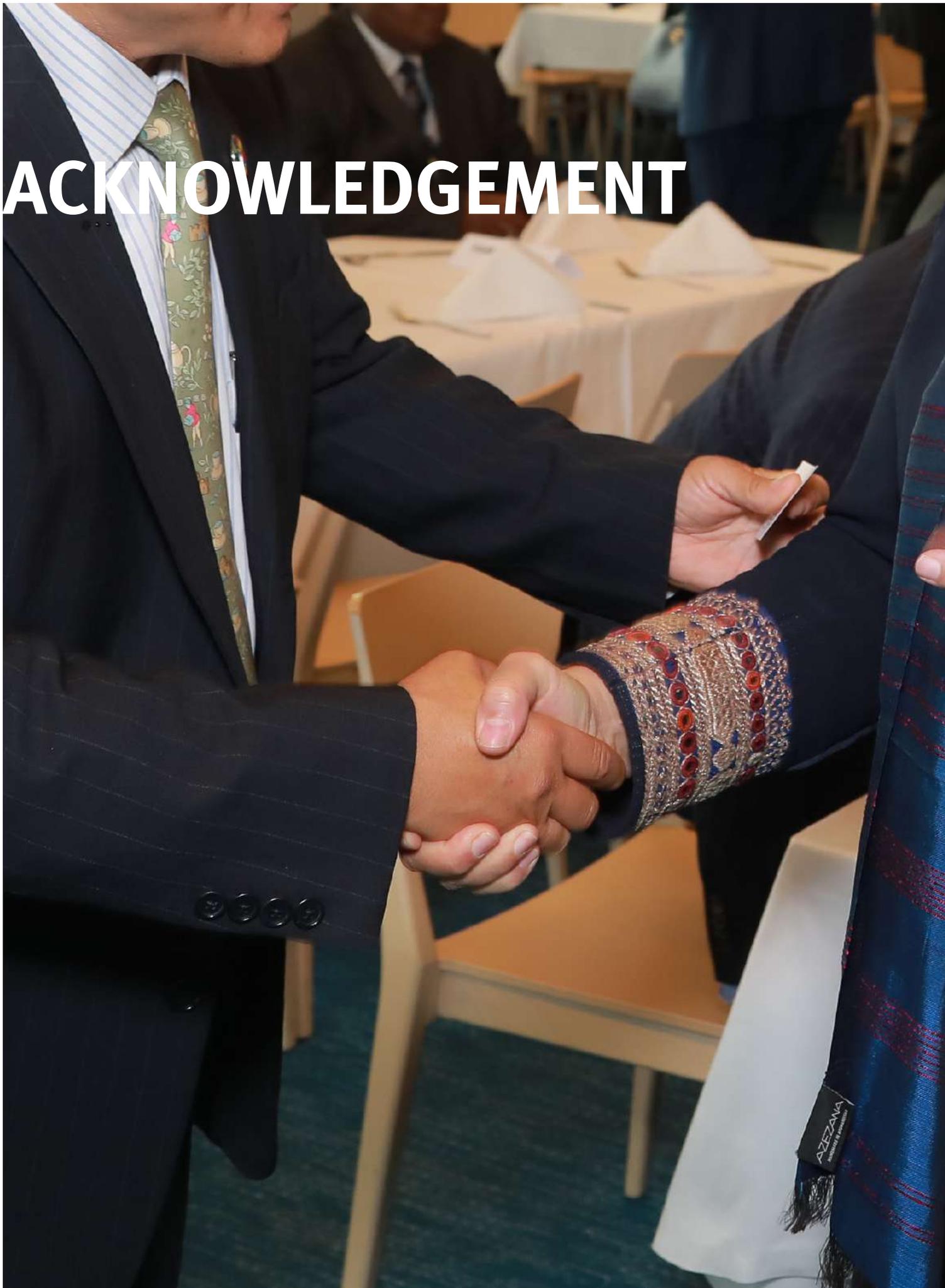
### **CAI E-Sheng**

#### **Chairman of the Finance Center for South-South Cooperation**



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心

# ACKNOWLEDGEMENT



This Report presents a summary of the discussions and proceedings from the third edition of the “BRIDGE for Cities – Belt and Road Initiative: Development Green Economies for Cities” event held from 9-11 October 2018 in Vienna, organized jointly by UNIDO and the Finance Center for South-South Cooperation.

The event was oversaw and thoroughly supported by UNIDO Director General, who provided decisive advice. The organization of the event was supervised by Ciyong Zou, who provided overall guidance. This report has been prepared by the “BRIDGE for Cities” core team, led by Weixi Gong with support from Kanishka Rathore, Francesco Azzena, Sofya Parfenova, Ming Zhang, Xinnan Yao, and Samantha Pilato. The organization of the event would not have been possible without the strong commitment and support received by the entire Organization.

In particular, the case cities’ assessment would not have been possible without the decisive involvement and support from UNIDO Technical Departments. The “BRIDGE for Cities” core team worked jointly with the Department of Energy and the Department of Environment for the assessment and full-fledged codification of the Trieste case; with the Department of Trade, Investment and Innovation for the preparation of Shanghai case and with the Department of Agri-Business for the organization and full-fledged codification of Chengdu case. Vienna session has been under the direct responsibility of the “BRIDGE for Cities” team in the Department of Programmes, Partnerships and Field Integration. A special mention goes to ITPO Italy and ITPO Shanghai, which contributed in a decisive way to the event.

The following list acknowledges all the persons who supported the “BRIDGE for Cities” core team and contributed to the successful organization of the event in their respective fields of expertise and action.

### UNIDO Colleagues

#### Clearances and Guidance:

- Mr. Li Yong
- Mr. Hiroshi Kuniyoshi
- Mr. Philippe Scholtès
- Ms. Fatou Haidara
- Mr. Wang Shichun
- Mr. Ciyong Zou
- Mr. Behrouz Moradi
- Mr. George Perera
- Mr. Juergen Hierold
- Mr. Jason Slater
- Mr. Kay Lisengard
- Mr. Jean-Paul Landrichter
- Mr. Konstantin Ivanov
- Mr. Florian Peter Iwinjak
- Mr. Jacek Cukrowski
- Mr. Diego Masera
- Mr. Jaime Moll De Alba
- Mr. Ma Jian
- Ms. Solomiya Omelyan
- Ms. Safyatou Ba
- Mr. Takeshi Nagasawa
- Ms. Virpi Stucki
- Mr. Marat Usupov
- Ms. Tonilyn Lim
- Ms. Sommai Faming
- Mr. Guillermo Castella Lorenzo
- Ms. Claudia Linke Heep
- Mr. Mark Draeck
- Ms. Rana Ghoneim
- Ms. Katarina Barunica
- Ms. Agnese Ratzenberger
- Ms. Annachiara Scandone

#### High-level Policy Dialogue and Speakers Mobilization:

- Mr. Li Yong
- Mr. Hiroshi Kuniyoshi
- Mr. Philippe Scholtès
- Ms. Fatou Haidara
- Ms. Ayumi Fujino
- Mr. Ciyong Zou
- Mr. Hansen Stein
- Ms. Giovanna Ceglie
- Mr. Paul Maseli
- Mr. Christophe Olivier Renaud Yvetot
- Mr. Patrick Jean Gilabert
- Mr. Suleyman Yilmaz
- Mr. Ralf Bredel
- Mr. Zhen Wang
- Mr. Victor Djemba
- Mr. Bassel Alkhatib

#### Case-Cities (Urban Issue Hub sessions):

- Mr. Bernardo Calzadilla-Sarmiento
- Mr. Tareq Emtairah
- Mr. Stephan Sicars
- Mr. Dejene Tezera
- Mr. Carlos Chanduvi-Suarez
- Ms. Lorence Ansermet
- Ms. Diana Battaglia
- Ms. Zhao Xiaolei
- Mr. Markus Hoffmann
- Mr. Niels Schulz
- Mr. Dino Fortunato
- Ms. Wang Chengling
- Ms. Wang Lihua

### Workshops, Matchmaking, Closing session:

- Mr. Hiroshi Kuniyoshi
- Ms. Cecilia Ugaz Estrada
- Mr. Nobuya Haraguchi
- Ms. Lucia Cartini
- Ms. Annemarie Heuls
- Ms. Tally Einav
- Ms. Hedda Öhlberger-Femundsenden

### Communication, Promotions and Interviews:

- Mr. Kai Bethke
- Mr. Sayaphol Sackda
- Mr. Charles Arthur
- Ms. Claudia Groessing
- Ms. Xu Fei
- Ms. Sabine Haspel
- Ms. Eva Manasieva
- Ms. Simone-Anne Carneiro

### Registration and Exhibition-related Support:

- Security team of VIC
- BMS team
- Infrastructure committee
- UNOV Conference service
- UNIDO ITS team
- UNIDO Procurement team
- Mr. Michael Dethlefsen
- Ms. Claudia Ziniel
- Mr. Peter Holzleitner
- Mr. Zhu Jia
- Mr. Kamal Kaveh
- Mr. Guenther Vogl
- Mr. Roman Julian Allmeder
- Mr. Michael Halwex
- Mr. Enes Jililati
- Mr. Edmund Treutler
- Mr. Dominik Fernand Petri
- Mr. Pavan Malji
- Ms. Gayathri Jyothi
- Mr. Joonas Tapio Herrera Guevara
- Ms. Ivanna Burtnyk

### Ad-hoc Support:

- Mr. Edme Koffi
- Mr. Prakash Mishra
- Ms. Cathie Brunner
- Mr. Federico Castellani Koessler
- Mr. Farrukh Alimdjano
- Ms. Olga Memedovic
- Ms. Aster Desalegn
- Ms. Tsung Ping Chung
- Mr. Martin Lugmayr
- Ms. Corina Gronnerod
- Ms. Monika Eichberger
- Mr. Philipp Scherbaum
- Ms. Constanze Silberbauer
- Mr. Ahmed Zaabar
- Ms. Lucrezia Pala

- Ms. Karin Hruby
- Ms. Monika Kubiec-Dobosz
- Mr. Pradeep Paulose
- Ms. Jesusa Mendez
- Ms. Gafia Timis
- Ms. Miriam Hintz
- Mr. Xiao Cheng
- Ms. Dragana Marusic
- Ms. Hoa Lai
- Ms. Michelle-Anne Yap
- Ms. Hanne Siaw
- Ms. Kathrina Samio
- Ms. Dagmar Diaz Costanti
- Ms. Shahinda Elsayed
- Mr. Nicholas Dehod
- Mr. Filipp Kogan
- Ms. Gabriele Boldt
- Ms. Maria-Kristina Einhaus
- Ms. Lincy Thevalakara
- Ms. Ludmilla Ormenaj
- Ms. Petra Ott
- Mr. Dani Kashouh
- Mr. Oliver Authried
- Ms. Eugenia Coman
- Ms. Rhonalyn Rectra
- Ms. Senorita Schmidt
- Ms. Nadia Akumuntu Mudeli
- Ms. Natalija Ivankovic
- Ms. Anna Stanczyk
- Mr. Guo Li
- Ms. Zhu Li
- Ms. Song Bo
- Ms. Xiao Li
- Mr. Wendengoudi Ahmed Rahim Sore

### Interns:

- Ms. Martina La Valle
- Ms. Anna De Vecchi di Val Cismon
- Mr. Marc Fernandez
- Ms. Stephanie Hasenoehrl
- Ms. Lisa Holzer
- Ms. Hanlu Hu
- Ms. Sargun Kaur Sachdeva
- Ms. Mari Kinoshita
- Mr. Rui Liang
- Mr. Jacopo Moreschini
- Mr. Mashifu Noguchi
- Ms. Susanna Onyemauwa
- Mr. Shusuke Oyobe
- Mr. Matthaus Schuster
- Mr. Daniele Vagnoli
- Mr. Zhengyang Xu
- Ms. Nataliya Yaremchuk
- Mr. Cong Zhu
- Ms. Christi Thomas
- Ms. Nazrat Abdulrazak

## Co-Organizer

### Finance Center for South-South Cooperation

- Mr. Cai E-Sheng
- Mr. Wu Zhong
- Ms. Zhao Je
- Ms. Hu Jiewen

## Activity-Level Partners

### City of Vienna

- Ms. Alena Sirka-Bred
- Mr. Richard Gauss
- Ms. Tanja Wehsely
- Ms. Regina Wiala-Zimm

### China International Center for Economic and Technical Exchanges

- Mr. Zhang Yi
- Ms. Zhang Wei

### Vienna Business Agency

- Mr. Gerhard Hirczi
- Ms. Sabine Ohler
- Ms. Zhang Xiaojun

### Vienna Chamber of Commerce

- Mr. Alexander Biach
- Mr. Hannes Hippacher
- Mr. Gian Paolo Spadola

### Urban Innovation Vienna/Smart City Vienna

- Ms. Pamela Muehlmann

### Center for International Economic and Technological Cooperation, Ministry of Industry and Information Technology of China

- Mr. Xu Kemin
- Mr. Yang Dongwei
- Mr. Zhang Qiang

### Institute of New Structural Economics, Peking University

- Ms. Yu Jia

### Social City Vienna/ Impact Finance Organization

- Mr. Richard Vrzal
- Mr. Ionut Emil Diaconu
- Ms. Jenny Kuhn

### Organization for International Economic Relations

- Ms. Kari Aina Eik
- Mr. Lukas Ertl

### Urban Forum

- Mr. Bernhard Mueller

### International Cultural Diversity Organization

- Ms. Josipa Palac

## Special Thanks

Special thanks go to the National Development and Reform Commission (NDRC) of China for their throughout support to the event, particularly for case cities nomination, which indicated a clear implementation of UNIDO–NDRC Memorandum of Understanding on the Belt and Road Initiative.

### National Development and Reform Commission of China

- Mr. Zhang Yong
- Mr. Li Bin
- Ms. Zhang Qin
- Mr. Zhou Qiang

Special thanks go to all Case Cities and their governments for their support and in-depth involvement in the event.

**Chengdu:** Chengdu Municipal Development and Reform Commission, Chengdu Municipal People's Government, China

**Vienna:** City of Vienna, Austria

**Shanghai:** Shanghai Municipal Commission of Commerce, Shanghai Municipal People's Government, China

**Trieste:** Friuli–Venezia Giulia Autonomous Region and Municipality of Trieste, Italy

# SUMMARY OF PROCEEDINGS



Director General, Mr. LI Yong acknowledged the great progress that the “BRIDGE for Cities” event has made, with an increase in participants from numerous countries. He extended his appreciation to all partners for their strong support and expressed the importance of the Belt and Road Initiative (BRI) in establishing a technical basis for strong cooperation to encourage investment and innovation. He stressed that the “BRIDGE for Cities” event is intended to channel efforts towards achieving the Sustainable Development Goals (SDGs), especially SDG 9 in the context of the BRI.

Mr. LI recognized the progress made in the last 5 years that brought the BRI from concept to actions, as testified by the increase in number of participating countries as well as the level of investments. This point is important as it demonstrates the effectiveness of the BRI in representing ideas of multilateralism and globalism, which foster peaceful cooperation and knowledge sharing. The BRI will continue to be an important driver for development, especially for digital economy, where innovation will connect markets bringing inclusive development that benefits all countries.

Cities will be leverage points for expanding the opportunities of the BRI, as they serve as crucial nodes for trade. Therefore there is a need to share some strategic goals for sustainable urban development, including infrastructural development, scientific research and innovation. Development will require policy frameworks and dialogue to help bring ideas from their early stages of theory into practice, and to find solutions that benefit all. Diversified financial services and industrial cooperation are essential for achieving the SDGs.

The BRI therefore works towards achieving the Sustainable Development Goals (SDG), ensuring inclusive, safe and resilient cities by laying the framework for clean energy, innovation and job growth. Everyone involved in the expansion of the BRI is encouraged to think ambitiously about its possibilities.

UNIDO Director General then invited all participants to save the date for the 4<sup>th</sup> “BRIDGE for Cities” event, to be held in Vienna from 3 to 5 September 2019.

### **Global Goals for Local Impact: Strengthening Policy Coordination for the Successful Implementation of Development Goals**

Infrastructure is the backbone in achieving SDGs and especially SDG 9. Proper infrastructure planning and implementation can avoid lock-ins such as negative influence towards climate change, loss of biodiversity, resource depletion, pollution, social stress and inequality, all of which carry serious implications that hinder sustainable development. Therefore infrastructure projects must respect common standards and frameworks to base all relevant works on a global consensus on sustainable development and resiliency. Although this process takes time and effort, it is the only way to measure whether the SDGs are actually being realized in line with industrial development.

Connecting cities with stakeholders to foster innovation, and share strategic choices and advice provided by the coordination of private and public sectors is essential in order to strengthen cooperation between political, social and economic actors to realize sustainable development at a local level.

The BRI is therefore an opportune platform in implementing these goals in the urban setting.

### **Financing the Future: Strengthening Multi-Stakeholder Partnerships to Finance Inclusive and Sustainable Urban-Industrial Development**

Financial institutions support sustainable infrastructural development by bringing together industry-wide interest partners, including municipal governments and business enterprises, to raise urban and rural projects at high social and environmental standards.

The challenges facing cities are accelerated by unprecedented speed of expansion, and investments made now will be crucial for the future, as cities are the key economic centers for industrialization. Industrialization can bring negative environmental impacts and therefore financial institutions must hold their own policies for projects to ensure environmental and social sustainability criteria that are comparable in the international context. Small and Medium Enterprises (SMEs) represent a majority of the business sector in both developing and developed countries and are envisaged to play an important role in the setting of future development. Initiating activities to support entrepreneurs is therefore a crucial component to foster their development, which leads to the concept of ‘developing as a whole’. Initiatives shall encourage multi-level partnerships by providing a platform for key stakeholders to frame together sustainable urban-industrial development projects’ fit for financing.

## **Cities of Tomorrow: Technological Solutions and Holistic Approaches for Sustainable Cities**

The coexistence of people and nature should be at the core of the dialogue towards achieving sustainable development in the urban context. This is especially important in a growing population where an expected 70% of the global population is expected to dwell in urban areas by mid-century. Time is pressing and strategic plans need to be made to ensure minimal contribution of human settlements towards climate change by improving city resilience, especially in developing countries.

Waste recycling must be adopted to mitigate pollution and resource degradation as well as investing in green technologies, improving health quality, and maintaining cultural heritage. Making cities more beautiful will not only serve the citizens but also benefit the tourism industry as well.

A liveable city can be achieved with careful consideration of the core functions that encapsulate a city including social housing, public transport, business enterprises, water quality, waste management, and healthy maintenance of green spaces. Strong policy frameworks and proper investments will be needed to integrate functions together in a cooperative manner. High quality health care and smart strategies are crucial cross-cutting interventions for maximizing the welfare and well-being of people in cities.

### **Sustainable City: Urban Port Industrial Symbiosis - Case City: Trieste**

Trieste has a long history of trade which transformed a small village into a trade hub, fostering large trade flows favored by the city's position as a major gateway to Central and Eastern Europe. The city has many competitive advantages including geographic location, intermodal transport connectivity, deep shipping berths, and a special free zone regime. Sustainable transport will require connectivity between various modes of transport that are non-polluting and therefore reduce direct emissions and traffic congestions. This involves the discouragement of private vehicle usage and the fostering of slow mobility like cycling by connecting paths with the railway network.

Connectivity ensures a smoother functioning of systems and therefore aids towards better development options. Establishing industrial and science parks through cooperation is therefore important to support innovation to enable such systems and will require symbiosis of industry, trade and science.

### **Smart City: Smart Productivity and Trade - Case City: Shanghai**

Shanghai has gone through significant development to become the large economic hub it is today. It is now working to implement smart measures by integrating digital technology into its public services and urban strategies. Achieving a smart city status requires deep integration of the components that make up a city, including smart transportation, smart industry, smart planning and construction. All of these components will require connections, big data and the internet. Fundamental strategic frameworks in the science and technology sector should foster innovation and development to strengthen advanced manufacturing and modern service sectors.

Artificial intelligence (AI) will play an important role in the next technological revolution, with the overarching aim to improve the lives of people living in cities. Examples can be envisaged through AI applications in medical practices, AI in financial institutions and AI as an overall tool to help achieve the SDGs.

Strong industrial ecosystems not only require money and land, but also talented players to lead the industry forward and to keep innovating. Therefore learning in the digital age, namely through online learning platforms that allow greater accessibility and dissemination of knowledge, will help to develop the academic community.

### **Liveable City: Soft Environment for Urban Investments - Case City: Vienna**

Numerous factors are needed to realize a liveable city's urban investment environment, which fosters further sustainable development. Stable economic growth, policy, regulation, and efficient infrastructure are some of the hard and soft factors contributing to attract investments that allow interconnections and further innovation, so to enhance the well-being of people, creating an ideal environment that upholds high quality of urban life.

There is a continuous need to improve the current system to accommodate the dynamic environment considering modernization and the changing demography. Quality of life is gaining more importance when evaluating the attractiveness of cities. Therefore municipalities must create environments that foster a qualitative way of living

providing adequate services (e.g. health care) to the citizens.

Digitalization is the backbone for innovation, as it enriches new ideas, encourages co-production and citizens' involvement. A mobile application that connects people with the local government can provide a platform to involve citizens in development dialogue. The liveability of Vienna was achieved by considering the citizens first, fostering social inclusion and providing good services for all without bias.

Dialogue is a key concept towards achieving success and stability. Enlarging dialogue can further improve cities and serve the people.

### **Park City: Urban Agribusiness - Case City: Chengdu**

Chengdu is proceeding on a path of green development by incorporating green mobility, clean energy and green parks into urban landscapes with ecological conservation as its core principle.

Exponential consumption is scientifically proven to lead to systems collapse. Given the alarming exponential behavior of human consumption, production, and land degradation, there is a strong need for dialogue to transition away from the existing linear economy in favor of a closed loop circular system that retains the value of products in economic-related materials flow. Indicators such as the nine planetary boundaries developed by the Stockholm Resilience Centre exhibit alarming environmental signs that cities must further phase out the present consumption-heavy system.

Rural areas play an important role for green development, as they promote biodiversity and provide ecological systems to support green development. Being a key center city in China with favorable agricultural conditions, Chengdu is paving a solid pathway towards realizing green development through an ambitious vision for its development. Technology and innovation will foster modern agricultural practices that provide quality products for trade, especially pollution-free and organic foods. Chengdu's green vision is leading the green revolution not only in China but also as a role model for cities in other countries.

### **Workshop on Industrial Policy**

Given that industrial policy is practiced in all countries, its proper planning and implementation can help towards achieving the 2030 Agenda. SDG9 in particular requires countries to orient their industrial policies to support a growth model that boosts productivity, while considering the sustainability of industrial operations. Industrial policies for technology transfer ensure capacity building for green development, especially in developing countries. Support for industrial policies requires coordination amongst various sectors and stakeholder at the supranational level, so to realize global and regional economic ecosystems that achieve fair competitiveness, resilience and productivity.

Industrial transformation must be supported with suitable policies, aimed at fostering rising incomes, reduction of costs and time for transport, diversification of trade and strengthening inter/intra-regional cooperation. Policies must be justified and utilize financial, non-financial, and systematic instruments that help towards their formulation. Special Economic Zones are an example of applied policy that can stimulate economic benefit to be adopted at various points along an economic restructure.

### **Matchmaking of SMEs along the Belt and Road**

SMEs have a large impact on national economies, as they create jobs, improve living standards, and contribute to rising economic output and exports. Therefore investments must be made to promote SMEs in line with policies supporting sustainable growth, including the optimization of the environment for development, enhanced market accessibility and the facilitation of resource sharing from large enterprises to smaller entities through collaboration and innovation. There is huge potential along the BRI and SMEs should be integrated in the economic prosperities.

# PROCEEDINGS



*“The “Belt and Road” Initiative, with its emphasis on inclusive partnership and cooperation, can serve as an effective tool for the advancement of the 2030 Agenda for Sustainable Development.”*

*Mr. Li Yong, Director General of UNIDO*

## WELCOMING ADDRESS AND OPENING REMARKS

**Mr. LI Yong, Director General, UNIDO**

Excellencies,

Distinguished Guests,

Ladies and Gentlemen,

Friends and Colleagues,

It is a great pleasure to welcome you once again to Vienna for the 3<sup>rd</sup> edition of UNIDO's "BRIDGE for Cities" event.

From our first event held in September 2016, we have come a long way. From 450 participants from 50 cities in 2016, to 650 participants from 136 cities in 2017. This year, the event attracted over 1.057 participants from 188 cities. Thank you for being here today, and for your strong support.

I am pleased to see the growing interest and momentum in this event. As many of you may know, the 2030 Agenda for Sustainable Development's Sustainable Development Goal 9, that calls for the promotion of inclusive and sustainable industrialization, along with fostering "innovation". Innovation is important to UNIDO and with this being one of UNIDO's flagship initiatives; we are constantly finding ways to innovate, exploring new modalities and ways of working to achieve our ISID goals.

For this year's event, we are focusing on maximizing the tangible benefits that this event can bring to our stakeholders in the cities. UNIDO stands ready to provide and utilize our know-how and in-depth technical expertise on making ISID a reality at the city level.

To achieve this aim, four case cities have been selected through a nomination process, resulting in the identification of Trieste, Italy; Shanghai, China; Vienna, Austria and Chengdu, China as our case cities. Each city, based on its development priority, was matched with a specific UNIDO technical area. In the months leading up to today's event, in-depth city assessments, followed by roadshows, were conducted in each case city to identify and highlight ongoing and future projects. The aim of these activities, beyond the establishment of a solid base for technical cooperation between UNIDO and the cities, is to assist cities in their efforts to promote and facilitate investments in their priority sectors.

Ladies and Gentlemen,

As part of our effort to encourage innovation through our "BRIDGE for Cities" platform, a key component in the city assessments and the roadshows was the identification of cutting-edge projects through business plan competitions organized with the support of our business-sector partners. Over 80 business plans were received from inspiring young entrepreneurs, from which a total of 12 business plans were selected to present their vision to an audience made up of local authorities, international organizations, financial institutions, as well as other development stakeholders.

These competitions are aimed at bringing innovative solutions to cities to help them with their development challenges. BRIDGE for Cities is also providing an international platform for these solutions to be promoted in cities along the Belt and Road and beyond. I am pleased to share with you a few key outcomes for this year's event and its featuring case cities:

- The involvement of Trieste paved the way for a partnership between UNIDO and the World Trade Centers Association on promoting South-South and triangular industrial cooperation, through the network of 320 World Trade Centers in 90 countries;
- The Shanghai Business Plan competition helped us identify a very innovative Artificial Intelligence based startup “Westwell lab” who is working on a smart port project;
- Taking Vienna as a benchmark as a liveable city, we developed an issue paper and identified key ‘soft factors’ that contribute to enhancing a city’s investment environment;
- Chengdu and its new ‘Park City’ concept, which encompasses urban agriculture; recycling; green spaces and sustainable industrial practices, created several technical cooperation opportunities for UNIDO.

Through this year’s event structure, UNIDO aims to follow up closely through our established network of cities to build partnerships and facilitate technical cooperation with our partners. I would therefore like to take this opportunity to express my sincere gratitude towards each of the four case cities for their support and their confidence in UNIDO’s capacities and technical expertise in ISID and putting trust into our convening role.

Ladies and Gentlemen,

The “Belt and Road” Initiative, with its emphasis on inclusive partnership and cooperation, can serve as an effective tool for the advancement of the 2030 Agenda for Sustainable Development. The UN Secretary-General António Guterres aptly put it during his speech at the opening of the Belt and Road Forum in 2017 that both the “Belt and Road” Initiative and the 2030 Agenda strive to create opportunities, global public goods and the principle of win-win cooperation, with sustainable development as their shared overarching objective.

Your strong participation today not only validates the significance of the “BRIDGE for Cities” platform in facilitating partnerships for sustainable urban-industrial development along the Belt and Road, but also highlights the importance and role of cities in the advancement of the 2030 Agenda for Sustainable Development.

The success of this flagship event will not be possible without the strong support of our partners. I would like to take this opportunity to thank our co-organizer, the Finance Center for South-South Cooperation, for their strong support for the third year in a row, as well as the City of Vienna, which has not only been an excellent host, but also one of the case cities for this year’s event.

As I conclude, I am pleased to announce the dates for the 4<sup>th</sup> “BRIDGE for Cities” event. It will be held in Vienna from 3 to 5 September 2019.

Please save the date for next year. Let us work together to upscale the benefits of this platform by translating opportunities into concrete actions, be it partnerships, projects, or policies. UNIDO stands ready, both now and in the future, to support you in this task.



*“Key - Action”*

*From left to right: Mr. M. Eftekhar,  
Mr. C. E-Sheng, Ms. B. Gierlinger,  
Mr. Y. Li, Mr. Y. Zhang,  
Mr. M. Fedriga,  
Ms. S. Di Pippo*



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

3<sup>rd</sup> ann



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心

A graphic for the 'BRIDGE FOR CITIES' logo, consisting of several flowing, wavy lines in shades of green and blue, with small yellow stars scattered throughout.

# BRIDGE FOR CITIES

Belt & Road Initiative:  
Developing Green  
Economies for Cities

Annual "BRIDGE for Cities" event

9 to 11 October 2018

Vienna International Centre  
Vienna, Austria

## HIGH-LEVEL POLICY DIALOGUE – OPENING CEREMONY

### Ms. Ayumi Fujino, Director, Office of Strategic Planning and Coordination, UNIDO



*Ms. Ayumi Fujino*

During the high-level policy dialogue our speakers will present their vision on inclusive and sustainable urban-industrial development.

### Mr. Li Yong, Director General, UNIDO

Comparing numbers from previous “BRIDGE for Cities” events, attendance has grown significantly. The event serves as an open platform for exploring ways to achieve the 2030 Agenda and its Sustainable Development Goals, specifically goal #9: Industry, Innovation, and Infrastructure. The focus is on maximising tangible benefits that the event can bring to stakeholders in cities. UNIDO is ready to provide and utilise its knowledge base and technical expertise to bring concrete results to the city level.

Through this year’s event structure, UNIDO aims to establish a technical base to achieve inclusive and sustainable urban industrial development to provide an opportunity for cities to build partnerships. The case cities were acknowledged for their support and trust. The Belt and Road Initiative (BRI), with its emphasis on exclusive partnership, can serve as a factor to mobilize action towards realizing the 2030 Agenda for sustainable development.

### Ms. Bernadette Gierlinger, Viceminister at the Federal Ministry of Digital and Economic Affairs of Austria

The economic importance of the BRI is huge, as it offers improved connectivity between Europe and Asia, as well as enormous potential for economic cooperation between Austrian and European businesses and China. The intervention will focus on three aspects: how sustainability can be ensured throughout the initiative in an unpredictable environment; Austria’s contribution to sustainable urban development; and the SDG Business Forum launched by the Federal Ministry of Digital and Economic Affairs of Austria.



*Mr. Li Yong, Director General of UNIDO*

On the first point, it is important that a close collaboration is established, in which the BRI plays an important role as a platform that enables connectivity and incorporates sustainability in its projects. However, there is still a need to assess the associated risks and meet ISO standards. Investment in infrastructure and connectivity can improve living standards by providing employment, transportation, and sanitary facilities. Whilst the initiative will lead to economic growth, it is important to ensure that growth does not impact or worsen environmental and social issues. To build sustainable cities means to make human settlements safer, more resilient, and environmentally neutral. It is important to invest in sustainable infrastructure such as renewable energy and green and low-carbon architecture and all relevant stakeholders must be encouraged to meet the SDGs. On the second point, Austria’s contribution, it is believed that countries must share their knowledge to achieve a common goal. The global success and expertise of Austrian green technologies has been remarkable, and Austria can greatly contribute to sustainable urban development by sharing its knowledge and technical skills.



*Ms. Bernadette Gierlinger*

Finally, the SDG Business Forum is an ongoing initiative that shows to Austrian companies the benefits of respecting the sustainable development goals, and the importance of evaluating and identifying what challenges companies are facing and what regulatory framework is required for engagement. Dialogue should be supported to foster collaboration and concrete initiatives for implementing sustainable development.

#### **H.E. Mr. Zang Yong, Vice Chairman, National Development and Reform Commission**

The BRI, in the last 5 years since its announcement in 2013, has become an important initiative that

has transitioned from concept to action. The level of investment has increased since 2013, with many jobs created.

Cooperation between UNIDO and the Chinese government has yielded good results and events have promoted international industrial matchmaking and project cooperation.

Innovation is an important driver of the BRI and the development of a digital economy. The multi-stakeholder win-win market model encourages enterprise key players to promote the economic elements of advancing the BRI construction projects and sharing resources.

#### **Mr. Massimiliano Fedriga, President, Autonomous Region of Friuli-Venezia Giulia**

The connection between the Autonomous Region of Friuli-Venezia Giulia (FVG) and UNIDO is strengthening. The position of Trieste is geographically, geopolitically and strategically important for traffic coming from the Far East and through the Mediterranean and Adriatic seas.

Trieste represents a bridge between eastern and western Europe. It is important to highlight in the dialogue with relevant counterparts the importance of access, and the possibility of industrial settlement in the free trade zone and the possibility to activate an advanced logistics platform. The “BRIDGE for cities” event is an opportunity for dialogue aimed at widening international cooperation and serves the potential of developing significant partnerships in many sectors.



*H.E. Mr. Zhang Yong*



*Mr. Massimiliano Fedriga*

#### **Mr. CAI E-Sheng, Chairman, Finance Center for South-South Cooperation**

UNIDO, through the “BRIDGE for Cities” event has provided a platform for dialogue, aiming at attaining the 2030 Agenda for Sustainable Development.

This year's theme of innovation and city development has turned from policy formulation to dialogue, from theory into practice and incorporates solutions through high-level policy development, providing opportunities for stakeholders to build partnerships, as all SDGs require diversified financial services and cooperation.



*Mr. Cai E-Sheng*

The Finance Center for South-South Cooperation was established and given special status exactly to pursue the same objectives.

It is a non-profit international organization which serves as an integral platform specializing in production capacity cooperation, development experience exchange and financial services.

**Ms. Simonetta Di Pippo, Director, United Nations Office for Outer Space Affairs**

Sustainable urban development will have a huge impact on development as by 2030 half of the world's population will live in cities. This fact has an impact on industry, innovation and infrastructure, and for sustainable communities.

The BRI aligns with the 2030 Agenda for Sustainable Development and strives for win-win cooperation for all partners through its whole societal approach for successful implementation. With contributions required from all sectors and stakeholders, the space sector has a key role through providing direct benefits from telecommunication satellites and geo location services.

Space science and satellite technologies are integral components of our modern society and they can be extremely important for integrating informed decisions on the urban environment within city projects.

United Nations Office for Outer Space Affairs (UNOOSA) works to optimise city planning, manage disasters and emergency responses, and wherever possible, bring the benefits of space to everyone. One main objective is to link individual user and user communities from all sectors with space solutions.

UNOOSA is now cooperating on the BRI, and a declaration of intent has been signed to this effect.



*Ms. Simonetta Di Pippo*

**Mr. Mehran Eftekhari, Chairman of the Audit and Risk Committee for the World Trade Centers Association; Director of the World Trade Center Cyprus**

Since the BRI was introduced five years ago, it has gained great support across continents and is a great showcase of leadership from China, as it contributes to common causes around the world. It will not only bring substantial capital, infrastructure, building capacity and manufacturing know-how to countries along its route but also access to China's tremendous market.

The Belt and Road Initiative will improve basic infrastructure, facilitate trade and investment, and accelerate the integration of supply chains.

The board of directors of the World Trade Centers Association (WTCA) recognizes the importance of the BRI to



*Mr. Mehran Eftekhari*

advance developing economies, and by adopting a resolution to support this initiative as of April 2016, continues to offer support with their global network. Together it is possible to identify and jointly leverage the global network of public and private entities to utilise a framework of collective knowledge to achieve goals.

WTCA believes that these initiatives will proactively support the economic development of countries, increase exports, and will result in mutual and integrated good for all.

**Mr. António Guterres, Secretary-General, United Nations (Video-Message)**

The United Nations have embarked across the world on the crucially important work of building more sustainable and prosperous cities and the Belt and Road Initiative is an important part of that effort.

The cities of the future need to be inclusive, safe, dynamic and resilient: places that foster job growth and innovation and where the air is clean, energy is renewable, and waste is being reduced and recycled. Around the world, cities of the present are taking action to make this greener future a reality.

United Nations count on their continued leadership and encourage urban development stakeholders to think creatively and ambitiously to help achieve a more sustainable future on a healthy planet.



*Video Message from United Nations Secretary General, Mr. Antonio Guterres*

## SIGNING CEREMONY



*Mr. M. Eftekhar and Mr. H. Kuniyoshi sign the Memorandum of Understanding between WTCA and UNIDO*

UNIDO and the World Trade Centers Association (WTCA) – represented respectively by Mr. H. Kuniyoshi, Deputy to the Director General, and Mr. M. Eftekhar, Director of the World Trade Center Cyprus – on the occasion of the 3<sup>rd</sup> “BRIDGE for Cities” event signed a Memorandum of Understanding on promoting South-South and Triangular Industrial Cooperation.

As one of the first key follow-ups, UNIDO will work closely with WTCA to co-organize business forums and matchmaking events along the Belt and Road.

WTCA will act as a supply side partner, building upon WTCA’s network of 320 members in 90 countries, to work to develop joint projects, programs and activities as well as to identify appropriate sources of funding.



*Mr. M. Eftekhar and Mr. H. Kuniyoshi after signing the Memorandum of Understanding*



*Mr. Li Yong presents souvenirs to dignitaries*



*Mr. Li Yong and Ms. Bernadette Gierlinger*



*Speakers of High-Level Policy Dialogue*



*Ms. Bernadette Gierlinger and Mr. Li Yong*



*Welcome speech by Mr. Cai E-Sheng*



ORGANIZATION



FINANCE CENTER  
SOUTH-SOUTH COOPERATION  
南南合作金融中心



**BRIDGE  
FOR CITIES**

Belt & Road Initiative:  
Developing Green  
Economies for Cities

3<sup>rd</sup> annual "BRIDGE for Cities" event

9 to 11 October 2018  
Vienna International Centre  
Vienna, Austria

*Key-Action*



*Key of Opening Ceremony*

## SESSION 1

### Global Goals for Local Impact: Strengthening Policy Coordination for the Successful Implementation of Development Goals

#### Ms. Katharina Schneider-Roos, CEO of Global Infrastructure Basel



*Ms. Katharina Schneider-Roos*

Infrastructure is the backbone of the SDGs and financing is required for their achievement. Infrastructure in emerging and developing countries is estimated to account for the vast majority of the required finance to meet the SDGs. Sustainable infrastructure enables other goals to be achieved, at a lower cost and by enhancing the impact of other measures, such as affordable and clean energy. Therefore the BRI offers a chance for infrastructure to align with the SDGs by incorporating carbon neutral standards.

A recent Intergovernmental Panel on Climate Change report emphasized the reality of climate change with far-reaching impacts on things such as infrastructure. In the long run it will lead to more than just cost, but also economic crisis, conflict,

and regional instability. When working with international organisations around the world, three elements were defined for defining best practices: environment, society, and government.

There are five key potential barriers to the uptake of sustainability standards in the infrastructure sector: lack of adequate incentives, lack of clarity between standards, complexities of regional and local laws, and a perception that it will increase cost and take time. A framework is required for standards along the BRI to address these barriers. The aim will be to reduce GHG emissions, ensure climate resilience, and ensure compliance with international standards, improving creditworthiness of projects and potentially attracting further investment.

The capacity element should be addressed to simplify the process of implementing the standards for all countries and making data access easier; UNIDO is best placed to provide these kinds of services.

#### Mr. Massimiliano Fedriga, President of the Autonomous Region of Friuli-Venezia Giulia, Italy

Consistency between regional and local development policies is very important; and this event is an important step in this direction. UNIDO has an active role in bringing solutions to achieve these objectives and the BRI is a fundamental step for developing the territory of the Autonomous Region of Friuli-Venezia Giulia (FVG). The initiative requires multi-level governance and it is important to engage with stakeholders on an international level to find solutions.

The FVG focuses on innovation for products and on guaranteeing high quality. Innovation is occurring in several countries and can be strengthened and improved by sharing strategic decisions and testing new approaches and best practices aiming at creating new jobs and investment. Regions and cities can and must offer a contribution,



*Mr. Massimiliano Fedriga*

and this must be done in coordination with public and private institutions. Challenges are still faced, such as the coordination of local and global policies, and strengthening connectivity. UNIDO offers an important role for partners and laying out the correct path.

### **Ms. YANG Wei, Founder and Chairman of Wei Yang & Partners**



*Ms. YANG Wei*

It is important to increase understanding of how the BRI relates to, and can improve quality of life at a local level.

### **Mr. YU Lifeng, Deputy Director General, Foreign Economic Cooperation Center, Ministry of Ecology and Environment of China**

The progress of the Green BRI is closely related to sustainable development, promoting investments in clean energy and strengthening partnerships in global energy development. The main tasks are green development, ecological and environmental security, abiding by laws and scientific planning, and promoting sustainable production. It is important to emphasise the

concept of ecological civilisation, enhanced ecological and environmental policy exchange and to maintain the basic principles of the BRI for peaceful cooperation and shared benefit.

The BRI encourages Chinese investments in foreign projects and there are various platforms to promote joint actions. One potential platform is industrial cooperation, including diffusion of standards and enhanced communications. Another is promoting the development of green finance to guide investment decision making. Urban development is a key component in the Green BRI, as cities are facing common challenges in environmental protection as populous hubs for development. China offers the world a public good through this large platform for international cooperation which can resolve the dilemma of choosing between industrial development and environmental sustainability.



*Mr. YU Lifeng*

### **Ms. Mariline Diara, Director of Environment and Classified Establishments, Ministry of Environment and Sustainable Development, Senegal**

The Senegal national strategy increasingly prioritizes industrial development: the national policy document is evolving and puts more emphasis and efforts to achieve sustainable development. Senegal's effective new governance is in the process of making a regulatory diagnosis with the support of UNIDO to put in place a framework that allows the development of the country's economy as well as the growth of local economy. For this reason, the government must work closely with cities and their mayors, but also take into account the population, who must benefit from this industrial boom.

To achieve the SDGs through measurable indicators, specific criteria must be defined. Senegal is setting up tangible targets and measurable indicators relating to renewable energy, energy efficiency, waste management, and stabilising greenhouse gases. Small and Medium Enterprises (SMEs) from various sectors must be built



*Ms. Mariline Diara*

up to benefit at the local level and be part of sustainable development in line with the 2030 objectives, especially improving the use of resources towards a circular economy. Industrial parks are at the core of national policy assessments and a national platform will be set up to foster the development of research between universities and technical institutions to advise industry standards and processes. The desire is to develop impact programmes by scaling up pilot projects with other cities in Senegal who are realising the impact on industry.

In conclusion, each panellist contributed one comment about what the BRI should do as a priority.

**Mr. Massimiliano Fedriga**

The capacity of enhancing logistics and infrastructural connections between eastern and western Europe are the key priorities to be addressed by the Friuli-Venezia Giulia Region in the framework of the BRI.

**Mr. YU Lifeng**

The green BRI can contribute to connectivity between countries along the route and the surrounding people can enjoy cultural, economic, and social benefits.

**Ms. Mariline Diara**

Working on a local as well as national level is important, and looking out for and sharing best practice has benefits.

**Ms. Katharina Schneider-Roos**

Consensus on developing standards as well as localising them is important. It takes time, but it is worth the effort because this is the way how we can measure if the SDGs have been implemented in a concrete way. BRI can be a driver of implementing the SDGs on an infrastructural and city level.



*Mr. Massimiliano Fedriga*



*Ms. Mariline Diara*



*From left to right: Mr. M. Fedriga, Ms. M. Diara, Ms. W. Yang, Ms. K. Schneider-Roos, Mr. L. Yu*



*Ms. Katharina Schneider-Roos*



*Ms. Yang Wei*

### Belt & Road Initiative and Win-Win Cooperation – Member States' Point of View and Expectations

**Mr. Bernhard Müller, Former Mayor of Wiener Neustadt; General Secretary, Urban Forum, Austria**



*Mr. B. Müller*

The United Nations predicted in 1992 that the future will be urban. Building on that vision, at the “BRIDGE for Cities” event we consider cities as bridges for development.

**Mr. Thomas Weninger, General Secretary of the Austrian Association for Cities and Towns**

In order to understand what is happening in any nation it is necessary to look what actions are being taken at local level.

The Austrian Association for Cities and Towns uses as reference for its action the abbreviation “S.M.A.R.T.”, which synthetizes the core elements necessary to build new, modern, and smart cities:

sustainability, mobility, attractiveness, resilience, tolerance and talent.

**Mr. Peter Buchas, Business Consulter and Member of the Austrian Chinese Business Association, Austria**

Over the last five years, European businesses things have experienced difficulties when operating along the Belt and Road, and there are examples of rejection, which means that some European countries are reconsidering their support to the Initiative. Some projects are not delivering the expected results, both in Asia and in Europe.

Two years ago in Germany infrastructure was launched alliance, a vehicle for bringing big enterprises in Europe and match them with Chinese enterprises. Those enterprises are also cooperating for applying and integrating their solutions at urban level for achieving smart cities. The Austrian-Chinese Business Association is working for expanding this framework further, to allow European countries to successfully collaborate with Asian partners.



*Mr. P. Buchas*

**Mr. Bartosz Piziak, Project Coordinator – Researcher, Department of Economic Processes, National Institute for Spatial Present Policy and Housing, Poland**

Cities are the core topic of our Institute’s activities. In Poland, smart cities are still in the developing process and could learn extensively from the Chinese experience.

The Belt and Road Initiative was symbolized in Poland by the first train connection between China and Poland, via Kazakhstan, Russia and Belorussia. Poland can be the gate for China to the European Union, as its economy is growing and provides a good investment environment.

**Ms. Julia Grüber, Economist, Vienna Institute for International Economic Studies, Austria***Ms. J. Grüber*

The Belt and Road Initiative has an undeniably potential but it is important to highlight also the challenges and risks. Since 2012, China is focusing on Eastern and South-Eastern Europe and in 2014 the format of the 16+1 was introduced.

Vienna Institute for International Economic Studies presented a policy brief in which the potential outcomes of the BRI in Eastern Europe and the Balkans are analysed. The documents points out that, especially for Balkan countries, there are clear economic benefits deriving from the fact that trade flows will pass in Montenegro, Serbia, Bosnia and Herzegovina, with a potential GDP growth of about 10%.

At the same time, some severe challenges can be observed. One important risk is the “debt trap”: examples in Sri Lanka and Malaysia show that if countries are not able to pay back the debts contracted with China they may be forced to cede to China the control over key infrastructure. Another point to be considered is that there is a risk that economic dependence may become political dependence. For example, after COSCO acquired the majority of stakes in the Piraeus port, Greece did not sign a European Union’s statement in favour of the respect of human rights in China. For what concerns environmental aspects, it is clear that China is striving to reduce coal consumption and pollution on its territory but at the same time, Chinese enterprises are building highly polluting coal-fired plants along the Belt and Road countries.

Moreover, the BRI might lead to further intra-European discussions, as some member states may not follow European-set public procurement rules. Additionally, it is important to stress that for being beneficial for recipient countries, Belt and Road relate projects must consider local employment and not just transfer Chinese manpower in partner countries. For what concerns Austria, it is an observer member of the 16+1 format, thing that shows the high political interest in the initiative. If we look at FDIs instead of loans, we can observe that Austria is among the top-5 investors in many Central and Eastern European countries, by far outpacing China for the time being. So, Austria can help – thanks to its expertise – investors from abroad to expand in Central and Eastern Europe, acting as a hub.

*From left to right: Mr. T. Weninger, Mr. P. Buchas, Mr. B. Müller, Ms. J. Grüber, Mr. B. Piziak*

## SESSION 2

### Financing the Future: Strengthening Multi-Stakeholder Partnerships to Finance Inclusive and Sustainable Urban-Industrial Development

**Mr. Marco Sorge, Principal Investment Officer, World Bank**



*Mr. Marco Sorge*

It is important to assess the number of agents involved in any project, and their respective needs for financing. UNIDO has a role to play to ensure that bankable projects attract appropriate private sector partners. Together, stakeholders create preconditions for development by bringing together technical know-how and financing for the best outcome for all citizens.

**Ms. Zheng Quan, Director General, Policy and Strategy Department, Asian Infrastructure Investment Bank (AIIB)**

AIIB has 87 member states from Asia and beyond, including Austria. The core value is to promote lean, clean and green projects. AIIB focuses on

financing infrastructure projects to promote sustainable eco-growth, long-term sustainability, and support for lower-middle income countries to maintain the quality of their assets.

AIIB supports municipal governments as well, and is interested to form partnerships for high standards for which there are three thematic priorities: sustainable infrastructure, cross-country connectivity, and private capital mobilisation. Asia has been more affected by climate change than other regions. With rapid urbanisation, cities are increasingly becoming the engines of national economies, centres of industrialisation, and hubs for trade in Asia. Cities are also where most people will live. Many Asian cities lack adequate infrastructure due to the small fiscal revenue base, lack of access to finance, and weak planning and management capacity of local administrators. Investment in cities' is multi sectorial in nature and requires spatial integration in urban areas in the form of an integral master plan.

Taking a more holistic approach, infrastructure investments in cities can be broadly categorised into four areas: enhancing urban mobility, improving basic infrastructure and city resilience, promoting integrated development, and building freestanding health/education facilities. AIIB's investments are client-driven, outcome-driven, and financial viability-driven. The long-term aspiration is to become a trusted banker in providing financing solutions for cities in Asia to achieve the AIIB objectives: green, resilient, efficient, accessible, and thriving (GREAT).



*Ms. Zheng Quan*

AIIB's implementation approach consists of a clear vision and strong capabilities, strong financial positioning, and robust governance through clear frameworks. However, AIIB strives to maintain contextual flexibility and being a new bank brings challenges due to a lack of established relationships. Therefore, AIIB seeks partnerships as an integral part of its business model, and to gain experience through co-financed projects. AIIB aims to prioritise urban mobility and basic infrastructure city resilience projects, gradually moving to projects which promote integrated development, and finally financing more complex projects.

AIIB's implementation approach consists of a clear vision and strong capabilities, strong financial positioning, and robust governance through clear frameworks. However, AIIB strives to maintain contextual flexibility and being a new bank brings challenges due to a lack of established relationships. Therefore, AIIB seeks partnerships as an integral part of its business model, and to gain experience through co-financed projects. AIIB aims to prioritise urban mobility and basic infrastructure city resilience projects, gradually moving to projects which promote integrated development, and finally financing more complex projects.

## Mr. Stefan Dörfler, CEO and Chairman of Board, Erste Bank



*Mr. Stefan Dörfler*

When discussing financing the future at Erste Bank, multi-stakeholder partnerships play a profound role and will do so even more in the coming years. Partnerships increase the level of cooperation amongst civil societies, financial institutions, governments, foundations, and businesses all around the globe. This will be necessary to achieve the SDGs.

SMEs represent the majority of businesses around the world, account for a large amount of economic activity and play a major role in future development. Therefore, SDGs can only be achieved if SMEs are built up and supported from a financial perspective.

Special focus has also been placed on social inclusion as the key purpose of Erste Bank,

which enables all parts of society to access wealth creation. Smart cities are the key for ensuring environmental sustainability and thus Erste Bank is determined to help facilitate financing for energy efficiency and clean technologies. Banks should play a key role in facilitating multi-stakeholder partnerships in business-oriented areas and provide a platform for stakeholders to come together and discuss innovation and share ideas.

## Mr. Roberto Dipiazza, Mayor of Trieste, Italy

Trieste is one of the case city success stories and an ideal headquarters for many commercial establishments.

First established by the 1947 Treaty of Peace with Italy, the free zone inside the port has created a lot of interest and investment as well as funding from the government.

The area is important for many reasons, including its pipelines which supply 5 billion tonnes of oil to neighbouring countries and because of the construction of a cruise port and railways which create good cooperation with Venice for tourism.

Even though there are some bureaucratic hurdles in Italy, Trieste is making a spotlight in trade through their investments in the port, partly because it is easier to develop infrastructure in Trieste than other ports due to the physical depth of the waters. Trieste, the closest port to access Central Europe from the Suez Canal, will be an important link on the BRI.



*Mr. Roberto Dipiazza*

## Mr. Huang Feng, Managing Director, Asia-Pacific Model E-port Network Operational Center

The global market of trade finance is in the trillions. Technology development has advanced international trade flow over the years and has changed the market dynamics. Institutions can receive more data via the use of emerging technologies, such as blockchain-based platforms that provide a new form of trust. This will help SMEs meet regulatory requirements for finance opportunities in order to expand in major markets.

Trade finance will be changed with the power of technology. A new trade ecosystem will develop beyond B2B and include smaller partnerships. Quality Traceability Systems will help trace product origin throughout the supply



Mr. Huang Feng

chain and allow financing access to the trade system with detailed information in real time, fostering cross-border trade and encouraging more finance for SMEs of the future.

**Mr. Marco Sorge**

I have a question for the panel regarding the experience of financial institutions and your attention to SMEs as well as smart city solutions. Mr. Stefan Dörfler and Ms. Zheng Quan, I'd like to ask you if you have any specific examples that could be interesting lessons for other partners represented in the audience.

**Mr. Stefan Dörfler**

Mr. Huang Feng pointed out the challenge of working with SMEs, that when it comes to activities which go beyond typical financing activities, such as anything connected to the needs of the capital market, there will be certain hurdles to face. Therefore it's about finding a broader community of companies driven by the content, in addition to financial institutions.

What are we financing? New specific activities are also pushing forward and they are changing businesses which are supported by public institutions as well as by financial institutions. One important thing mentioned today is speed. We need to get rid of certain bureaucratic hurdles which are stopping us achieving what we want to achieve. The ideas and creativity are there but we lose too much time in Europe before we really get going.

**Ms. Zheng Quan**

We are a new bank but we've been able to co-finance with other entities to support some urban projects. An example would be upgrading projects in Indonesia and India that we co-financed and from which we gained experience from the representative implementing these urban projects. AIIB considers that government and institutional ownership of the city as an integral part of city development plans is a fundamental success factor, as is to comply with national development plans. In addition to that I emphasise the word partnership, for AIIB especially so. Without working together with mature organisations, we do not think we would be as successful. Any project that has an outcome brought around by joint and collaborative efforts requires special responsibility to think about what will be brought to the market.



Ms. Zheng Quan answers the questions

**Mr. Marco Sorge**

I'd like to ask Mr. Roberto Dipiazza: the free zone of the port gives people of Trieste an advantage, but we have other ports not so far from there. The World Bank invested in some other ports that have lower costs from the wages point of view. How can Trieste compete against these ports from the point of view of quality, security, and environmental standards which are mandatory for the city?

## Mr. Roberto Dipiazza



*Mr. Roberto Dipiazza answers the questions*

I had some experiences in project development, a joint project between the city and the private sector. This is an efficient choice and we try to involve the private side in the city, in terms of services, because they can be quicker and more efficient. What is important is an arrival in the Adriatic Sea, and competition in the ports is always good because Trieste wants to compete, and we have advantages compared to other ports. Many ports have an issue of depth, so in that sense, Trieste has an advantage, for example, when compared to Venice.

## Mr. Marco Sorge

Mr. HUANG Feng, how can technology be an asset for competition? You work a lot in solutions for

e-ports: have you seen the trajectory of those ports change since you started working with them? What would be your best examples?

## Mr. Huang Feng

I think that technology is very vital to the competitiveness of a port. So, just take an example: I started working for the trade facilitation field in 2000. At that time, the customer clearance time was quite long in Shanghai, so there is a project just to improve that time. Of course, the solution is to use technology, so we set up a new e-port.

We started operating the e-port from 2003 and four years ago, Shanghai's port started to support a single-window system, which allows integration. We have involved more than twenty government departments and it's possible to go to this single interface to handle all business interactions. It's part of the answer to why Shanghai became the largest player in terms of container handling around the world. Last year, it surpassed Singapore and Hong Kong so that's a very simple example that shows the power of technology and the integration of the different elements.



*Mr. Huang Feng answers the questions*

## Question from the audience:

I'd like to know about AIIB and what it has been doing. How do you increase the sustainability of the cities and could you share with us an example?

## Ms. Zheng Quan

There are multiple components to making a project sustainable and we have policies which uphold high standards. The reason is we found that all institutions have different ways of implementing standards and that's one of our essential operational policies, to make sure all the projects financed must be socially sustainable.

We examine whether a project would generate an economic benefit in addition to running a financial benefit analysis, altogether being an integral part of our due diligence that started from the beginning of the initial project identification, extending towards project implementation. In the end, some of the results are closely associated with socioeconomic environmental outcome.



*Questions from the audience*

### Question from the audience:

In banking, do you have a certain amount of percentage in your budget to support technical cooperation?

How can we make a technical cooperation project fundable combined with a commercial initiative? Do you have facilitation or a mechanism to work together with certain organisations?

### Ms. Zheng Quan

We do not have a concessional window at AIIB, we have a small amount of funds contributed by a few member countries. The funding has the same governance structure as a normal resource and we provide grants to support a project that will be

financed by the AIIB. I think there is space to incorporate the idea in all member countries contributions.

### Mr. Marco Sorge

We are entrusted with resources from a number of governments, I would like to mention Austria as our host and one of our primary donors, as well as the governments of Switzerland and Canada who have the long-term view of trusting the World Bank with these funds.

In terms of projects which would attract the financing of other partners, I think UNIDO has a role to play because whilst the individual donor governments have a specific agenda, they sometimes have their own angle and their own policies and objectives.

UNIDO can really pull it all together in terms of promoting a shared vision and what is the international best practice in development that can be used as a target for all other governments to benchmark against in project preparation.

It's not just the finance that is missing, the point is that there are a very limited number projects that are ready to be financed and that comply with a necessary standard in terms of environmental sustainability and governance, as well as profitability for private investors. It is a combination of building partnerships and creating the preconditions for projects and entire programmes, more broadly, bringing together the finance, the preparation, and the technical knowhow.



*Mr. Marco Sorge answers the question*

### Question from the audience:

You are talking about the XIX Century economy, fossil fuels and so on. I'd like to know what the innovation is, because as Stefan described, Erste Bank has open for 200 years but there is the arrival of new technology. How are we still talking about the old technologies? How do you see the future in terms of these technologies that will change our society completely?

I would like to ask Mr. Huang Feng about the blockchain solutions. What is the scalability of such projects? A lot of things are happening in blockchain technology, especially for supply chain management, but as you are working on rail projects, so I would like to know the scalability of these projects.



*Questions from the audience*

### Mr. Huang Feng

The scalability of blockchain technology is still at the early stages. We have some projects in the financial area relating to supply chain, I think the adoption of this technology is only in its early stage.

Right now, it's quite mature in the track-and-trace field but for the trade finance, I have mentioned that this has just started as a trial in Hong Kong. I cannot say right now that blockchain is already very mature in the supply chain and management, but what I have said is the trend of this new technology is to enhance the connectivity of the supply chain.

As for the other question, I would say that a lot of what we call new technology has existed in the

world for quite a long time before being adopted in a business scenario.

So, you can say this is old technology but once it's adopted in a new area it can create a new business model, for example. From my point of view, I do not think of technology in terms of whether it is new or old, but whether it is useful.



*From left to right: Mr. F. Huang, Mr. S. Dorfler, Mr. M. Sorge, Ms. Q. Zheng, Mr. R. Dipiazza*

## SESSION 3

### Cities of Tomorrow: Technological Solutions and Holistic Approaches for Sustainable Cities

#### Mr. Dennis Pamlin, Senior Advisor, RISE Research Institutes of Sweden AB



*Mr. Dennis Pamlin*

The final afternoon session will focus on the cities of tomorrow. It is time for a more integrated approach, particularly with the BRI.

#### Ms. Yang Wei, Founder and Chairman of Wei Yang & Partners, United Kingdom

There are many large global challenges to face. The population is growing, as well as the concentration of people in cities. With 70% of human population expected to be in urban areas by mid-century, cities must be developed strategically. The issues of climate change are inevitable and urban growth must be achieved in an efficient, sustainable way. Urban planning has been related to social reform of society and that

is the foundation of the modern planning profession. The most important factors at the core of urban planning are health, wellbeing and happiness of the people.

Urban development is not a product but a process which should fulfil what is needed under long-term maintenance, while encouraging people to adapt with changing environments. A good connection is required between plan making and place making. Things should be designed, implemented, measured, and adjusted, for a preserved, integrated planning system. It is necessary to start from a foundation of the natural landscape and understand the people and their needs for coexistence, in order to provide a community with appropriate infrastructure to ensure everyone is looked after, and there are sustainable links to the natural environment. Creating a liveable city is the key to making it sustainable and focussing only on technology can lead to the wrong conclusions. It will be a requirement to think globally, but act locally, and to think about what can be done differently to preserve cultural identity and create places tailored to citizens. It is about working together to create a sustainable place for tomorrow.



*Ms. Yang Wei*

#### Ms. Simonetta Di Pippo, Director, United Nations Office for Outer Space Affairs

UNOOSA, through its role as capacity builder, global facilitator, and gateway to space has the responsibility of bringing the benefits of space to humankind. There is evidence of a rapid growth of space technology, data sharing and their potential towards sustainable development. UNOOSA is bridging the space divide by not only working on the technologies, but also promoting international cooperation and integrating assets and infrastructures in order to provide the best possible services and applications on Earth.



*Ms. Simonetta Di Pippo*

There are several agreements signed with space agencies, the private sector and NGOs. The development of the Space2030 Agenda analyses how the UN should deal with space activities, and focuses on thematic priorities of climate change mitigation, disaster prevention, integrated space applications and interoperability with ground systems. The UN-SPIDER is a knowledge portal which provides a platform to facilitate the use of space-based technologies for disaster management and emergency response. These applications will allow countries to build resilience to disasters and understand risks that are not visible to the human eye such as land subsidence. Additionally countries can monitor urban development via satellite technology. All of these tools are important aspects of city

planning. Declarations outline joint efforts to support countries along the BRI and other developing countries. The involvement of space provides significant support to achieve the commitments outlined in the 2030 Agenda.

### **Mr. Gao Jianjun, Deputy Secretary General, Chengdu Municipal Government, China**

The holistic solutions for sustainable cities involves servicing citizens, optimizing green resources, and delivering low-carbon, green cities. This relates to the promotion of green consumption, low-carbon production, tourism, and existing culture.

Also, a focus on comfortable and healthy living, quality of life, managing pollution and setting up air quality monitoring systems is needed. Protection of biodiversity and ecological areas will be promoted, as well as preserving water resources and sanitation. It will be necessary to upscale and to improve the ecology system and promote the high efficiency use of resources. Repairing city degradations is therefore a top priority and tomorrow's city must rely on recycling. The application of the concept of "Park city development" will make cities more beautiful, attract tourism and optimize multilevel networkin city systems. There will be a need to set up AI technology for open production systems, high efficiency of energy resources, as well as smart technology. New businesses will be developed, as well as new business models.



*Mr. Gao Jianjun*

### **Mr. Richard Gauss, Head of Department, Municipal Department 24 – Health Care and Social Welfare Planning, City of Vienna**

Vienna is a leading city for what concerns liveability and its aim is to be smart. Vienna is managing social housing, public transport, business, water quality, waste management, and green spaces through strong policy frameworks and investments. Vienna wants to be a forerunner among smart cities, with a key element being social participation and provision of services of general interest tailored to human needs, with the highest quality of living. Quality of life means equal opportunities and accessibility to public services without regard to gender, age, social, and ethnic origin.

There is an evident correlation between cities' quality standards and welfare system. High competitiveness of a city allows high expenditures for welfare and legitimises political institutions. High social spending



*Mr. Richard Gauss*

increases the quality of a location. Health status is among the most important indicators of life satisfaction, and smart healthcare is going to become more important. This means innovative digital and mobile devices, and not just curing but tackling health problems at the right time with an increased focus on self-monitoring. The city government has to promote investment in innovation and technology that will deliver both cost reductions and better health outcomes.

Smart environments and smart urban architecture are considered essential for healthy lifestyles. The future vision is stronger regulation on unhealthy goods, technology that will empower individuals to monitor their health, compulsory health and digital literacy classes that will form part of the school curriculum and incentives for healthy

lifestyles. The key is to look after the people and the people will look after the city.



*From left to right: Mr. J. Gao, Ms. S. Di Pippo, Ms. W. Yang, Mr. D. Pamlin, Ms. F. Haidara, Mr. R.*



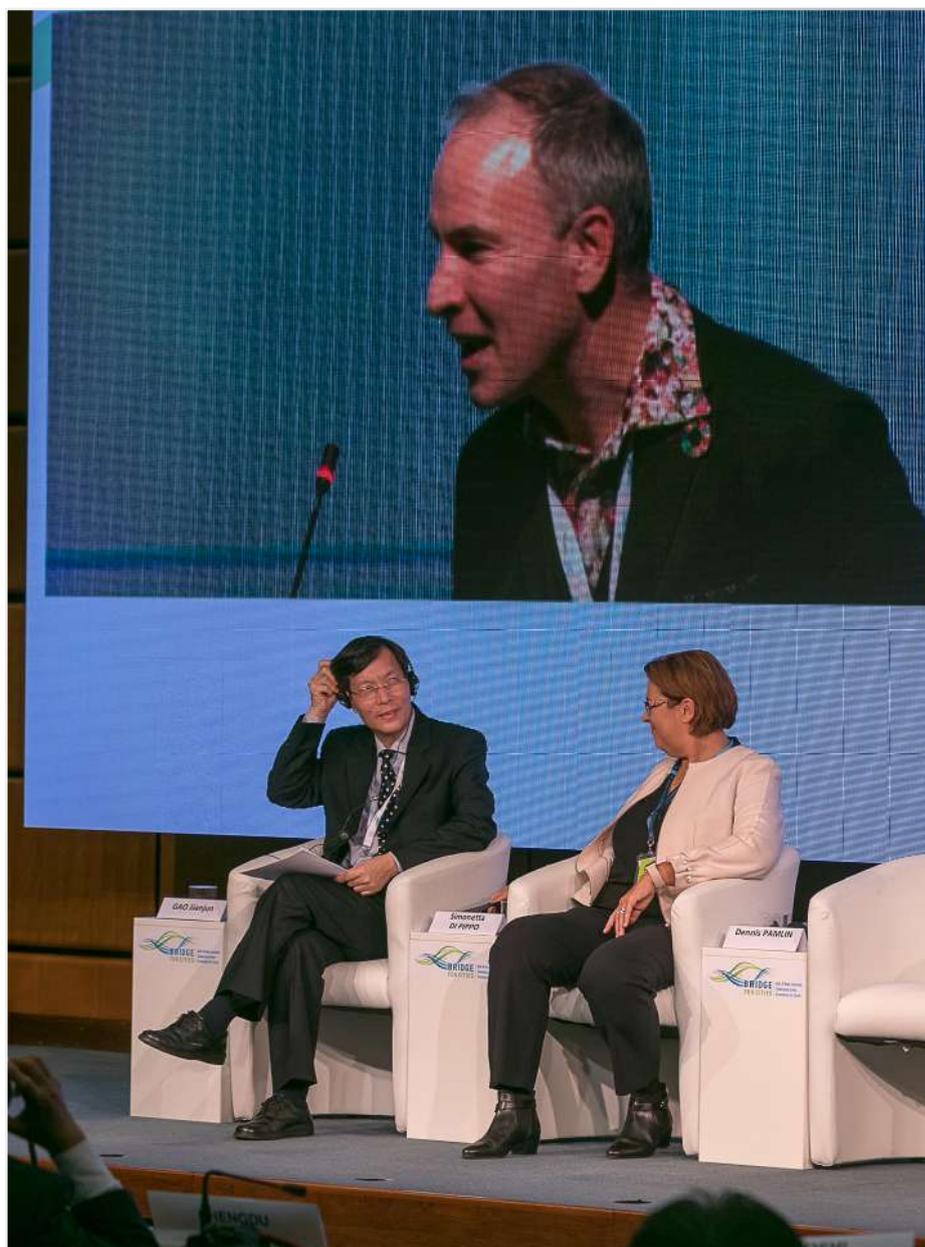
Ms. Fatou Haidara delivers Wrap-Up remarks



Ms. Yang Wei



Gauss



Mr. J. Gao and Ms. S. Di Pippo



*On the occasion of the Reception closing the first day of the event, Mr. Li Yong, Director General of UNIDO awarded Westwell company, represented by Mr. Zhang Rong, as the winner of the Business Plan Competition organized during the Roadshow held in Shanghai.*



# MAYOR AND AMBASSADOR BREAKFAST

## Mr. Li Yong, Director General of UNIDO



*Mr. Li Yong, Director General of UNIDO*

Distinguished Guests,  
Ladies and Gentlemen,  
Friends and Colleagues,  
Good morning.

I am extremely pleased to be here with you at the Mayor and Ambassador Breakfast, one of the innovative features of the third annual “BRIDGE for Cities” event.

As you know, this event builds on from our previous “BRIDGE for Cities” events, where we have extended for the first time our discussions on

inclusive and sustainable industrial development at the city level.

The goal of the Belt and Road Initiative is to build partnerships but most importantly, to enhance ‘connectivity’ for the streamlining of industrial policies and for the development of soft and hard infrastructure.

The “BRIDGE for Cities” platform connects cities along the Belt and Road and beyond, to foster innovation and to facilitate the sharing of cutting-edge technologies for sustainable urban-industrial development.

Through this platform, UNIDO supports all cities and countries participating in the Belt and Road Initiative on a demand-driven basis. The increasing demand from case cities and the strong attendance of participants from over 186 cities located in 87 countries testifies the strong support of the municipal representatives. Moreover, the presence of more than 30 Permanent Missions on this occasion shows your support to the event and further validates the decisive role that UNIDO can play in gathering together the many relevant urban-industrial stakeholders to discuss global development challenges.

The city-level setting is motivated by the recognition that urban development and industrial development have always been mutually reinforcing. On the one hand, cities serve as the hub of every nation’s industrial development, and have tangible impact on the lives of its citizens. On the other hand, industrial development, as an effective strategy for job creation and poverty reduction, plays a vital role in sustainable urban development.

For these reasons, the development of sustainable, inclusive, green and smart cities is crucial to the achievement of the 2030 Agenda for Sustainable Development.

Today, during the Urban Issue Hub sessions, representatives from the four case cities, namely Trieste, Shanghai, Vienna and Chengdu, joined by UNIDO’s technical departments will hold discussions on ISID in cities. These sessions will present challenges faced and innovative solutions developed by each of these case cities to reach inclusive and sustainable industrial development. I hope that the discussions will inspire innovative ideas for the development of your city and cities in your country.

I wish to thank our Permanent Missions for their support as without it, we would not have been able to draw in such strong participation. The support given to the “BRIDGE for Cities” event from the Permanent Missions was invaluable.

I am therefore pleased to hear that the event has provided an opportunity for our Permanent Missions to communicate with participants involved in ISID at the city level. I believe that this unique ‘matchmaking’ is vital and will enhance our efforts towards the achievement of the 2030 Agenda for Sustainable Development, particularly in cities.

This breakfast event is an excellent occasion for all of us, to engage with each other in an informal setting, before proceeding to the upcoming sessions focusing on case cities.

I wish you all a very pleasant morning and I look forward to yet another fruitful day of discussions and interactions.

Thank you.



*Mayor and Ambassador Breakfast*





*“The presence of more than 30 Permanent Missions on this occasion shows your support to the event and further validates the decisive role that UNIDO can play in gathering together the many relevant urban-industrial stakeholders to discuss global development challenges.”*

*Mr. LI Yong, Director General of UNIDO*

# URBAN ISSUE HUB (I) – SUSTAINABLE CITY: URBAN PORT INDUSTRIAL SYMBIOSIS | CASE CITY: TRIESTE

**Mr. Carlos Chanduvi Suarez, Senior Coordinator, Climate Technology & Innovations Division, Department of Energy, United Nations Industrial Development Organization (UNIDO)**

This morning's discussion will be focused on the first case city Trieste, Italy. The panellists will analyze the existing symbiosis between the industries, the port and the socio-economic texture in the city and in the region of Friuli-Venezia Giulia at large. The discussion will be enriched by different point of views from the private sector, the public sector as well as from scientific institutions.

**Mr. Zeno D'Agostino, President, Port System Authority of the Eastern Adriatic Sea, Italy**

The relationship between the port and the City of Trieste is of historical importance, dating around 300 years ago. Through the port, Trieste has the potential to become a new gateway for the BRI towards the centre of Europe.



*Mr. Carlos Chanduvi Suarez*

There has been strong investment in Trieste and in its port, and the connections and traffic have increased over recent years. Green sustainability is strongly supported, as well as green sociability.

The port of Trieste ranks first for total tonnage and rail traffic in Italy, and among oil ports in the Mediterranean Sea.

Trieste has a competitive advantage thanks to its geographic position, intermodal capabilities, rail links, seabed depth, and its special free zone regime status. It is important for people to understand the benefits of the free zone in Trieste.

When speaking about green economy, it is also necessary to discuss the new “grey revolution”

important for development. This is not the colour of infrastructure but instead brain matter. As activities between neurons in the brain express the connectivity of nodes for an efficient and productive system, it is believed that a revolution will occur due to the role of brains working together rather than focusing solely on infrastructure.

**Mr. Sergio Paoletti, President, AREA Science Park, Trieste, Italy**

Trieste was a minor city of Italy when a scientist had an idea of joining the port of trade to a port of science. Therefore an international centre of theoretical physicists was created in Trieste and became the only place in the world where physicists from both Soviet Union and the United States could meet and talk in the 1970s, when AREA Science Park was created and devoted to innovation.

Still today, Trieste has a special record of having a high percentage of scientists, which is 34 per 1,000 active people, whereas the average in the European Union is 8 per 1,000.

In the late '70s, there was the idea that, in the same way trees have deep roots and give fruit to society, science



*Mr. Zeno D'Agostino*



*Mr. Sergio Paoletti*

should give back to society, and thus the AREA science park was created.

It is a national governmental agency which is not devoted per se to any specific scientific discipline but to innovation.

This is why AREA and the port decided on collaboration with the idea to support the motto that says port, park, and city should develop together.

**Ms. Giulia Catini, Institutional Relations EMEA & APAC, CNH Industrial Representative Office to the European Union, Italy**

CNH Industrial is strongly devoted to sustainability, being a leader in the Dow Jones

sustainability index for about eight years now. There are four main drivers for CNH: expanding the biofuel offer, spreading sustainable farming solutions, advancing environmental protection, and fostering people engagement. Another key point is the strong push for waste-to-energy circular economies and the reduction of CO<sub>2</sub>.

The initiative towards reducing downstream CO<sub>2</sub> emissions includes designing trucks and buses to run on natural gas and electricity. The industry has proven to be growing, and the goal is to support sustainable transport as a leader in natural gases.

**Mr. Enrico Samer, President of the World Trade Center Trieste, Italy**

There are various important development initiatives in Trieste and its economy is growing. The goal is to boost economic development and create jobs through strategic public and private partnerships. The recently signed MOU between UNIDO and WTCA is important because both organizations have deeply rooted global footprints.

The Freeway Trieste – to which WTCA Trieste is partner – is an industrial innovation hub and accelerates high tech cooperatives and sustainable growth.

The success realised in Trieste can be shared for the benefit of economies and businesses worldwide. Our vision is to recreate the model in cities around the globe resulting in economic success for all stakeholders making up the Freeway Cities Network.



*Ms. Giulia Catini*



*Mr. Enrico Samer*

## Mr. Sandro Chiarandini, Director of Regional and Local Public Transport of Friuli-Venezia Giulia Region, Italy



*Mr. Sandro Chiarandini*

The aim of Friuli-Venezia Giulia Region is to improve infrastructure and transportation connectivity to facilitate inter-regional development. We should start by preparing a sustainable public transport across frontier barriers. There are trains connecting Trieste with other border regions and this is creating new possibilities. It is possible to help build people friendly infrastructure connections from rail to bicycle paths and to add bicycle holdings to trains. The goal is to avoid traffic jams and pollution in the area by supporting regional mobility and the use of vehicles that do not pollute.

Easing technical legal and administrative obstacles can help overcome barriers from the administrative and bureaucratic point of view.

## Mr. Giulio Bernetti, Director, Department for City Planning, City of Trieste, Italy

Trieste consists of its old port, the historical centre and the new port. The free zone Trieste is located along some important European corridors, but it also wants to be the arrival point of the Maritime Silk Road. Development of the old port serves for sustainable industries such as biotechnology, high-tech and creative industries, as well as commercial, residential, and leisure uses, including parking which will support inter-modality transportation. The involvement of Trieste in the BRI supports the development of new projects and investments and offers new land capacity for supporting infrastructure. There is active engagement of regional and Italian government bodies as well as the Port Authority Committee for the enhancement of the old port area with a 'can-do' attitude.



*Mr. Giulio Bernetti*

### Question from the audience:

How can we start this partnership in terms of the science and tech park? What are the requirements to open start-ups, let's say in the science area in Trieste, especially for investors who would like to invest in Italy?

### Mr. Sergio Paoletti

We have a tradition of hosting scientists from all over the world. We host 6,000 physicists every year, so almost 200,000 physicists from all over the world have visited for a period of one day to two years. This has been extremely fruitful. The environment in science and technology is extremely open and I would say that there are very high possibilities for investors, both public and private.

There are clear examples of international cooperation and feedback we can extensively gain in technology. About a third of our beam lines are financed by international investors. All countries who invest give very interesting feedback in technology and information and teaching for young scientists.



From left to right: Mr. S. Paoletti, Mr. E. Samer, Mr. G. Bernetti, Mr. S. Chiarandini, Ms. G. Catini, Mr. C. Chanduvi Suarez



Ms. G. Catini



Trieste Session

## URBAN ISSUE HUB (II) – SMART CITY: SMART PRODUCTIVITY AND TRADE | CASE CITY: SHANGHAI

**Mr. Bernardo Calzadilla-Sarmiento, Director, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization (UNIDO)**



*Mr. Bernardo Calzadilla-Sarmiento*

Today we see a tendency towards smart cities through innovation and mainstreaming industry 4.0 technologies. This will have great effect on city planning and management with new technologies such as IoT, AI, etc. and will provide many new opportunities including job creation. The session shall explore sustainable pathways for this new development.

**Mr. Gu Xianglin, Vice President, Tongji University; Vice Chairman of Shanghai Association for Science and Technology, Shanghai, China**

Smart city development has been occurring in Shanghai for many years, fostered by the city's convenient location for global connection. Shanghai offers cultural facilities and large

educational institutions and many programs. The goal is to develop a more sustainable eco-city with multi-level urban systems by 2035. This kind of development involves technologies such as information sensing systems which aid in facial recognition, satellite technology for surveillance and monitoring, location awareness, and understanding weather conditions. Smart city development relies on the wired and wireless broadband network as IT infrastructure is needed by the city administration, including Internet of Things platforms that provide the storage, computing analysis and service functions for applying data and services. It is possible to control everything in the city with this, such as the transportation system.

There are a few smart industry key areas: electronic information, virtual reality, network security, automation, and 3D printing, which will shape the development of industries such as railway systems, ship and marine, aviation and aerospace over the years. IT-based technologies are used in the whole lifecycle of urban construction. Risk management is critical for the daily maintenance of a city by using these platforms and systems it is possible to guarantee the daily safety of cities by conducting hazard identification, risk monitoring, warning and controlling.

There are big objectives for the future, including a masterplan for establishing the fundamental framework of a science and technology innovation centre with global influence by 2020. By 2035, Shanghai will develop into a world city of excellence, a welcoming city of innovation, humanity and sustainability with global influence.

To achieve these goals, strategic targets have been identified, such as accelerating advanced manufacturing development, enhancing development of modern service sectors, and expanding a new space for the 'going global' strategy. To do these things, Shanghai has agreed to develop the industries for these key areas, to realize modern agriculture and to develop economic cooperation using modern technologies to support the running of the city.



*Mr. Gu Xianglin*

**Ms. Fan Jingyan, Executive Vice President, YITU Technology, China***Ms. Fan Jingyan*

Academic studies pointed out that a smart city needs many things: smart transport, a smart life, and a smart environment. This is not just about innovation but also creating an environment where citizens are smart, healthy and happy.

A smart city requires IT and advanced technology so people can make more rational choices while municipalities can use advanced technology to make informed decisions for improving the quality of life of the people in that city.

There has been much research in this area and Artificial Intelligence can play an important role by enhancing citizens' daily life. This is being introduced in China in the medical community to help with diagnosis and treatment, and the financial industry to help with safety at ATMs.

AI is also used in transportation and communities, reducing traffic congestions and improving parking and mobility, thereby easing areas of concern for many governments. In September, a strategic plan was signed with UNIDO to accept safer, healthier ways of living in the world by engaging companies, like YITU Technology, committed to using AI to serve the sustainable development goals and improve the lives of everyone.

**Mr. Pascal Koster, Managing Director, Malo Capitals & Consulting, S.A., Luxembourg**

X-Cite is a company founded to help people, governments, and industries combining fast data, AI, blockchain, and robotics to connect the economy through an open community model. The aim is to frame root problems and give companies a vision to create new solutions. Digital transformation can change daily life, in the same way that the introduction of mobile phones did. The methodology in this case is understanding, contextualizing, expressing, and delivering.

The power of technology enables another shift in human relationships, organisations and governments. In five years, AI will be a reality and will change how we operate our cities and industries.

*Mr. Pascal Koster*

The megatrends for 2030 include lab-grown meat, cities as farms, remote medical diagnostics and using AI with robots for medical surgery. 5G digitalization will be widespread, thus combining data to lead to more efficiency and productivity across all sectors, which could increase by 25% through the use of massive data.

When thinking about smart cities, we are thinking about creating a digital twin of the city. It means building the right regulatory framework in order to use the data: these are not just technical problems but concerns the creation of standards and common semantic models.

This is about using IoT in an intelligent way in cities. Shanghai has begun to transform itself into a digital technology leader by starting this process over the last ten years.

## Mr. YU Jie, Founder of Ants Plan, China



*Mr. Yu Jie*

Smart cities should be based on smart education. Internet can change education, which in turn can help alleviate poverty.

Ants Plan's target is to give young people an online learning platform that will change education, by providing enhanced accessibility for knowledge sharing.

Shanghai is an educational town, an ecosystem that has been built for young people's living and education, and allows companies to work together and share resources for future development. There is also an element of industrial education. Industries who want to change and restructure do not just need money but talented young people: this is the core element that allows industries to

change. What is important to Ants Plan is to provide to the city's industrial sector education for talented young people who can lead future industry change.

## Mr. Bernardo Calzadilla-Sarmiento

Innovation cannot be managed without strong involvement from the private sector. The solutions come from the private sector but someone has to take them forward. Mr. Gu Xianglin, which measures have you taken in Shanghai that could be used in other cities?

## Mr. Gu Xianglin

The AI technologies are the most important for smart cities. AI can be used in different areas in the world, for example, we can use big data to understand what infrastructure projects are useful.

AI can increase the efficiency of engineers' work, for example. Some kind of work cannot be performed directly by people so we need to use the AI technology to do that work.

Most importantly, in the service area, all available information should be applied, so we can see what kinds of structures should be repaired. This is important for the sustainability of the world. The technology may be different but the principles are the same in different areas.



*Mr. Gu Xianglin gives a comment*

## Question from the audience:

I can see there has been a lot of innovation in Shanghai but what do you see as the future innovation of higher education?

## Mr. Yu Jie

Every country has its solutions, but my point is that the base for different countries is always education. If you want to achieve something, focus on your education. The base is talented young people. I suggest that any city,



*Mr. Yu Jie answers the questions*

any area, any country, should develop education first and help young people go abroad to study in other countries. A better focus on your country's dominant industry means that even if they study elsewhere, they can come back and improve that industry. That is the most important focus, appropriate education.

#### **Question from the audience:**

Most of us are talking about raining youth and find talented people. Why do not we focus on school systems? This type of AI education at school level can give kids a good understanding basis so when they go to university, they are more mature and informed and they can decide much better; they are more innovative.

We must look into that, we need to train our kids for the future. If they can play video games, they can design their own games, but they have to know how to do it. How can we get a benefit from that? We need to focus on our young entrepreneurs. I would request guidance on how we can improve and implement that.

#### **Mr. Gu Xianglin**

You are right, it is important to educate our children in modern technology. So, let's go back twenty years to the computer. Twenty years ago the computer was well developed but after that, we cannot find many courses relating to it. Likewise, we do not find many courses relating to AI in universities.



*From left to right: Mr. J. Yu, Mr. P. Koster, Mr. B. Calzadilla-Sarmiento, Ms. J. Fan, Mr. X. Gu*

# INNOVATION, BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP: FUTURE PERSPECTIVES

**Mr. Christoph Matznetter, Vice-President, Austrian Federal Economic Chamber, Austria**



*Mr. Christoph Matznetter gives a comment*

If you see particular companies utilising new technologies, you then start to see more and more people using them around the world. In the last 100 years mass production changed many industrial sectors. Smaller companies are able to produce good products in many industries. This gives many more possibilities and it changes the form of the economy.

Small, intelligent entities are more challenging than central, organised corporations and there is a bright future in this area.

**Mr. Gerardo Pataconi, Head of Operations, International Coffee Organization, Italy**

In a traditional sector like the coffee industry, innovation can impact the way of trading traditional commodities and products. There are various trends in the sector. Technology such as blockchain is having a big impact on that, for example in supply chain management. New materials are being used in different or creative ways.

**Mr. Zhang Rong, COO, Westwell, China**

Developing companies face similar issues with efficiency and productivity, which lead them to look into ways of improving through technology. Based on these experiences, innovation is about combining businesses and technologies together, to think about how customers can be better supported to do their jobs. AI should be an engine to empower all kinds of industries and help all kinds of people. Eventually, innovation should be used to achieve development.



*Ms. YANG Linda gives a comment*

**Ms. Yang Linda, Executive Chairwoman of Yingke Global Board of Directors, China**

How to achieve sustainable development using these technologies?

**Mr. GONG Weixi, Senior Coordinator for South-South and Triangular Cooperation, UNIDO**

Small companies need to catch up with larger ones. Innovation is important because there is a desire to bring something new to the market. When talking about development, innovation is important from different angles. Partnerships are important in this regard and the next step is learning from others' experiences.

## Mr. Christoph Matznetter



*Mr. GONG Weixi gives a comment*

What is important is how communication is done and how it develops over the years.

When there is no development in communication, development possibilities are also limited for industry. Innovation will change everything that is done systematically, with communication and services and throughout every area of people's lives.

## Mr. Gerardo Pataconi

The practical elements of access to knowledge and market information make a difference. There is still work to be done but we can see that there are more chances for people like small farmers to work with other people and have more access to

information. Blockchain is new but has a huge impact. By applying blockchain technology, some problems that cannot be solved in other ways can be addressed.

## Mr. Zhang Rong

Understanding the pain points of certain customers is the starting point for developing innovation. Using new solutions has a huge positive impact on customers, but this couldn't be achieved without that original communication. Therefore, partnership is important. Innovation, technology, relate to serving people.



*From left to right: Mr. W. Gong, Mr. C. Matznetter, Ms. L. Yang, Mr. G. Pataconi, Mr. R. Zhang*

## URBAN ISSUE HUB (III) – LIVEABLE CITY: SOFT ENVIRONMENT FOR URBAN INVESTMENTS | CASE CITY: VIENNA

**Mr. Gong Weixi, Senior Coordinator for South-South and Triangular Industrial Cooperation, UNIDO**



*Mr. Gong Weixi*

Vienna is constantly among the most liveable cities in the world and this is the result of a combination of many different factors. The discussion will thus focus on which soft and hard factors contribute to cities' liveability.

**Mr. Richard Gauss, Head of Department, Municipal Department 24 – Health Care and Social Welfare Planning, Austria**

Based on previous studies, the factors that influence the liveability of a city can be summarised in three categories: economic, physical, and 'other' factors, which can then be divided further into hard and soft factors. The soft factors, including policy and regulation, and their interconnections to sustainable urban

development are generally analysed less often but they are the main focus for the Vienna case city session.

To ensure economic and social development, Vienna aims to become a smart city and has developed a strategy to improve the general living quality while reducing resource usage through innovation. To assess the Viennese model, the urban soft environment and its linkage to the urban physical environment must be taken into consideration. Vienna has one of the best urban soft environments in the world, built upon a foundation of music, high living quality, health and well-being. This is due in part to a strong government, which owns infrastructural services effectively managing maintenance, expansion of health systems, accessibility and affordability of public services for the citizens.

In addition to household income, health status is one of the most important indicators of the life satisfaction for Viennese residents. Vienna is experiencing a demographic transition and rising population. This creates the need for more hospitals, more transportation capacity and further integration of the city with the surrounding area, which will require closer cooperation beyond administrative boundaries to build upon a well-functioning health system.



*Mr. Richard Gauss*

Another important topic for Vienna is migration and its impacts on healthcare decisions, as well as an aging population. Migrants and elderly people are more likely to be vulnerable and exposed to increased health risks. Therefore Vienna will need to offer balanced and comprehensive basic medical and nursing care, construct new long-term care facilities and expand home care through mobile services. Life expectancy is rising as well as changes in the society and family structures, factors that are leaving family members with less and less care. One central goal of Vienna is to enable the elderly to live independently for as long as possible while offering local services in line with the requirements of customer-oriented supply planning.

In conclusion, in Vienna the quality of life is an important soft environment factor, contributing to the city's attractiveness. In addition, other factors contribute to the city's soft environment:

- Favourable geographical and natural conditions, for example urban and supra-regional natural space, air, water;
- The urban policies focusing on sustainability and the environment;
- The application of gender mainstreaming and diversity management;
- The traditional and comprehensive communalisation of social and technical services, for example health, housing, water supply, and public transport.

Ensuring the quality of life in Vienna means equal opportunities and accessibility to services of general interest, without regard to age, social background and ethnic origin.

### **Mr. Rudolf Hundstorfer, President, Austrian Sports Organization, Austria**

Sport is an important part of our society influencing health care systems as a high level of sport activity has a positive influence on young people. Sport must start in kindergarten and continue to be promoted, which is why many schools now implement an hour of sport per day.



*Mr. Rudolf Hundstorfer*

Sport is also an important way to enhance sociality at urban level as it brings people together to play and volunteer. To this end, all the sport facilities provided in Vienna are free of charge.

The city's potential depends upon its people and their habits. Vienna fosters a system change, promoting new ideas and cooperation between stakeholders.

### **Ms. Tanja Wehsely, Member of Vienna City Council and Vienna State Parliament, Austria**

Innovation and digitization are the backbone for developing new ideas, co-production and people participation. The City of Vienna is attempting to

get its citizens involved, exploiting digital innovations. For example, Vienna offers an easy mobile app that helps people get in contact with the local government.

One of Vienna's successes is social partnership. Admittedly Vienna's taxes are slightly higher than European average but the services Vienna offers its society, such as the sports facilities mentioned, are provided for free.

The smart city thinking in Vienna integrates digitization with policy making; it is not just about technology, but always about putting the citizens first and thinking about social inclusion, justice and equality. Without this approach, a city would not be liveable.

Elements such as social housing, free of charge kindergarten and University are important to Vienna. Vienna is the biggest German speaking University city and invests a lot in science programmes and the labour market to help people improve and to foster a low unemployment rate. Investing in the people and integrated policy are all things required to offer good services, and what makes a city like



*Ms. Tanja Wehsely*

Vienna. A clear goal and clear policies really make a difference and therefore keeping on track with a shared goal is important in times of changing administrations.

**Mr. Alexander Biach, Deputy Director, Vienna Economic Chamber**



*Mr. Alexander Biach*

One of the successes of Vienna is stability, which comes from dialogue. Dialogue has been going on for decades between representatives of labour and of business, and Vienna continuously works on enlarging this dialogue to improve the municipal services, listening to the needs of its people. There are environmental advantages in Vienna: a green and secure city. Vienna is a relatively young city with a strong student population. Vienna offers a secure environment for business with a highly qualified labour force, offering vocational trainings in highly qualified sectors. Foreign businesses which come in Vienna are thoroughly supported and they find an agile bureaucratic system. Business follows infrastructure, roads, and rails and therefore dialogue should also surround this idea, and lead to ways of connecting Vienna to the rest of

the world through more railway connections, to attract business and high quality tourism. In conclusion, no matter where you come from, no matter who you represent, dialogue is the key word.

**Question from the audience:**

You mentioned that there are 200,000 students in Vienna. How have you attracted education tourism in Austria?

**Mr. Alexander Biach**

Vienna has a long history as a student city; the first university was founded in the 14th Century. We offer universities concentrating on public management and tourism scholarships to get students to Vienna because it is an important message to the world to get connected to Vienna.

**Mr. Rudolf Hundstorfer**

Attending University is free in Austria and this is important. You do not have to pay anything.

**Question from the audience:**

Vienna is very different now when compared to 35 years ago. The elements of tourism and money are important but without the strong presence of international organisations this would be different.

**Ms. Tanja Wehsely**

Yes, it is a big asset and we should not take it for granted.

**Question from the audience:**

Decent social welfare requires a certain number in the workforce but as the society is ageing, what is Vienna's strategy for providing social welfare?



*Question from the audience*

**Mr. Rudolf Hundstorfer**

Society is ageing but Vienna's city is also getting younger at the same time, so we are in a good situation, sustainable in the long run. The other advantage is that Vienna, in comparison to some German cities, is a growing city and not a shrinking city. If your community is getting older and young people are going away, it is difficult to sustain services.

Vienna attracts people from outside and as my colleagues have said, attracts highly qualified people who earn high incomes and therefore pay higher taxes and contribute to the social system.

**Mr. Alexander Biach**

*Mr. Alexander Biach answers a question*

You are right, the age is rising and so is the life expectancy, so what we have to look for is keeping people on the job, which is not so easy to some extent. Older people have to get used to digital developments, so training is required.

Secondly, I have visited cities throughout Europe and one of our biggest advantages is that living in Vienna is affordable, also for older people. This is why we offer social apartments, social housing in Vienna, which makes it possible for people to afford life here.

If you compare the economic development with rising wages, it doesn't ensure you keep the same quality, so it's a good mixture of affording life in Vienna and maintaining social income levels.

**Question from the audience:**

I would like to know the tools you are implementing to the accelerated process of digitalisation. China is going ahead with artificial intelligence and this will change society completely. Do you have a time frame, budget, or tools for accelerating the process?

**Ms. Tanja Wehsely**

We do have frameworks and programmes. One thing that is important to us is not AI but digitalisation; we have this open dialogue with everyone and the framework of the smart city is putting the citizens in the forefront. Thinking about the citizen and what he needs, that's what we try and do.

I might sound old-school, but the focus is really about what the people want and need. This talk about what's going to be here can be overwhelming. We do have frameworks for digitalisation and innovation strategies of the city but we are not trying to get too focussed on AI and robot integration, we do not think it's going to be so strongly the case.

**Mr. Rudolf Hundstorfer**

Digitalisation is very important, of course, but our smart city is more than just about digitalisation, it needs smart citizens to start off with. So, we focus on building the smart citizen and digitalisation is part of that. To be a smart citizen is more than that, more than data and technology.



*Mr. Rudolf Hundstorfer gives a comment*

### Question from the audience:

I do research in urban planning and you were talking about the development of neighbourhoods and the movement of the people. We are seeing development happening in Vienna currently as the city is growing. Is there any room left and is there any need to redevelop and redesign the public spaces within the city? As we are seeing migrants or foreigners coming to Vienna to study, how much do we change the City of Vienna to impact it in a better way?

### Ms. Tanja Wehsely



*Ms. Tanja Whesely gives a comment*

For the first part, I think it is an interesting question, especially talking about Aspern. This is one of our biggest development places recently in Vienna, building a whole city within a city there. I think it is a good example for integrated urban planning. I am not a professional in that area but I think that, watching it, hard and soft factors are both really attractive there.

A whole subway line was constructed before we even built the first houses in Aspern. We were told that was a crazy idea, to build a whole subway before a single house was even built.

As one of the largest construction sites in Europe, it is developing quickly and there is attention for social spaces, collaboration, and shared urban gardening to get biological foods into the spaces.

One of the first things we put in Aspern was a youth centre, which I didn't mention earlier, and that is really a factor for social peace, caring for our young people.

It's about developing the space, even without people living there but involving those in the surrounding places, like having the first youth centre there for the kids from the surrounding neighbourhoods. We had a special programme to build a ramp around the lake and we had kids come and build a train around the lake.

We had young people being in labour market programmes, building something in a new part of town. They'll look back in 30 years and tell their children that they built that. We do a lot for development and attracting people and having them participate. Maybe it's not the best but we are really trying to get people involved in good processes that we shape.

### Mr. Alexander Biach

This is an important point; you have to fulfil wishes with spatial planning. You have to develop the City of Vienna, the whole region, as a livelihood city. It pays to get into a dialogue with everyone, this is what we aim to.

With subway lines you can cross Vienna in 25 minutes. That's amazing. We'll reach 2 million inhabitants by 2034. You have to attract the enterprises and the private companies here, as they drive employment and development.

When industries move into a densely inhabited region, the citizens will complain about the inconveniences caused, and that will lead the industry to move. In this regards, Vienna developed a programme which means there are strict reserved places for industries and companies to stay in order to be connected to the rail and highway. These areas are reserved for business and green businesses, and this is the secret of developing and drawing a city for the people and the companies.

I think they are doing a good job because last year we attracted 200 new international companies coming to Vienna looking for a place to stay, with billions of investments. This is an important test of good spatial planning for the city.



*Question from the audience*

### Question from the audience:

How do you manage with the neighbouring provinces the different aspects of infrastructure and city life that are now disconnected outside the administrative border? For instance, Vienna wants to contain the urban system, but the neighbouring regions do not want it. For example, the connection with the airport of Vienna causes disagreement and there is no urban connection to the airport. I know there are similar problems in other cities, but I am interested in how it works in Vienna.

### Mr. Rudolf Hundstorfer

You have provinces and different municipalities and different ideas. The airport situation is a bit difficult, because the airport has three owners.

Normally, you would go for an underground route from Vienna to the airport but there are complications with some of the owners. We do not have an underground system at the moment. In the next ten to fifteen years I think there will be a new situation. Many people work in Vienna but do not live in Vienna, they are coming from outside. I think there will be more discussions and more contracts for the public traffic sector, working together.



*From left to right: Mr. A. Biach, Mr. R. Hundstorfer, Ms. T. Wehsely, Mr. W. Gong, Mr. R. Gauss*

## URBAN ISSUE HUB (IV) – PARK CITY: URBAN AGRIBUSINESS | CASE CITY: CHENGDU

**Ms. Lorence Ansermet, Senior Industrial Development Officer, Department of Agri-business, United Nations Industrial Development Organization (UNIDO)**



*Ms. Lorence Ansermet*

There has been a dramatic increase in urbanization in the last 35 years. Today, there are 16 million inhabitants in Chengdu, which creates the need for systems to manage production, consumption, waste and energy implications for which China is at the forefront of the circular model. The final session of the day will focus on the case city of Chengdu.

**Ms. Eva Gladek, CEO of Metabolic, Netherlands**

Circular cities create pathways to sustainable urban food systems and resource management leading to green, healthy, resilient cities. Metabolic works to achieve circular economy.

Human population is increasing exponentially and this fact will have many implications for sustainable consumption and resource management. Scientists have identified 9 planetary boundaries to ensure survivability, some of which have already been exceeded. However, exponential problems can be met with exponential solutions and we are already seeing this. Global renewable energy consumption has been growing exponentially, and some countries are well on their way to building a circular economy and are 40 years ahead of the forecast for the adoption of renewables.

Traditionally, countries followed a linear economy of take, make, and dispose. The circular economy aims to retain the value in a product for as long as possible. For business enterprises, this value should be retained the same in business models. Value must be captured in value chains, as estimates show that 6 billion euros of value is currently being thrown away in the linear economy.

A circular economy retains materials, and focusses on health, energy, biodiversity, equity, and resilience. A solution will transform the entire economy, and requires mapping resource and materials flow. The key intervention areas are agriculture and cities considering they are responsible for a large percentage of the consumption of global resources and production of greenhouse gases. Cities are real leverage points, as they contribute to 60-80% of greenhouse gases while occupying only 3% of land surface. There are three strategies for this transition: tackling food waste, closing resource cycles, and integrated urban-agri design.



*Ms. Eva Gladek*

There are many possible intervention points. When analysing food waste, 30% is contributed by people who misunderstand food labelling. Companies must develop new business models for waste. With regards to closing resource cycles, everything should be reused for a beneficial, high-end value. Regarding integrated urban-agri design, cities are drains of resources and there are opportunities for reusing and recycling that currently aren't utilised as they could be. Integration can be taken even further with symbio-culture, where the production of many different species are gathered in one production cycle and put inside a city to create more products. For

There are many possible intervention points. When analysing food waste, 30% is contributed by people who misunderstand food labelling. Companies must develop new business models for waste. With regards to closing resource cycles, everything should be reused for a beneficial, high-end value. Regarding integrated urban-agri design, cities are drains of resources and there are opportunities for reusing and recycling that currently aren't utilised as they could be. Integration can be taken even further with symbio-culture, where the production of many different species are gathered in one production cycle and put inside a city to create more products. For

example, using waste water from fish going to plants it is possible to create a closed system. Cities can go from resource drains to centres of circular production, creating value within city walls whilst becoming greener, healthier, and shortening the distance that food needs to travel. This transition will create huge amounts of value.

### **Mr. Gao Jianjun, Deputy Secretary General, Chengdu Municipal Government, China**



*Mr. Gao Jianjun*

Chengdu is a key center city in China with 2,300 years of history and a long and constructive relationship with UNIDO. Chengdu is a city for tourism and food and a model inland city for investment, the closest to Europe. Chengdu is a land of abundance and therefore created a path of ecological conservation and green development to become a liveable, green park city. There is a focus on clean energy, people, servicing residents and giving them a better life through inclusiveness, comfort, and by providing platforms for recreational activities.

Chengdu is also shifting towards green public mobility and residents are incentivised to adopt green habits, like cycling, to reduce emissions. Focusing on the environment means to increase and protect green spaces and local habitats for

shared benefit. Chengdu is focusing on city construction and on optimizing the urban layout by taking a holistic approach to landscaping which maintains the traditional culture and environment. In Chengdu clean energy is accounting for 58.8% of energy consumption and hosts the longest green footpath and the largest urban forest park in the world, to preserve the vegetation and the panda population. Chengdu is working for ecological restoration, and to protect drinking water and wetlands. The business dimension is focusing on upgrading industry by means of resource efficiency, environmental friendliness, and by circular production. Therefore innovation in IT and equipment manufacturing are fundamental to construct open, efficient and green industrial systems. This facilitates the integration of the digital economy and real economy to promote green development.

### **Mr. Yin Ke, Deputy Inspector, Chengdu Development and Reform Commission, China**

Chengdu is located in a mountainous region with biodiversity and a good ecological background. There are 1.5 million people working in agriculture and 530,000 hectare in cultivation, representing a large part of the economy. In recent years, green industrial and rural development has occurred with strict ecological protection measures employed for agricultural products and projects to ensure a liveable city and a healthy environment. Thanks to those measures, there are 235 days of good air quality and water bodies are improving. Agriculture production systems are being optimized through technology and innovation, which is enhancing trade quality, traceability, and a wider use of agriculture products that are pollution free for organic foods. There is still a lot to be done but there have been goals set and decisions made on how to measure and monitor progress.



*Mr. Yin Ke*

A new slow city example is being developed in the western suburbs of Chengdu, in Tienfu. The project will attract US\$1.5 billion investment,

cover roughly 74km<sup>2</sup> and it is designed to build a slow life culture, integrating elements of a slow city in a modern fashion, focusing on low-carbon production and environmental protection. Rural areas will be transformed into forest areas and villages. Chengdu will continue to move forward in its development projects and continue to learn from the example of other cities.

**Ms. Lorence Ansermet**

In Chengdu, we see how rural areas are utilised to balance out the environmental impacts and in turn both air and water quality has improved.

**Mr. Bon Tjeenk Willink, Protix Director Business Development, Netherlands**



*Mr. Bon Tjeenk Willink*

Insects and food have a great deal of power in balance with nature. The population of the world is increasing, which increases demand for protein and meat, and in years to come, this will push resources past their limits. A third of all food is wasted but Protix believes that insects can solve both of these problems. Insects can be fed food waste and the product can be processed into high value animal protein, lipids, and fertilizers. Utilising this as animal feed can be beneficial for the animal’s health and even reduce mortality rates. Many places are facing environmental challenges due to kitchen waste which pollutes the city and the air. Governments are forcing municipalities to address this challenge in new ways through either digestion or incineration. Utilising insects in the recycling process for

food is rated well in terms of sustainable waste treatment. It also uses less land, water, and power than other solutions. Insects are the most environmentally-friendly protein source on the market, even more than soy. This will fundamentally change the feed system in the food industry. We should avoid limiting policies and then leapfrog to solutions. China is the perfect country for applying these solutions at the moment because of the large dependence on protein, and also because it’s trying to face the environmental problems.

**Question from the audience:**

Chengdu should be the model for a sustainable city and an original leader for neighbouring cities. How can Chengdu leverage the growth of the neighbouring cities as well as regional growth?

**Mr. Gao Jianjun:**

Chengdu is an important city. In the planning of city group development there are different definitions and standards for different cities. Within a wider context, the central government recognises the important role of Chengdu as a starting point for the Belt and Road project.

Chengdu has become an important point, so we position ourselves for its development in a global context. We follow the trend of the development in order to make ourselves more prominent.

**Question from the audience:**

Our two experts from the Netherlands have made remarkable speeches. I noticed what they said about circular economies is focused on agriculture and food. It seems fairly easy to implement. You



*Mr. Gao Jianjun answers a question*

showed us some pictures of the recovery of electronic devices, which was a horrific picture. Ms. Eva Gladek, do you have any further involvement in that area?

### Ms. Eva Gladek



*Question from the audience*

I spoke mostly about food because that was the focal topic for today's session, but we always look at the different resource flows through cities. We have some city partners with whom we are developing circular strategies for and we often start with analysis of all the different resources consumed and thrown away in the city. That identifies where the biggest losses of value are happening and the biggest areas for improvement.

Electronics are one of the most difficult streams to handle because they are not designed for recycling, but that's not true for all electronics. LED lighting can have reusable components rather than just crushing the materials, and there is a lot of gain to be had there.

There are interesting new technologies which

allow sorting metals through magnetic separation. It's an interesting topic so I am happy to share more after the session.

### Ms. Lorence Ansermet

There is always the problem of land and water, so would the circular solution address both?

### Ms. Eva Gladek

I am passionate about the symbiotic agriculture approach for cities in particular because there are so many resources already there in cities. The smartest thing to do when moving towards a circular model is working out what you can use, in the smartest way possible, that's already inside the city.

Looking at urban agricultural systems that are monoculture, they are still not optimal because you can produce just one thing which has limited value and still creates waste.

The idea with the symbiotic agricultural system was to combine layers with soil-based agriculture, agriculture that happens in the dark such as mushroom and fish production, hydroponic agricultural systems, and involving insects too.



*Ms. Eva Gladek answers a question*

One of the most impressive things in the models is that you reduce water consumption by up to 90% and reduce the total nutrient demand, so you can extract the highest possible value out of a designed ecosystem.

### Question from the audience:

Do you have the same issue with fertilizers in China as we do in Europe and the United States?

## Mr. Yin Ke

Insofar as Chengdu city is concerned; we've been developing organic agriculture. We have all sorts of standards governing the fertilizer area. The soil and the plants are all governed by strict standards.

So, in Chengdu, starting from the seed, we have organic sifting around the rice fields, we dig tunnels and fill them with water and raise fish in there.

When we harvest the rice, it will be healthy and meet organic standards.



*Mr. Yin Ke answers a question*



*From left to right: Mr. B. Tjeenk Willink, Mr. J. Gao, Mr. C. Zou, Ms. L. Ansermet, Ms. E. Gladek, Mr. K. Yin*

## WORKSHOP ON INDUSTRIAL POLICY ALONG THE BELT AND ROAD

### Mr. Nobuya Haraguchi, Senior Research and Industrial Policy Officer, UNIDO



The BRI is underpinned by countries' experiences and discussing policy measures and plans for sustainable development. Opportunities and challenges have been discussed throughout the event and in line with these ideas the workshop aims to enhance the understanding of possible impacts of BRI.

The bigger picture for the BRI is enormous diversity among countries and economies, involving about 4.2 billion people. As it aims to connect a large number of countries, the BRI offers tremendous opportunities to contribute to prosperity. The BRI can maximise its positive impacts by focusing on the outcomes of the SDGs, particularly SDG 9. This implies that countries need to see the BRI not only in terms of building infrastructure, connectivity and industrialisation, but as the support that

allows countries to reach environmental sustainability and inclusive development.

### Ms. Yu Jia, Director, Department of International Development Cooperation, Institute of New Structural Economics, Peking University, China



China's industrial policy and structural transformation includes implications for Belt and Road countries from a New Structural Economic (NSE) perspective.

Looking at industrial policy from an NSE perspective, there are five categories of industrial policies based on distance from the global technological frontier: catching up with higher-income countries' industries; maintaining leading edge technology leadership globally; leapfrogging high-income countries in short innovation-cycle industries; defying comparative advantage defence-related industries; and helping firms exit from comparative advantage losing industries. There are financial and non-financial as well as systematic policy instruments to utilize for their realization.

The law on Special Economic Zones (SEZ) offers two main types of benefits: economic benefits and soft benefits. It is an effective vehicle for policy implementation. In China, the starting point for reform was SEZ, which triggered the shift in parts of the country from a planned economy to a market economy.

The economic structure is evolving in China, as the service sector surpassed the primary and secondary sectors in 2013. The Chinese 'economic miracle' involved four factors: an enabling government; an effective market; dynamic entrepreneurship, and continued innovation. The private sector enterprises contribute greatly to the national economy. However, China is losing its comparative advantage in the manufacturing sector and faces the same challenges experienced in Japan, for example. This loss will be translated in the relocation of manufacturing jobs to other developing countries, due to rising wages in China.

A country can achieve economic success by determining what it has, what it can do well, and how the government can play a role in the structural transformation. Developing countries have comparative advantages but suffer from binding constraints. One possible solution is the establishment of special economic zones, which means that the government will concentrate its limited resources to enhance soft and hard infrastructure to attract potential investors. The industrial policy is not a replacement of the market force, but a complementary element. The SEZ is not a silver bullet: the key is to have strategy focus and commitment. High environmental standards and policies should be applied.

**Mr. Robert Stehrer, Scientific Director, Vienna Institute for International Economic Studies, Austria**



*Mr. Robert Stehrer*

From a European perspective one of the focuses of the BRI is its impact on the Western Balkans. There is a substantial investment need in the Central and Eastern European countries, particularly in the Western Balkan countries. There is a huge demand for investment, particularly in transport and electricity.

The railway density is low in these countries compared to other parts of Europe. There is also low motorway density in the Central and Eastern European periphery and in the Balkans and powerful electricity lines are scarcer. The European Union is important for European members in terms of loans of great significance for transport and energy, as it is important to attract Chinese and other multi-donor infrastructure investments, which will enable industrialization.

The distribution of financing loans differs from country to country. The short-term positive impacts are increased demand resulting from investment activities, increased direct imports, and increased indirect imports via production and supply networks.

The potential negative impacts are based on risk and uncertainty regarding whether or not the debt is sustainable in these countries, and whether such large investments can fuel corruption. There are also concerns about dependency and political influence and whether or not the implementation of projects influences local contractors, suppliers, workers and material. Regardless, there is the potential for acceleration; the long-term benefits include rising incomes, reduction of transport costs and time, the diversification of exports and imports, and strengthening of intra- and inter-regional cooperation.

**Ms. Wang Xiaojun Grace, Deputy Director, Programme and Operations, United Nations Office for South-South Cooperation**

Despite different views towards the scope and impact of industrial policies, they are implemented in all countries trying to achieve growth. Industrial policies have impacts for all SDGs but there are particular benefits for SDG 9, which impact can be seen through GDP increase, through the decrease in carbon intensity, and the improved telecommunication connectivity.



*Ms. Wang Xiaojun Grace*

Achieving SDGs will require countries to determine key measures and pathways to orient their industrial policies in support of their growth models while boosting productivity and sustainability.

Renewable energy is a key industrial sector supported by the BRI. Sectors should be coordinated to optimise the impact on human development. BRI serves as a catalyst for regional integration and connectivity facilitates strategic planning, leveraging the advantages of all countries involved. Implementation is very important, and policies should be tested and proven to be implementable through practice, as policy based on evidence is more effective.



*Question from the audience*

The BRI provides opportunities for cooperation and accumulating evidence to foster joint policy making based on concrete experiments for optimal development and collective competitiveness.

#### **Question from the audience:**

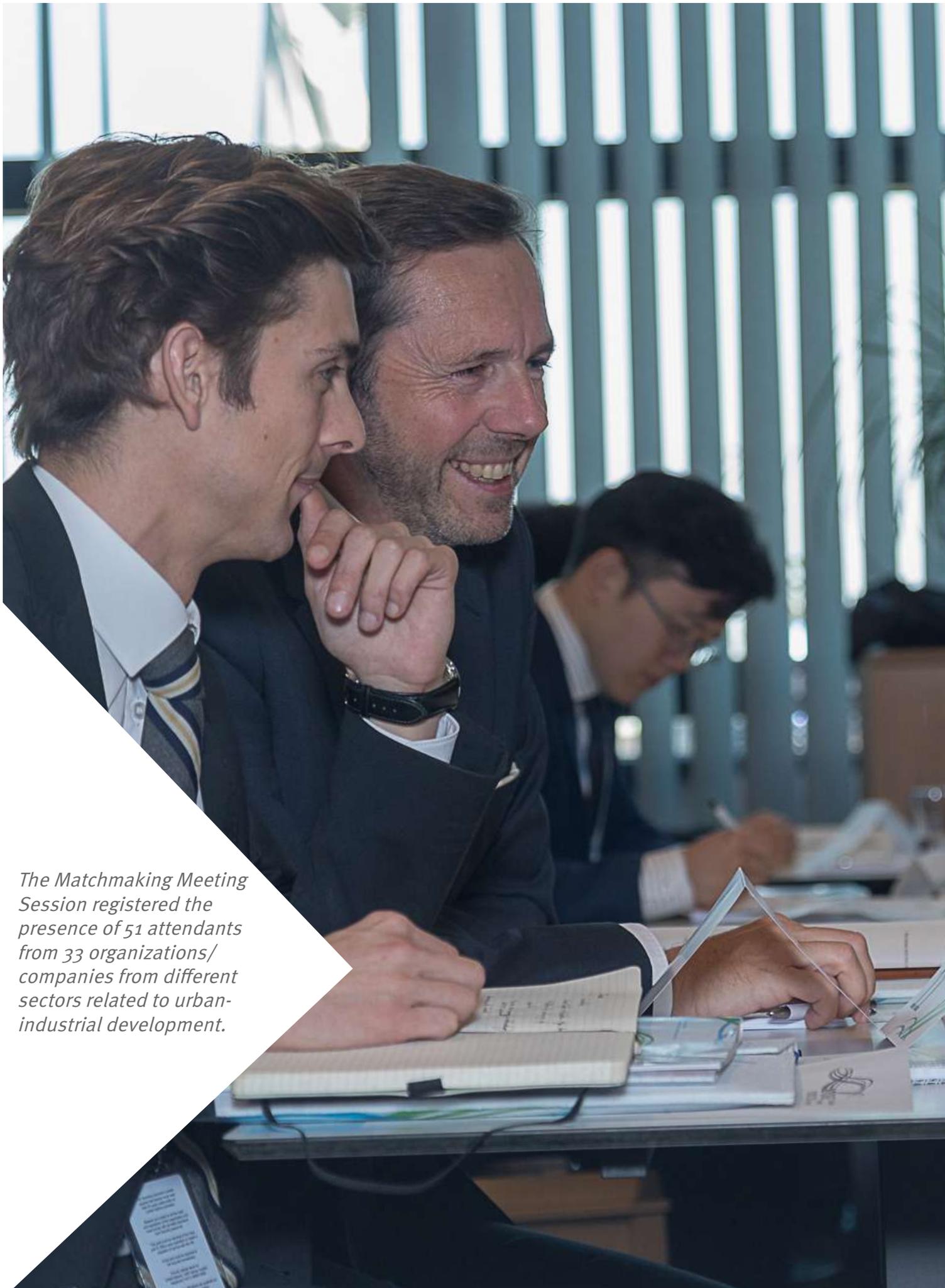
You mentioned avoiding corruption in your presentation. What do you consider the mechanism could be to reduce this potential danger in this kind of project?

#### **Mr. Robert Stehrer**

In the perspective of the Western Balkan countries, the agreement contains the requirement for laws to reduce the corruption potential. Basically, the European standard will hopefully be applied in these countries.



*From left to right: Ms. J. Yu, Mr. N. Haraguchi, Ms. X. Wang, Mr. R. Steher*



*The Matchmaking Meeting Session registered the presence of 51 attendants from 33 organizations/ companies from different sectors related to urban-industrial development.*



## MATCHMAKING OF SMES ALONG THE BELT AND ROAD (PART 1)

**Ms. Lucia Cartini, Senior Industrial Development Officer, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization (UNIDO)**



*Ms. Lucia Cartini*

This session aims at sharing experiences of Austrian and Chinese SMEs operating along the Belt and Road.

**Mr. Alexander Biach, Deputy Director, Vienna Economic Chamber, Austria**

The BRI is seen as one of the greatest infrastructure projects in the world and there are big opportunities for connecting people and for SMEs to step into business. The Vienna Chamber of Commerce aims to offer opportunities to Austrian companies and to the entire Austrian economy through the connection to the BRI.

There are many opportunities for importing and exporting goods to/from China and Vienna is looking to maintain position as the Austrian hub for export-oriented enterprises, increasing foreign trade volume, and becoming a distribution hub for Europe and the Eurasian corridor. This vision will require a clear commitment to BRI from the politics community and a push from the logistics community.

88% of businesses agree that the BRI is important for future success. Banks have established central branches in Vienna and there are opportunities in the finance, energy, and telecommunication sectors as well.

The Chamber of Commerce can represent the local interests, and we are attempting to help businesses get connected. For this reason the Vienna Chamber of Commerce is negotiating with the Viennese and Austrian governments to highlight the opportunities of the BRI and that all people should profit.



*Mr. Alexander Biach*

**Mr. Xu Kemin, Director General, Department of Industrial Policy, Ministry of Industry and Information Technology, China**

The Chinese government considers SMEs to be a key force in developing the economy as they are the fundamental driving force for development.

Four areas should be prioritized for ensuring the development of SMEs, combining the development of SMEs with promotion of economic quality, and eliminating regulations that hinder progress. The first area is the optimisation of the enabling environment, enhancing policy acquisition for SMEs, by strengthening the legal systems for SMEs. The second area is the improvement of professionalism and the promotion of the high-quality development of SMEs by guiding large enterprises to share resources to SMEs through collaboration and innovation, and by promoting the use of IT to improve public systems. The third area relates to deepening cooperation between industry and finance and to alleviating the problem of access to credit by expanding financing channels.



*Mr. Xu Kemin*

The fourth area is strengthening cultivation of high-level personnel and promoting entrepreneurship and craftsmanship spirits.

Challenges do remain as the world economy is undergoing profound changes and global economic trade has continued to slow down. However, SMEs will continue to develop quickly in China and can deal with various challenges as they have the ability to innovate. There is huge potential along the BRI and SMEs should be integrated in the economic prosperities.

**Mr. Liu Yaozhong, Deputy Chief of the Office of International Trade at the National Textile and Apparel Council of China**

Focusing on the textile sector, China has established an independent and complete textile industrial value chain and its textile industry is one of the key players in the world. In fact, China is the number one exporter of clothing in the world. Hence, the textile industry is an important pillar industry and livelihood industry in China. It is a market-driven, vigorous and promising industry. It is very resilient, attracts continuous investment and is experiencing rising productivity. High growth rates are maintained by industrial upgrading and multilevel innovation.

SMEs play an important role in the textile economy as they create jobs, improve living standards, create economic outputs and exports, and support the whole production chain. Establishing a platform for SMEs is possible via domestic exhibitions and overseas exhibitions in Europe and Belt and Road countries. Our vision is to become the organiser of leading exhibitions in the global textile and fashion industry.



*Mr. Liu Yaozhong*

**Mr. Yang Yang, Vice-President, China Huayang Economic and Trade Group Co., Ltd, China**



*Mr. Yang Yang*

China Huayang Economic and Trade Group Co., Ltd, can become an operational platform for the BRI. As globalization deepens, the BRI becomes more important for trade and can be realized by balancing ecological protection with socioeconomic development. The green economy is growing in response to climate change, and green development is becoming a driving force for global development. Green development serves as a new development mode that reduces energy and emissions and stimulates economic restructure to promote environmental protection.

The BRI fosters participation in international commerce, thus creating new opportunities. Creating a global network will require cooperation to ensure eco-growth and wealth creation while thinking sustainably.

The transition to a low carbon economy will require effort from all enterprises, and the acceleration of developing environmental management systems to guarantee resources are used more efficiently. Enterprises carry social responsibility and must cooperate for development. It will be required for enterprises to implement green management, which will provide benefits for themselves and society, such as energy conservation and consumption reduction. The BRI must promote green development across the board coupled with innovation within business operational models. UNIDO and the China International Chamber of Commerce have an open channel of work and resources that can be used to provide diversified services for enterprises. Both organizations can utilize their networks to connect countries to achieve win-win cooperation.



*From left to right: Mr. K. Xu, Mr. Y. Yang, Ms. L. Cartini, Mr. A. Biach, Mr. Y. Liu*



*Discussion in process*

## MATCHMAKING OF SMES ALONG THE BELT AND ROAD (PART 2)

The discussion on the experiences of Austrian and Chinese SMEs operating along the Belt and Road explored the possible opportunities for establishing partnerships and joint projects, and was followed by a series of matchmaking meetings, both pre-arranged and arranged on-site.

The Matchmaking Meeting Session registered the presence of 51 attendants from 33 organizations/companies from different sectors related to urban-industrial development.

In particular, companies engaged in industry 4.0 technologies, energy efficiency, waste management, and urban agriculture were largely represented.

Representatives from international organizations, from the public sector, and from financial institutions, NGOs and Academia were also present.

One week prior to the event, the organizers reached all participants who have indicated their interests in matchmaking when registering for the event with an online survey form, and a list of organizations/companies that have already expressed their interest in matchmaking.

This system allowed 23 meetings to be scheduled in advance, based on the preferences of the participants collected through the survey form.

During the session, 14 additional meetings were arranged among participating organizations and companies, both Business-to-Business and Business-to-Government.

Overall, 37 matchmaking meetings were organized during the session. Based on the post-meeting surveys collected, 73 % of the participants indicated plan for further meetings as a result of the session.



## BRIDGE FOR CITIES CLOSING LUNCH

**Ms. Tally Einav, Executive Officer, Office to the Deputy to the Director General, United Nations Industrial Development Organization (UNIDO)**



*Ms. Tally Einav*

The BRIDGE for Cities event puts the emphasis back on cities, which are hubs for productivity and commerce and where new ideas, culture, and social development are generated.

**Mr. Alexander Biach, Deputy Director, Vienna Economic Chamber, Austria**

This is a very valuable event as it builds bridges between people, which is the secret of success, not just culturally but economically. The matchmaking session is very beneficial for developing aims and common goals.

**Ms. Hedda Öhlberger-Femundsenden, Gender Coordinator, Office for Gender Equality and Empowerment of Women, United Nations Industrial Development Organization (UNIDO)**

**Coordinator, Office for Gender Equality and Empowerment of Women, United Nations Industrial Development Organization (UNIDO)**

Gender equality is not only a matter of human rights but an economic necessity, and it is required for social cohesion. Many more women could be business owners, their companies could be bigger and they could create more jobs if it were not for the harmful stereotypes and systemic barriers they meet on a daily basis.

11th October is the International Day of the Girl. This year the focus is on skills development and transition to work. Girls should be able to access learning and gain transferable skills to avoid being unemployed, as they are three more times likely than boys to be without work. They should be hired and promoted at a more regular and faster pace than now.

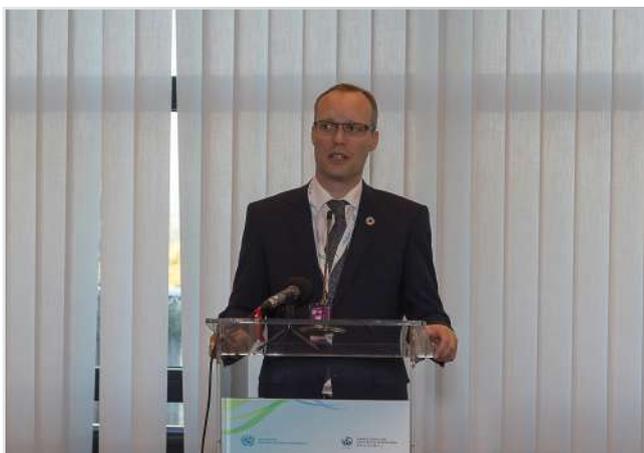


*Ms. Hedda Öhlberger-Femundsenden*

**Mr. Hiroshi Kuniyoshi, Deputy Director General, United Nations Industrial Development Organization**

Three intense and productive days have given the opportunity for many panellists to contribute to the discussions by sharing their experience on sustainable development.

The “BRIDGE for Cities” event provides an opportunity to build a bridge to a smarter future. The entire event was specifically designed to be outcome oriented and innovative. These goals have been fulfilled.



*Mr. Alexander Biach*



*Mr. GONG Weixi delivers remarks*



*Mr. Hiroshi Kuniyoshi*



*From left to right: Mr. W. Gong, Mr. A. Biach, Mr. H. Kuniyoshi, Ms. T. Einav*

## EVENT ACTIVITIES

### Exhibition

The exhibition has been organized by UNIDO and the four cities chosen as case studies for this year's event: Chengdu, China; Shanghai, China; Trieste, Italy; Vienna, Austria.

Each city showcased in an exhibition booth various success stories, challenges or ongoing initiatives taking place in the given city with relation to the sector-specific urban-industrial development challenges discussed throughout the Urban Issue Hub Sessions.

One additional booth was used by UNIDO to provide participants with additional information about the organization's goals and ongoing initiatives.



*Exhibition Area*



*From left to right: Mr. J. Gao, Mr. E. Woller, Mr. C. E-Sheng, Mr. Y. Li, Mr. R. Dipiazza, Mr. X. Gu*



*Trieste Exhibition Booth*



*Matchmaking Meetings*

### Media Breakfast

The Media Breakfast, hosted by Mr. Kai Bethke, Director of UNIDO Department of External Relations was an occasion to present to journalists and media outlets the structure of the event, the expected highlights and the key messages addressed during the three days of the event.



*From left to right: Mr. W. Gong and Mr. K. Bethke*

## Cultural Performance

Culture is an important aspect of cities competitiveness and the fifth pillar of the Belt and Road Initiative. Cities regularly invest in cultural programmes and tourism initiatives, not only to influence the image and attractiveness of their city, but also to stimulate social inclusion and cultural integration.

In order to showcase different facets of city life, cultural performances will be organized:

### The VIC Club Filipino Folklorico

- The VIC Club Filipino Folklorico dance group – with support from the European network of Filipino Diaspora – organized a show featuring one typical dance from each region of the country.

### Indonesia cultural performance

- The Indonesia Culture Group organized a dance show, showcasing the rich and multifaceted cultural heritage and traditions of Indonesia.

### The Melting Bop jazz band

- The jazz band “Melting Bop” performed both during the morning cultural performance and during the Reception in the evening, entertaining the guests with a selection of jazz music.

### Costumes of the World Parade

- The International Cultural Diversity Organization (ICDO) – a Vienna-based international NGO with the objectives of promoting diversity, interculturality and raising awareness of different cultural expressions – organized the ‘Costumes of the World’ parade.

The aim of the parade was to create awareness of how different cultures influence each other and promote unity, by showcasing traditional costumes from different parts of the world.



*Indonesia Cultural Performance*



*The VIC Club Filipino Folklorico*



*The Melting Bop Jazz Band*



*The Costume of the World Parade*



*The Costume of the World Parade (Russian Federation)*



*The Costume of the World Parade (Indonesia)*

## Study Tour

A combined study tour, organized by the City of Vienna and Urban Innovation Vienna, was designed to familiarize participants with practical urban-industrial development solutions. The study tour covered the following locations:

### Location 1: Aspern Seestadt

Description: Innovative solutions are not about technological progress alone. A city is only “smart” when everyone benefits and the focus of innovation is firmly on people and their needs. New approaches to enhance community life in the urban environment and make it more eco-friendly are being piloted and tested at aspernSeestadt, the new city-within-a-city currently under construction and due for completion in 2028. It is one of Europe’s largest urban development projects in Vienna’s fast-growing 22nd district in the north-east of the city. Seestadt functions as an urban lab, a pilot environment for urban planning and development.

### Location 2: Industry 4.0 – Pilotfactory

Description: The Pilotfactory is being built in SeestadtAspern, where the laboratories of researchTUB, a cooperation between TU Vienna, the Vienna Business Agency and real estate developer wien3420, have been housed. The pilot factory is important for several reasons: Scientific know-how about optimal production techniques should be developed, which then benefits the economy. At the same time, the Pilotfactory will play a decisive role in the teaching of the Vienna University of Technology. Students can get to know and co-develop the entire value chain there – from design through production and assembly to quality assurance and logistics. It should be possible there to develop new prototypes and new process technologies. Last but not least, the Pilotfactory should also be used for further education – skilled workers from the production area should get to know new ideas, which they can then implement in their own companies.



*Study Tour 1: Aspern Seestadt*



*Study Tour 1: Aspern Seestadt*



*Study Tour 2: Pilotfactory*



*Study Tour 2: Pilotfactory*

## ADDITIONAL INFORMATION

Information on the sessions of the high-level forum and on all of the side events, including event documents, videos and photos, is available at the following website: <https://www.unido.org/3rd-bridge-cities-event>

Core team of the 3<sup>rd</sup> “BRIDGE for cities” event:



From left to right: Mr. Kanishka Raj Rathore, Ms. Sofya Parfenova, Mr. Ciyong Zou, Mr. Francesco Azzena, Mr. Weixi Gong, Mr. Ming Zhang, Ms. Xinnan Yao



Mr. W. Gong with interns and volunteers





# 9 October 2018

**08:30 - 09:15**

*Registration for media representatives will start at 07:45*

## Registration

Gate 1, Vienna International Centre (VIC)

- Security check through Gate 1 of the VIC.
- Collection of conference bags and badges:
  - » All registered speakers can collect their badges and bags from the “Registration Desk” in the lobby of Gate 1.
  - » All registered general participants can collect their badges in the lobby - Gate 1, and their bags at the Infodesk in front of Boardroom D, 4th floor, Building C.
- Registration and bag collection for the Permanent Missions will take place at the Infodesk in front of Boardroom D, 4th floor, Building C.

*(Logistical Notes: See maps attached on page 47 for directions on how to get from Gate 1 to the VIC rotunda in Building C where elevators in the lobby, located in the direction of Buildings D & E, will take you directly to Boardroom D on the 4th floor. The route from Registration Desk to Board Room B should take approximately 10 minutes. Please note that security check through Gate 1 and badge collection could take up to 30 minutes in the morning.)*

**08:00 – 09:00**

## “BRIDGE for Cities” Media Breakfast

(Only for media representatives)

UNIDO Booth, Rotunda, Ground Floor, Building C

“BRIDGE for Cities” Media Breakfast will be the occasion to present to journalists and media outlets the structure of the event, the expected highlights and the key messages addressed during the three day event.

Welcome remarks to media: **Mr. Kai Bethke**, Director, Department of External Relations, United Nations Industrial Development Organization.

Key message delivery: **Mr. GONG Weixi**, Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships and Field Integration, United Nations Industrial Development Organization.

*(Logistical Notes: All media representatives are invited to attend the “BRIDGE for Cities” Media Breakfast at the UNIDO Booth in the VIC Rotunda, Ground Floor, Building C.)*

9:30 – 9:50

**Exhibition – Inauguration Ceremony**

Rotunda, Ground Floor, Building C

Moderator: **Ms. FUJINO Ayumi**, Director, Office of Strategic Planning and Coordination, United Nations Industrial Development Organization

Welcome remarks: **Mr. LI Yong**, Director General, United Nations Industrial Development Organization

**Ribbon Cutting and Group Pictures**

- **Mr. LI Yong**, Director General, United Nations Industrial Development Organization
- **Mr. CAI E-Sheng**, Chairman, Finance Center for South-South Cooperation, Hong Kong, China
- **Mr. GU Xianglin**, Vice President, Tongji University; Vice Chairman of Shanghai Association for Science and Technology, Shanghai, China
- **Mr. Roberto Dipiazza**, Mayor of Trieste, Italy
- **Mr. GAO Jianjun**, Deputy Secretary General, Chengdu Municipal Government, China
- **Mr. Ernst Woller**, First President of the Vienna Parliament, Vienna, Austria

*(Logistical Notes: After the exhibition - inauguration ceremony, all dignitaries are requested to proceed to Boardroom D on the 4th floor.)*

**High-Level Policy Dialogue**

Policy → Dialogue

The high-level policy dialogue aims to facilitate constructive dialogue between policymakers and key development stakeholders from international organizations, financial institutions, governments, civil society, academia, business enterprises and industry and is designed to guide event participants throughout the whole process of sustainable urban-industrial development by connecting policy to practice.

10:00 – 10:55

**High Level Policy Dialogue - Opening Ceremony***Boardroom D, 4th Floor, Building C*

During the opening ceremony, distinguished dignitaries will share their vision, strategies, knowledge and experience, as well as the on-the-ground insight necessary to ensure an inclusive approach to the implementation of the 2030 Agenda for Sustainable Development under the framework of the Belt and Road Initiative (BRI).

Moderator: **Ms. FUJINO Ayumi**, Director, Office of Strategic Planning and Coordination, United Nations Industrial Development Organization

Statements by:

- Mr. LI Yong**, Director General, United Nations Industrial Development Organization  
**Ms. Bernadette M. Gierlinger**, Viceminister at the Federal Ministry of Digital and Economic Affairs of Austria  
**H.E. Mr. ZHANG Yong**, Vice Chairman, National Development and Reform Commission, China

**Mr. Massimiliano Fedriga**, President, Autonomous Region of Friuli-Venezia Giulia, Italy

**Mr. CAI E-Sheng**, Chairman, Finance Center for South-South Cooperation, Hong Kong, China

**Ms. Simonetta Di Pippo**, Director, United Nations Office for Outer Space Affairs

**Mr. Mehran Eftekhari**, Chairman of the Audit and Risk Committee for the World Trade Centers Association; Director of the World Trade Center Cyprus

**Mr. António Guterres**, Secretary-General, United Nations (Video message)

*(Logistical Notes: All speakers in the opening ceremony are kindly requested to take their assigned seats on the stage. All other participants are requested to take a seat in the boardroom and to keep their mobile phones on silent.*

*During the opening ceremony, after the speech of the Director General of UNIDO, all opening ceremony speakers will be invited for a “key-action” during which all invited speakers will insert the provided individual keys inside a box to officially open the 3rd “BRIDGE for Cities” event.*

*A Signing Ceremony will follow directly after the Opening Ceremony. Please stay seated in Boardroom D until the Signing Ceremony has concluded. All dignitaries on the panel are kindly requested to relocate behind the signatories to witness their signature.)*

10:55 – 11:05

### Signing Ceremony

*Boardroom D, 4th Floor, Building C*

*(Logistical Notes: During the Signing Ceremony, all panellists from the Opening Ceremony will relocate behind the signatories to witness their signature. After the Signing Ceremony has concluded, invited high-level dignitaries will attend a Press Briefing. All other panellists and general participants are requested to stay in their seats for the start of Session 1, which will take place in the same meeting room beginning at 11:15)*

11:15 – 11:35

### Press Briefing

*Room C5, 7th Floor, Building C*

Moderator: **Mr. Kai Bethke**, Director, Department of External Relations, United Nations Industrial Development Organization

**Mr. LI Yong**, Director General, United Nations Industrial Development Organization

11:15 – 12:15

### Session 1 - Global Goals for Local Impact: Strengthening Policy Coordination for the Successful Implementation of Development Goals

*Boardroom D, 4th Floor, Building C*

*The framework of the Sustainable Development Goals (SDGs) has been designed and developed to address global issues in a holistic manner. There have been remarkable advancements in today’s world in the fields of healthcare, energy, environment and information technology, to name but a few. All of these advancements have opened up new opportunities for partnership and economic development. In many respects,*

*the 2030 Agenda for Sustainable Development and the BRI share a similar vision. As one of several operational models of South-South cooperation, the BRI has identified five priority areas for cooperation – policy coordination, enhanced connectivity, unimpeded trade, financial integration and cultural exchange – all of which contribute directly or indirectly to the achievement of the 17 SDGs. Although launched independently of the 2030 Agenda, the BRI will therefore act as a strong instrument for the promotion of integrated sustainable development and will facilitate the implementation of the 2030 Agenda. Session 1 aims to initiate a discussion on the importance of strengthening policy coordination for sustainable urban-industrial development, which is critical to achieving the 2030 Agenda and the New Urban Agenda.*

*Focus:*

- Coordinating development strategies and policies through the BRI;
- Integrating approaches and the role of municipal governments for the successful realization of the SDGs in cities;
- Improving infrastructure and transportation connectivity to facilitate inter-regional development;
- Facilitating the implementation of the New Urban Agenda and the 2030 Agenda for the advancement of inclusive and sustainable urban-industrial development.

Moderator: **Ms. YANG Wei**, Founder and Chairman of Wei Yang & Partners, United Kingdom

Keynote Speaker: **Ms. Katharina Schneider-Roos**, CEO of Global Infrastructure Basel, Switzerland

Panellists:

**Mr. Massimiliano Fedriga**, President, Autonomous Region of Friuli-Venezia Giulia, Italy

**Mr. YU Lifeng**, Deputy Director General, Foreign Economic Cooperation Center, Ministry of Ecology and Environment, China

**Ms. Mariline Diara**, Director of Environment and Classified Establishments, Ministry of Environment and Sustainable Development, Senegal

**General discussion**

*(Logistical Notes: During Session 1, participants will receive their lunch voucher for the lunch area in VIC rotunda on the Ground Floor, Building C. The open debate will take place from 12:30 in the VIC rotunda on the Ground Floor, Building C. The route from the meeting room to the VIC rotunda will take approximately 5 minutes.)*

**12:30 - 14:15**

**Lunch Break**

*Lunch Area, Rotunda, Ground Floor, Building C*

12:30 – 13:15

## Open debate: Belt and Road Initiative and Win-Win Cooperation - Member States' Point of View and Expectations

*Rotunda, Ground Floor, Building C*

*The open debate will be organized in close cooperation with the Permanent Missions and will explore **how Member States perceive the Belt and Road Initiative as an effective mechanism for achieving economic development and as a platform for win-win cooperation.***

*The debate will involve leading experts as well as representatives from the Permanent Missions who will enrich the discussion by presenting different experiences and points of view on the topic.*

Moderator: **Mr. Bernhard Müller**, Former Mayor of Wiener Neustadt; General Secretary, Urban Forum, Austria

Panellists:

**Mr. Thomas Weninger**, General Secretary of the Austrian Association for Cities and Towns, Austria

**Mr. Peter Buchas**, Business Consulter & Member of the Austrian Chinese Business Association, Austria

**Mr. Bartosz Piziak**, Project coordinator – Researcher, Department of Economic Processes Research, National Institute for Spatial Present Policy and Housing, Poland

**Ms. Julia Grübler**, Economist, Vienna Institute for International Economic Studies, Austria

*(Logistical Notes: The Open Debate will take place on the stage in the centre of the rotunda. Panellists will be welcomed to the stage by Mr. Bernhard Müller.)*

13:15 – 14:15

## Cultural Performances

*Rotunda, Ground Floor, Building C*

*Culture is an important aspect of city competitiveness and the fifth pillar of the BRI. Cities regularly invest in cultural programmes and tourism initiatives, not only to influence the image and attractiveness of their city, but also to stimulate social inclusion and cultural integration. In order to showcase different facets of city life, cultural performances will be organized during the lunch break on 9 and 10 October.*

Moderator: **Ms. Sofya Parfenova**, International Consultant, United Nations Industrial Development Organization

Performances:

- 1. Philippines Culture Group:** *The VIC Club Filipino Folklorico dance group – with support from the European Network of Filipino Diaspora – will feature one dance from each region of the country and will culminate its performance with the official Philippines' tourism song.*
- 2. Indonesia Culture Group:** *This performance will showcase the rich and multifaceted cultural heritage and traditions of Indonesia.*

3. **VIC Jazz Band Performance:** *The jazz band “Melting Bop” will close the Cultural Performance session with a brief jazz concert.*

*(Logistical Notes: After cultural performances, session 2 will take place in Boardroom D, 4th Floor, Building C. The route from the rotunda to Boardroom D will take approximately 5 minutes.)*

14:30-15:45

## Session 2 – Financing the Future: Strengthening Multi-Stakeholder Partnerships to Finance Inclusive and Sustainable Urban-Industrial Development

*Boardroom D, 4th Floor, Building C*

*Industrialization has led the way in urbanization by creating economic growth and job opportunities, which draw people to cities. The relationship and dynamics between industries and cities are very strong and persistent. Industries will continue to have a sizeable footprint on sustainable urban development in the coming decade as SDG 9 (Industry, Innovation and Infrastructure) continues to provide co-benefits to all 17 SDGs. Industries can be drivers of sustainable economic growth and urban development but they require a huge amount of financing. Industries must keep to a more sustainable trajectory, however, which means improving energy efficiency and resource consumption by using clean technologies, and supporting urban development and economic growth by implementing technologies in sectors that are vital to ensuring cities’ development. Session 2 aims to explore the role of multi-stakeholder partnerships for sustainable cities and to identify innovative sources and mechanisms to boost trade and investment in cities.*

*Focus:*

- Facilitating multi-stakeholder partnerships to foster sustainable urban growth and development;
- Exploring the role of small and medium-sized enterprises (SMEs) in powering the urban economy;
- Closing the urban-financing gap through bankable urban-industrial development projects;
- Ensuring environmental sustainability, energy efficiency and the adoption of clean technologies in industries for sustainable cities.

Moderator: **Mr. Marco Sorge**, Principal Investment Officer, World Bank Group - Vienna Office (IFC)

Keynote Speaker: **Ms. ZHENG Quan**, Director General, Policy and Strategy Department, Asian Infrastructure Investment Bank

Panellists:

**Mr. Stefan Dörfler**, CEO and Chairman of Board, Erste Bank, Austria

**Mr. Roberto Dipiazza**, Mayor of Trieste, Italy

**Mr. HUANG Feng**, Managing Director of Asia-Pacific Model E-port Network Operational Center, China

**General discussion**

*(Logistical Notes: After Session 2, there will be a 15-minute coffee break. The route from the meeting room to the “Coffee Corner”, located behind Boardroom D, will take approximately 2 minutes. Panellists and general participants are requested to return to their seats promptly to attend the start of Session 3 beginning at 16:00.)*

15:45 – 16:00

### Coffee Break

“Coffee Corner” located behind Boardroom D, 4th Floor, Building C

16:00 – 17:15

## Session 3 - Cities of Tomorrow: Technological Solutions and Holistic Approaches for Sustainable Cities

Boardroom D, 4th Floor, Building C

*It can be seen clearly that the different challenges facing urban areas environmentally, socially and demographically are all interwoven and interlinked. Innovation and technology are driving forces for the future of urban development. The aim of urban innovation is to ensure a better use of assets and resources while enhancing urban competitiveness and capital. Urban physical planning should work in parallel with educational institutions, industrial leaders and private-sector organizations, along with local citizens, entrepreneurs and civil society. By combining local expertise, culture, technology and capacities and by developing holistic solutions, the path to achieving sustainable urban-industrial development will become more clear and effective. Session 3 aims to lead a discussion of challenges and holistic solutions for sustainable cities.*

*Focus:*

- Promoting entrepreneurship and citizens’ engagement in smart and resilient-city planning processes;
- Stimulating technological innovation, the adoption of alternative energy sources and knowledge-sharing within the framework of the BRI;
- Emphasizing holistic, integrated and multidisciplinary approaches for sustainable cities;
- Forecasting the contribution of big data to inclusive and sustainable urban-industrial development.

Moderator: **Mr. Dennis Pamlin**, Senior Advisor, RISE Research Institutes of Sweden

Keynote Speaker: **Ms. YANG Wei**, Founder and Chairman of Wei Yang & Partners, United Kingdom

Panellists:

**Ms. Simonetta Di Pippo**, Director, United Nations Office for Outer Space Affairs

**Mr. GAO Jianjun**, Deputy Secretary General, Chengdu Municipal Government, China

**Mr. Richard Gauss**, Head of Department, Municipal Department 24 - Health Care and Social Welfare Planning, City of Vienna, Austria

### General discussion

*(Logistical Notes: After Session 3, please remain seated in the meeting room for a brief wrap-up of the day’s proceedings)*

17:15 - 17:30

## Wrap-Up Remarks and Achievement Highlights

*Boardroom D, 4th Floor, Building C*

- **Ms. Fatou Haidara**, Managing Director, Directorate of Corporate Management and Operations, United Nations Industrial Development Organization

*(Logistical Notes: After the last session of the first day, dignitaries with invitation cards are invited to attend a reception hosted by UNIDO's Director General, which will take place in the VIC Restaurant on the Ground Floor, Building F at 18:00. The route from Boardroom D to the VIC Restaurant will take approximately 7 minutes. General participants who are not attending the reception may exit the VIC via Gate 1. To ensure easy access to the VIC on subsequent days, please retain your ground passes for the remainder of the event.)*

From 18:00 onwards

## Reception hosted by UNIDO's Director General\*

*VIC Restaurant, Ground Floor, Building F*

Master of Ceremonies: **Mr. Hiroshi Kuniyoshi**, Deputy Director General, United Nations Industrial Development Organization

Remarks by sponsor: **Mr. Gerhard Hirczi**, Managing Director, Vienna Business Agency, Austria

### **Souvenir presentation to representatives of 4 case cities and the "BRIDGE for Cities" business plan competition winner by the Director General of UNIDO**

- **Mr. GU Xianglin**, Vice President, Tongji University; Vice Chairman of Shanghai Association for Science and Technology, Shanghai
- **Mr. Giulio Bernetti**, Director, Department for City Planning, City of Trieste, Italy
- **Mr. GAO Jianjun**, Deputy Secretary General, Chengdu Municipal Government, China
- **Ms. Tanja Wehsely**, Member of Vienna City Council and Vienna State Parliament, Austria
- **Mr. ZHANG Rong**, COO, Westwell, China ("BRIDGE for Cities" Business Plan Competition Winner)

Toast remarks: **Mr. LI Yong**, Director General, United Nations Industrial Development Organization

*\*By Invitation Only*

*The VIC Jazz band "Melting Bop" will perform during the reception.*

*(Logistical Notes: Following the reception, dignitaries may exit the VIC via Gate 1. To ensure easy access to the VIC on subsequent days, please retain your ground passes for the remainder of the event.)*



# 10 October 2018

09:00 - 09:50

## Mayor and Ambassador Breakfast

*VIC Restaurant, Ground Floor, Building F*

*The Mayor and Ambassador Breakfast is an occasion for ambassadors, representatives from the permanent missions and the mayors of partner cities to interact and share information about their projects and activities in an informal setting.*

Welcome remarks by: **Mr. Li Yong**, Director General, United Nations Industrial Development Organization

*(Logistical Notes: Dignitaries with invitations are invited to attend a Mayor and Ambassador breakfast, which will take place in the VIC Restaurant on the Ground Floor, Building F. After the breakfast, the first session of the day will take place in Boardroom D on the 4th Floor, Building C. The route from the VIC Restaurant to Boardroom D will take approximately 7 minutes.)*

## “Urban Issue Hub” sessions

### Challenges → Solutions

UNIDO aims to provide an open platform for all stakeholders to exchange alternative, affordable and appropriate solutions for inclusive and sustainable urban-industrial development. “Urban-Issue Hub” sessions will therefore be organized in order to identify potential investment opportunities and to showcase urban-industrial development demands and innovative urban solutions, with a specific case city. Municipal stakeholders and city representatives are encouraged to actively participate in these sessions to learn from internationally identified best practices, projects and illustrated practical solutions.

10:00 - 11:00

### Urban Issue Hub (I) – Sustainable City: Urban Port Industrial Symbiosis Case City: Trieste

*Boardroom D, 4th Floor, Building C*

*The Urban Issue Hub (I) session will delve into the potential benefits deriving from the implementation of a “triangular model” of urban development in which the port enhance and facilitates the integration of industrial activities into the city’s fabric. The panellists will draw their attention on the importance of linking urban industrialization to a sustainable infrastructure system that facilitates connectivity among industrial regions. They will also illustrate some successful examples of urban-industrial symbiosis, with particular attention to the case of **Trieste**.*

*Focus:*

- Discussing the challenges faced by municipal authorities in balancing the beneficial influence of industrial production at the urban level and the related challenges;
- Illustrating the required policy facilitations and infrastructures needed for the adoption of an environmentally viable model of urban-industrial symbiosis and sustainable cities;
- Showcasing scalable, replicable and successful examples of sustainable infrastructure development at the urban level, especially through the example of Trieste and its port;
- Discussing how the City and the Port of Trieste can become a commercial and distribution hub, as the last buckle in Europe of the Maritime Silk Road.

Moderator: **Mr. Carlos Chanduvi Suarez**, Senior Coordinator, Climate Technology & Innovations Division, Department of Energy, United Nations Industrial Development Organization

Keynote Speaker: **Mr. Zeno D'Agostino**, President of Port System Authority of the Eastern Adriatic Sea, Trieste, Italy

## Panellists:

- **Ms. Giulia Catini**, Institutional Relations EMEA & APAC, CNH Industrial Representative, Office to European Union, Italy
- **Mr. Sandro Chiarandini**, Director of Regional and Local Public Transport, Autonomous Region of Friuli-Venezia Giulia, Italy
- **Mr. Giulio Bernetti**, Director, Department for City Planning, City of Trieste, Italy
- **Mr. Sergio Paoletti**, President, AREA Science Park, Trieste, Italy
- **Mr. Enrico Samer**, President of the World Trade Center Trieste, Italy

**General discussion**

*(Logistical Notes: After the first session, there will be a 15-minute coffee break. The route from the meeting room to the "Coffee Corner", located behind Boardroom D, will take approximately 2 minutes. Panellists and general participants are requested to return to their seats promptly for the second session, which will start at 11:15.)*

**11:00 – 11:15****Coffee Break**

*"Coffee Corner" located behind Boardroom D, 4th Floor, Building C*

**11:15 – 12:15**
**Urban Issue Hub (II) – Smart City: Smart Productivity and Trade**  
 Case City: Shanghai

*Boardroom D, 4th Floor, Building C*

*The Urban Issue Hub (II) session aims to explore the complex and multi-layered inter linkages between Industry 4.0, innovation, and creating new wealth at the urban level.*

*The session aims to identify business opportunities in the urban-industrial sector, with particular attention to IT infrastructure development and SMEs' digital transformation. The measures taken and relevant projects implemented in **Shanghai** will be thoroughly discussed as replicable success stories.*

*Focus:*

- Mainstreaming Industry 4.0 technologies and innovative industries into the cities' development plans to foster the transition toward smart cities;
- Sharing the experience on effective collaboration platforms between municipal authorities, representatives of innovative industries, academia and other stakeholders;
- Showcasing how Industry 4.0 technologies can open up new possibilities for SMEs and young entrepreneurs in urban context;
- Sharing examples of jobs created and trade facilitated by Industry 4.0 and new innovative industries in urban context.

Moderator: **Mr. Bernardo Calzadilla-Sarmiento**, Director, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization

Keynote Speaker: **Mr. GU Xianglin**, Vice President, Tongji University; Vice Chairman of Shanghai Association for Science and Technology, Shanghai.

Panellists:

- **Mr. Pascal Koster**, Managing Director, Malo Capitals & Consulting S.A., Luxembourg
- **Ms. FAN Jingyan**, Executive Vice President, Yitu Technology, China
- **Mr. YU Jie**, Founder of Ants Plan, China

**General discussion**

*(Logistical Notes: Following the second session, there will be a lunch break. All participants will be provided with lunch coupons during the session and are requested to take their lunch in the lunch area in VIC rotunda, which is a 5-minute walk from the meeting room.)*

**12:30 – 14:15**

**Lunch Break**

*Lunch Area, Rotunda, Ground Floor, Building C*

**12:30 - 13:15**

**Innovation, Business Development and Entrepreneurship: Future Perspectives**

*Rotunda, Ground Floor, Building C*

*In this session the panel will discuss how innovation is driving more business development every day, triggering economic growth at large. Both in developed and developing countries, the inception and development of new technologies and innovative solutions has become the most effective way to increase efficiency and productivity at all levels.*

*The panel will analyse the future perspectives for innovative industrial development, devoting particular consideration to sustainability and green innovation. The different professional backgrounds of the speakers will ensure a multiplicity of approaches on the subject, ranging from the point of view of private sector stakeholders in developed and developing countries to a wider international approach.*

Moderator: **Ms. YANG Linda**, Executive Chairwoman, Yingke Global Board of Directors, China

## Panellists:

- Entrepreneur Perspective: **Mr. ZHANG Rong**, COO, Westwell, China (“BRIDGE for Cities” Business Plan Competition Winner)
- Austrian Perspective: **Mr. Christoph Matznetter**, Vice-President, Austrian Federal Economic Chamber, Austria
- International Development Perspective: **Mr. Gerardo Pataconi**, Head of Operations, International Coffee Organization
- Belt and Road Perspective: **Mr. GONG Weixi**, Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships and Field Integration, United Nations Industrial Development Organization

## General discussion

13:15 – 14:15

## Cultural Performances

*Rotunda, Ground Floor, Building C*

*Culture is an important aspect of city competitiveness and the fifth pillar of the BRI. Cities regularly invest in cultural programmes and tourism initiatives, not only to influence the image and attractiveness of their city, but also to stimulate social inclusion and cultural integration. In order to showcase different facets of city life, cultural performances will be organized during the lunch break on 9 and 10 October.*

Moderator: **Ms. Sofya Parfenova**, International Consultant, United Nations Industrial Development Organization

## Performance: ‘Costumes of the World’ parade

The International Cultural Diversity Organization (ICDO) – a Vienna-based international NGO with the objectives of promoting diversity, interculturality and raising awareness of different cultural expressions – will organize the ‘Costumes of the World’ parade.

The aim of the parade is to create awareness of how different cultures influence each other and promote unity. Participants will have the opportunity to admire traditional costumes from different parts of the world and experience the varied dressing styles and artistic performances, while appreciating the value of cultural diversity.

*(Logistical Notes: After cultural performances, the third session will take place in Boardroom D, 4th Floor, Building C. The route from the rotunda to Boardroom D will take approximately 5 minutes.)*

14:30 – 15:45

Urban Issue Hub (III) – Liveable City: Soft Environment for Urban Investments  
Case City: Vienna

*Boardroom D, 4th Floor, Building C*

*The Urban Issue Hub (III) session aims at addressing and discussing the wide and diversified range of soft measures necessary to facilitate and attract investments for cities’ development. The session will highlight how soft environment in cities supports an open society, which spurs ideas, entrepreneurship, innovation, growth, and ultimately attracts investments for urban development, while creating a liveable environment. The panellists will showcase the best practices useful to ensure competitiveness and economic attractiveness*

through soft environment, with an example of **Vienna**, a prominent liveable city that sets the standards in this domain.

Focus:

- Discussing the policy mechanisms and enabling measures that could spur investments in the realms of sustainable urban development;
- Analyzing how investments and partnerships – through the support for innovative initiatives – foster the transition of cities into liveable cities;
- Presenting successful measures implemented to enhance cities’ competitiveness and attractiveness to potential investors.

Moderator: **Mr. GONG Weixi**, Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships and Field Integration, United Nations Industrial Development Organization

Keynote Speaker: **Mr. Richard Gauss**, Head of Department, Municipal Department 24 - Health Care and Social Welfare Planning, City of Vienna, Austria

Panellists:

- **Mr. Rudolf Hundstorfer**, President, Austrian Sports Organization
- **Ms. Tanja Wehsely**, Member of Vienna City Council and Vienna State Parliament, Austria
- **Mr. Alexander Biach**, Deputy Director, Vienna Economic Chamber, Austria

### General discussion

*(Logistical Notes: After the third session, there will be a 15-minute coffee break. The route from the meeting room to the “Coffee Corner”, located directly behind Boardroom D, will take approximately two minutes. Panellists and general participants are kindly requested to return promptly to their seats for the fourth session, which will start at 16:00.)*

15:45 - 16:00

### Coffee Break

“Coffee Corner” located behind Boardroom D, 4th Floor, Building C

16:00 – 17:15

### Urban Issue Hub (IV) – **Park City: Urban Agribusiness** Case City: Chengdu

Boardroom D, 4th Floor, Building C

*The Urban Issue Hub (IV) session revolves around the recently developed concept of “Park City”. This concept focuses on actual living green spaces in urban areas, combined with an environmentally friendly urban agriculture. The session will highlight how cities – as living organisms – have to create and rebuild a wise combination of parks, urban agriculture projects, business models and resource-processing activities that make great use of by-products, thus limiting the impact of waste. The projects implemented in **Chengdu** in this domain will be examined and highlighted to stimulate discussion.*

*Focus:*

- Illustrating how Chengdu's initiatives and projects can serve as examples for other cities, in their paths to develop into park cities;
- Discussing different strategies apt to limit the ecological deficit and the consumption of resource material observed in industrial societies' urban areas;
- Discussing different strategies apt to limit the ecological deficit and the consumption of resource material observed in industrial societies' urban areas;
- Presenting the concept of industrial sustainability, which ultimately aims to decouple resource overuse and environmental overload from economic growth, by supporting recycling and the development of symbiotic eco-systems.

Moderator: **Ms. Laurence Ansermet**, Senior Industrial Development Officer, Department of Agri-business, United Nations Industrial Development Organization

Keynote Speaker: **Ms. Eva Gladek**, CEO of Metabolic, Netherlands

## Panellists:

- **Mr. GAO Jianjun**, Deputy Secretary General, Chengdu Municipal Government, China
- **Mr. YIN Ke**, Deputy Inspector, Chengdu Development and Reform Commission, China
- **Mr. Bon Tjeenk Willink**, Head of Business Development, Protix, Netherlands

**General discussion**

*(Logistical Notes: At the end of the fourth session, all panellists are requested to remain seated for a brief wrap-up of the day's proceedings and achievement highlights.)*

17:15 to 17:30

**Wrap-Up Remarks and Achievement Highlights**

*Boardroom D, 4th Floor, Building C*

- **Mr. ZOU Ciyong**, Director, Department of Programmes, Partnerships and Field Integration, United Nations Industrial Development Organization

*(Logistical Notes: After the wrap-up remarks, participants may exit the VIC via Gate 1. To ensure easy access to the VIC on the third and final day, please retain your ground passes for the remainder of the event.)*

## Theory → Practice

09:15 – 10:15

### Workshop on Industrial Policy along the Belt and Road

Room C3, 7th Floor, Building C

*The theme for this workshop is “The Impact, Mechanism & Routine and Practical Experience of Industrial Policies in China, and the International Production Capacity Cooperation between China and Countries along the Belt and Road”. This workshop will mainly focus on the key industrial policies of countries along the Belt and Road Initiative, and their influence on sustainable industrial and regional development. The discussions will also explore the mechanism and routine to forge cooperation mechanisms aimed at enhancing productive capacities of industries along the Belt and Road. During the session, the experiences learned in this matter by manufacturing industries in China will be summarized together with successful examples of cooperation between China and Belt and Road countries. This multilateral approach to these topics would be helpful for improving the existing industrial policy framework of countries along the Belt and Road, in order to further support the establishment of bilateral and multilateral industrial policy cooperation mechanisms.*

*In parallel, the workshop will also discuss how governments should take into consideration market forces, in order to promote efficient and successful cooperation mechanisms for sustainable, mutually-beneficial industrial development along the Belt and Road.*

#### *Focus:*

- The impact of industrial policies on industrial and regional economic development in countries along the Belt and Road;
- The mechanism and routine for enhancing industrial cooperation among the countries along the Belt and Road;
- The successful experiences of the manufacturing industries in establishing international industrial cooperation linkages through the Belt and Road Initiative.

Moderator: **Mr. Nobuya Haraguchi**, Senior Research and Industrial Policy Officer, Department of Policy Research and Statistics, United Nations Industrial Development Organization

#### Panellists:

- **Ms. WANG Xiaojun Grace**, Deputy Director, Programme and Operations, United Nations Office for South-South Cooperation
- **Ms. YU Jia**, Director, Department of International Development Cooperation, Institute of New Structural Economics, Peking University, China
- **Mr. Robert Stehrer**, Scientific Director, Vienna Institute for International Economic Studies, Austria

*(Logistical Notes: See maps attached in the last two pages of this agenda for directions on how to get from Gate 1 to the VIC rotunda in Building C where elevators in the lobby, located in the direction of Buildings D & E, will take you directly to Room C3 on the 7th Floor. The route from Registration Desk to Board Room B should take approximately 10 minutes. Please note that security check through Gate 1 and badge collection could take up to 30 minutes in the morning.)*

10:30 - 11:15

### Matchmaking of SMEs along the Belt and Road (first part)

Room C3, 7th Floor, Building C

*The session will provide opportunities for exploring partnership and joint projects to the participating SMEs. Particular attention will be devoted to highlight and showcase the lessons learned and the experiences of Austrian and Chinese SMEs operating in countries along the BRI.*

*The session will be followed by matchmaking meetings, arranged according to country specific priority sectors and areas of expertise.*

Moderator: **Ms. Lucia Cartini**, Senior Industrial Development Officer, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization

Keynote Speaker : **Mr. Alexander Biach**, Deputy Director, Vienna Economic Chamber, Austria

Speakers:

- **Mr. XU Kemin**, Director General , Department of Industrial Policy, Ministry of Industry and Information Technology, China
- **Mr. YANG Yang**, Vice President, China Huayang Economic and Trade Group Co., Ltd., China

**Mr. Liu Yaozhong**, Deputy Chief of the Office of International Trade at the National Textile and Apparel Council of China

*(Logistical Notes: After the first part of this session, participants are requested to proceed to the second part: 'Matchmaking Meetings' which will begin at 11:30 in the VIC Restaurant, Ground Floor, Building F)*

11:30 – 12:30

### Matchmaking Meetings (second part of previous session)

VIC Restaurant, Ground Floor, Building F

*The second part will provide opportunities for matchmaking between various sustainable urban-industrial development stakeholders, such as international organizations, public sector, financial institutions, and companies engaged in various sectors related to urban-industrial sustainable development, including but not limited to infrastructure, Industry 4.0 technologies, energy efficiency, waste management, urban agriculture, as well as NGOs, academia, etc.*

*Three rounds of matchmaking meetings, pre-arranged based on the actual demands of participants taking a sector-specific focus, will be conducted, with each round lasting for 15 minutes.*

*The remaining 15 minutes of the session will be provided for participants to establish further contact as they wish and complete a survey on the matchmaking meetings, as the event approaches its ending.*

*(Logistical Notes: All participants of matchmaking meetings and dignitaries with invitations are invited to attend “BRIDGE for Cities” Closing Lunch, which will take place in the VIC Restaurant on the Ground Floor, Building F.)*

12:45 – 14:00

### “BRIDGE for Cities” Closing Lunch \*

*VIC Restaurant, Ground Floor, Building F*

Moderator: **Ms. Tally Einav**, Executive Officer, Office of the Deputy to the Director General, United Nations Industrial Development Organization

Remarks by Sponsor: **Mr. Alexander Biach**, Deputy Director, Vienna Economic Chamber, Austria

Remarks on the role of women as creators of businesses, jobs and social cohesion: **Ms. Hedda Öhlberger-Femundsenden**, Gender Coordinator, Office for Gender Equality and Empowerment of Women, United Nations Industrial Development Organization

Event Closing Remarks: **Mr. Hiroshi Kuniyoshi**, Deputy Director General, United Nations Industrial Development Organization

\*By Invitation Only

*(Logistical Notes: Dignitaries with invitations are invited to attend a closing lunch, which will take place in VIC Restaurant on the Ground Floor, Building F. After the lunch, registered study tour participants are requested to gather promptly at the UNIDO Booth in the VIC rotunda at 14:00.)*

14:15 – 17:15

### Study Tour on Aspern Seestadt and Industry 4.0

*Gathering point: UNIDO booth, Rotunda, Ground Floor, Building C*

A combined study tour, generously organized by the City of Vienna and Urban Innovation Vienna, will take place on 11 October to familiarize participants with practical urban-industrial development solutions. The study tour will cover the following locations:

#### **Location 1:** Aspern Seestadt

**Description:** Innovative solutions are not about technological progress alone. A city is only “smart” when everyone benefits and the focus of innovation is firmly on people and their needs. New approaches to enhance community life in the urban environment and make it more eco-friendly are being piloted and tested at aspernSeestadt, the new city-within-a-city currently under construction and due for completion in 2028. It is one of Europe’s largest urban development projects in Vienna’s fast-growing 22nd district in the north-east of the city. Seestadt functions as an urban lab, a pilot environment for urban planning and development. That makes Vienna a Smart City.

**Location 2:** Industry 4.0 – Pilotfactory

**Description:** The Pilotfactory is being built in Seestadt Aspern, where the laboratories of researchTUb, a cooperation between TU Vienna, the Vienna Business Agency and real estate developer wien3420, have been housed. The pilot factory is important for several reasons: Scientific know-how about optimal production techniques should be developed, which then benefits the economy. At the same time, the Pilotfactory will play a decisive role in the teaching of the Vienna University of Technology. Students can get to know and co-develop the entire value chain there – from design through production and assembly to quality assurance and logistics. It should be possible there to develop new prototypes and new process technologies. Last but not least, the Pilot factory should also be used for further education – skilled workers from the production area should get to know new ideas, which they can then implement in their own companies.

*(Logistical Notes: Participants registered for the study tour are requested to gather promptly at the UNIDO Booth in the VIC rotunda at 14:00. At 14:10, all three groups will be conveyed by a UNIDO employee to their bus via Gate 1. At the end of the study tour, the bus will return all participants to the VIC. If necessary, participants are encouraged to call the coordinator of their respective study tour for additional information or in case of any unforeseen delays.*

# BIOGRAPHIES

DAY 1 | 9 October 2018

## “BRIDGE FOR CITIES” MEDIA BREAKFAST

### Welcome Remarks

#### Mr. Kai Bethke



*Director, Department of External Relations, United Nations Industrial Development Organization*

Mr. Kai Bethke was appointed as the Director of External Relations by UNIDO Director-General LI Yong in 2017. As part of this activity, he is responsible for the organization’s relations with all member states and for communication. In 2007, Mr. Bethke took over the management of the UNIDO Regional Office for Mexico and Central America in Mexico City and, in 2013, the UNIDO Regional Office for

Southern South America in Montevideo. Mr. Bethke began his career in the private sector in Bogota with the Colombian-German Industrial and Trade Chamber. He received his PhD in Economics from the University of Nuremberg.

### Key Message Delivery

#### Mr. GONG Weixi



*Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

Mr. GONG Weixi has over two decades of professional experience, with positions and expertise in the Aviation Industry, Systems Analysis as well as Technology Transfer and its negotiation, theory and practice. In 1997, he was recruited by the United Nations Industrial Development Organization (UNIDO), where he undertook various responsibilities in the area of information and knowledge management, business sector development, sector-specific value chain development, technology transfer, programme evaluation, human resources development, field operations, and South-South cooperation. Since 2012, Mr. Gong has been engaged in the area of sustainable cities and urban-industrial development at UNIDO. He has previously served as the UNIDO representative in Iran and as the chairperson of the Operations Management Team of the United Nations in Iran. Currently, Mr. Gong is serving as the Senior Coordinator for South-South and triangular industrial cooperation at the Department of Programmes, Partnerships, and Field Integration at UNIDO.

## EXHIBITION – INAUGURATION CEREMONY

### Moderator

#### Ms. FUJINO Ayumi



*Director, Office of Strategic Planning and Coordination, United Nations Industrial Development Organization*

Ms. FUJINO Ayumi was Head of the Regional Office of Thailand at the United Nations Industrial Development Organization from 2006 to 2010, where she was responsible for UNIDO operations in the industrial sector. Over the next several years, she was UNIDO Representative in India and Head of the Organization’s South Asia Regional Office. In 2016, she became Director of the Strategic Planning and Coordination Office at UNIDO. Ms. Fujino started

her career at UNIDO in the 1980s, holding various positions, including Associate Expert and Industrial Development Officer. While she was stationed at UNIDO Headquarters in Vienna, she implemented different projects for the development of micro-, small- and medium-scale enterprises.

## Welcome Remarks

### Mr. LI Yong



*Director General, United Nations Industrial Development Organization*

Mr. LI Yong, Director General of the United Nations Industrial Development Organization, has had an extensive career as a senior economic and financial policymaker. As Vice-Minister of Finance of the People's Republic of China and a member of the Monetary Policy Committee of the Central Bank for a decade, Mr. Li has long been involved in setting and harmonizing fiscal, monetary and industrial policies and in supporting sound economic growth in China. Throughout his career, he has advocated financial-sector reform and prompted major financial institutions to establish corporate governance, deal with toxic

assets and strengthen risk management.

Mr. Li prioritizes fiscal and financial measures to promote agricultural development and small and medium-sized enterprises, both of which represent cornerstones for creating economic opportunities, reducing poverty and promoting gender equality. He played a key role in China's cooperation with multilateral development organizations, such as the World Bank Group and the Asian Development Bank.

## HIGH-LEVEL POLICY DIALOGUE - OPENING CEREMONY

### Moderator

#### Ms. FUJINO Ayumi (Please see page 110)

*Director, Office of Strategic Planning and Coordination, United Nations Industrial Development Organization*

### Statements

#### Mr. LI Yong (Please see page 111)

*Director General, United Nations Industrial Development Organization*

#### Ms. Bernadette Gierlinger

*Viceminister at the Federal Ministry of Digital and Economic Affairs of Austria*



Ms. Bernadette Gierlinger worked for nearly two decades in tax law and finance, with positions in both private firms and public departments. From 2002 until 2005, she held the position of Deputy Director of Finance at the Federal Ministry of Finance where she coordinated tax policy, prepared government bills and oversaw the calculation of implementation costs. Ms. Gierlinger has held the position of Vice Minister for Foreign Economic Policy and European Integration at the Federal Ministry of Science, Research and Economy since 2010. Her main responsibilities include coordinating foreign trade and investment policy, trade promotion and bilateral issues, as well as acting as Austria's representative in the European Union Trade Policy Committee. Ms. Gierlinger holds a master's degree in Business Informatics and Computer Science from the University of Vienna in Austria.

## H.E. Mr. ZHANG Yong



*Vice Chairman, National Development and Reform Commission, China*

Mr. ZHANG Yong is a senior economist with a master's degree of Economics. Mr. Zhang is Vice Chairman of the National Development and Reform Commission (NDRC). Mr. Zhang Yong served as Deputy Secretary General and member of the Party Members' Group of the State Council, Deputy Secretary General of the State Council and Office Director and Secretary of the Party Members' Group of the Food Safety Committee of the State Council (minister level), Deputy Secretary General of the State Council and Commissioner and Secretary of the Party Members' Group of the State Food and Drug Administration consecutively. In January 2015, Mr. Zhang Yong was appointed Vice Chairman (minister level) of NDRC.

## Mr. Massimiliano Fedriga



*President, Autonomous Region of Friuli-Venezia Giulia, Italy*

Born in Verona but grown up in Trieste, Mr. Fedriga holds a Master in Communications Analysis and Management. He worked several years as Head of Marketing for many SMEs in the region. In parallel, Mr. Fedriga cultivated his passion for politics. In 2003, he became "Lega Nord" party secretary for the province of Trieste. Elected for the first time as Member of Parliament in 2008, he was then re-elected both in 2013 and 2018. During his tenure as Member of Parliament he worked in the Parliamentary Committee for Labour. On April 29th 2018 he was elected President of the autonomous region of Friuli-Venezia Giulia.

## Mr. CAI E-Sheng



*Chairman, Finance Center for South-South Cooperation*

Mr. CAI E-Sheng serves as Chairman of the Finance Center for South-South Cooperation and has served as Executive Director of the China Society for Finance and Banking since 2014. Mr. CAI joined the People's Bank of China (PBC) in 1975 where he served as Assistant to the Governor from 1998 and Governor of the PBC Shanghai Branch from 2000. He then acted as Chairman of the Supervisory Board for the China Everbright Group and the Citic Group Corporation beginning in 2001. From 2005 to 2013, he worked as Vice Chairman of the China Banking Regulatory Commission. He was elected a member of the Chinese People's Political Consultative Conference in 2013. Mr. Cai holds a bachelor's degree in Economics from Shanxi University of Finance and Economics in China.

## Ms. Simonetta Di Pippo



*Director, United Nations Office for Outer Space Affairs*

Ms. Simonetta Di Pippo is the Director of the United Nations Office for Outer Space Affairs (UNOOSA), which is mandated to enhance international cooperation in space activities to promote their use for humanity. Prior to joining UNOOSA in 2014, she was Head of the European Space Policy Observatory at Agenzia Spaziale Italiana (ASI) in Brussels. Ms. Di Pippo also served as Director of Human Spaceflight of the European Space Agency from 2008 to 2011, and Director of the Observation of the Universe at ASI from 2002 to 2008, where she started her career in 1986. She has been an Academician of the International Academy of Astronautics (IAA) since 2013, and since 2016 a member of the IAA Board of Trustees. Ms. Di Pippo is also a member of the World Economic Forum Global Future Council on space technology for 2016-18. Ms. Di Pippo holds a Master's Degree in Astrophysics and Space Physics from University "La Sapienza" in Rome, an Honoris Causa Degree in Environmental Studies from St. John University, and an Honoris Causa Degree in International Relations from John

Cabot University. Ms. Di Pippo was knighted by the President of the Italian Republic in 2006. In 2008, the International Astronomical Union named asteroid 21887 “Dipippo” in honour of her contribution to space activities.

### Mr. Mehran Eftekhar



*Chairman of the Audit and Risk Committee for the World Trade Centers Association; Director of the World Trade Center Cyprus*

Mr. Eftekhar has been a Director and the Group Head of Corporate Services & Finance at Nest Investments Holdings Ltd. since 1995. Through his efforts, WTC Cyprus obtained certification as a Center of Excellence, and hosted the WTCA EMEA regional meeting in 2006. Mr. Eftekhar was advisor to WTCA’s Ad Hoc Governance Committee, helping bring reforms and added transparency to WTCA’s business practices. Mr. Eftekhar has been involved in real estate developments located in Doha, Algeria, Saudi Arabia, Lebanon, Cyprus, United Kingdom and Spain.

### Mr. António Guterres



*Secretary-General, United Nations (Video Message)*

Mr. António Guterres, the ninth Secretary-General of the United Nations, took office on 1st January 2017. Prior to his appointment as Secretary-General, Mr. Guterres served as United Nations High Commissioner for Refugees from June 2005 to December 2015, heading one of the world’s foremost humanitarian organizations during some of the most serious displacement crises in decades. Before joining UNHCR, Mr. Guterres spent more than 20 years in government and public service. He served as prime minister of Portugal from 1995 to 2002. As president of the European Council in early 2000, he led the adoption of the Lisbon Agenda for growth and jobs, and co-chaired the first European Union-Africa summit. He was a member of the Portuguese Council of State from 1991 to 2002. Mr. Guterres was elected to the Portuguese Parliament in 1976 where he served as a member for 17 years. During that time, he chaired the Parliamentary Committee for Economy, Finance and Planning, and later the Parliamentary Committee for Territorial Administration, Municipalities and Environment.

From 1981 to 1983, Mr. Guterres was a member of the Parliamentary Assembly of the Council of Europe, where he chaired the Committee on Demography, Migration and Refugees. Mr. Guterres is a member of the Club of Madrid, a leadership alliance of democratic former presidents and prime ministers from around the world.

## PRESS BRIEFING

### Moderator

**Mr. Kai Bethke** (Please see page 110)

*Director, Department of External Relations, United Nations Industrial Development Organization*

### Panellists

**Mr. LI Yong** (Please see page 111)

*Director General, United Nations Industrial Development Organization*

## SESSION 1 – GLOBAL GOALS FOR LOCAL IMPACT: STRENGTHENING POLICY COORDINATION FOR THE SUCCESSFUL IMPLEMENTATION OF DEVELOPMENT GOALS

### Moderator

#### Ms. YANG Wei



*Founder and Chairman of Wei Yang & Partners, United Kingdom*

Ms. YANG Wei is a renowned urban designer and master planner with considerable wealth of experience in both new communities and urban regeneration. Her professional strengths lie in combining innovative planning inspirations with feasible implementation solutions. She has extensive experience in managing multi-disciplinary teams and is now leading large scale regeneration and low carbon master planning projects in Britain and internationally. Actively promoting ‘joined-up thinking’ between different professionals, Wei is the Vice-chair of RTPI International Committee, an Academician of the Academy of Urbanism and a Board Trustee of Milton Keynes City Discovery Centre. Due to her substantial contribution and leadership in the planning field, Wei has been conferred Fellowship of Academy of Social Sciences, among distinguished scholars and practitioners from across the full spectrum of social sciences.

### Keynote Speaker

#### Ms. Katharina Schneider-Roos



*CEO of Global Infrastructure Basel*

Ms. Katharina Schneider-Roos is CEO of the non-profit foundation Global Infrastructure Basel (GIB). Katharina’s team has assessed over one hundred infrastructure projects across the world applying the GIB Grading for Sustainable Infrastructure. This tool helped to highlight the environmental, social and economic risks and potential impacts of projects and provided investors and project owners a framework for decision-making. Katharina was responsible for organizing an annual investment forum during GIB Summits, and led the publication of the Sustainable Infrastructure Capacity Building Handbook and a Scoping Study for the Early Stage Project Preparation Stage. She co-chairs the Cities Climate Leadership Alliance’s (CCFLA) Working Group on Project Preparation Facilities, is member of the CCFLA Steering Board and a member of the ICLEI Resilient Cities Conference Program Committee. In support of the Swiss Government and international experts, she is currently working with a project team to establish SuRe – The Standard for Sustainable and Resilient Infrastructure. Katharina is member of the Steering Board of the Resilience Measurement, Evidence and Learning Community of Practice funded by the Rockefeller Foundation.

### Panellists

#### Mr. Massimiliano Fedriga (Please see page 112)

*President, Autonomous Region of Friuli-Venezia Giulia, Italy*

#### Mr. YU Lifeng



*Deputy Director General, Foreign Economic Cooperation Center, Ministry of Ecology and Environment of China*

Mr. YU Lifeng is Deputy Director-General and Chief Financial Officer of FECO, Ministry of Environment and Ecology, China. He graduated from Wuhan University with a degree in Financial Management. He also obtained a Master Degree in accounting from the People’s University of China, and Master of Public Administration and Management from the National University of Singapore. Mr. Yu started working in

FECO in 2001. His business involves many fields, including international environmental convention and GEF implementation, multilateral and bilateral cooperation and south-south cooperation. He led the project implementation under Montreal Protocol referring to Ozone Depleting Substance, Stockholm convention referring to persistent organic pollutants, Biological Diversity Conservation and Minamata Convention referring to mercury, which greatly enhanced China's environmental convention implementation and ecological and environmental protection. With a background in finance and law, he also has rich experience in strategic financial planning and analysis.

### Ms. Mariline Diara



*Director of Environment and Classified Establishments, Ministry of Environment and Sustainable Development, Senegal*

Ms. Mariline Diara, a trained geologist, is Director of Environment and Classified Establishments at the Senegalese Ministry for the Environment and Sustainable Development, a focal point for climate change as part of the United Nations Framework Convention on Climate Change for Senegal. From 1986 to 2012 Ms. Diara was a researcher, Professor at the University Cheikh Anta Diop. In 2014 she was decorated Knight of the Order of the Lion. Since November 2012 she served as the Director of Environment and Classified Establishments (DEEC) at the Ministry of Environment and Sustainable Development of Senegal. In this focal point framework, she was involved in the UN Framework Convention on Climate Change and participation in the COPs of Doha, Warsaw, Lima, Paris, Marrakesh and Fiji Islands in Bonn; the Abidjan Convention and participation in the Cape Town COP in 2013 and the COP in Abidjan in 2017; the Basel, Rotterdam, Stockholm and Minamata conventions and participated in the Geneva COPs; the Global Environment Facility (GEF / GEF) project WACA (Regional Investment Project for Resilience of Coastal Zones in West Africa - Donors: BM and FND - 2018 to 2023).

## OPEN DEBATE: BELT AND ROAD INITIATIVE AND WIN-WIN COOPERATION – MEMBER STATES' POINT OF VIEW AND EXPECTATIONS

### Moderator

#### Mr. Bernhard Müller



*Former Mayor of Wiener Neustadt; General Secretary, Urban Forum, Austria*

After graduating from Wiener Neustadt Business Academy, Mr. Müller studied law, political science and journalism. In 1995 he became a specialist in housing subsidies in Vienna. In 1996 he moved to Wiener Neustadt, where he spent three years in the building law department and seven years in the commercial office. He graduated in 2013 with a "Master of Public Administration" degree. Bernhard Müller was a member of the municipal council of the city of Wiener Neustadt. In 2005, he was appointed City Councillor for Finance and the Economy. He was the Mayor of his home town from 2005 to 2015. In the Social Democratic Party of Austria Müller is active since 1995, whose Chairmanship he held until February 2017. He founded the "Platform Critical Youth" in 1996, and served as Chairman until 2001.

From 1995 to 2001 Bernhard Müller was the youth spokesman of the SPÖ city party organization. In 2005, Mayor Müller was elected city party Chairman. He was a member of the Bundesparteivorstand, the regional party presidium and board of the SPÖ Lower Austria. Additionally, he was appointed Federal Chairman of the AGM Austria and is a member of the executive committee of the Austrian Association of Towns.

## Panellists

### Mr. Thomas Weninger



*General Secretary of the Austrian Association for Cities and Towns, Austria*

Mr. Thomas Weninger manages the General Secretary of the Austrian Association of Cities and Towns since 2006. He studied political science at the University of Vienna and started his occupational career at the Institute for Advanced Studies (IHS). His further career steps included working as scientific officer at the Institute for Conflict Research (IKF) and the Centre for Public Administration Research (KDZ). Between 1993 and 1994, Thomas Weninger was General Secretary of the Austrian Society for Political Science (ÖGPW). In 1994 he switched to the Bureau for Coordination at Chief Executive Office of the City of Vienna where he worked in the field of European Integration. Between 1997 and 2007 he worked as director of TINA Vienna Transport Strategies GmbH (Transport Infrastructur Needs Assessment). Between 2003 and 2004, Thomas Weninger was director of the unit “Knowledge Management and Coordination” at the Chief Executive Office of the City of Vienna. At the end of 2004, he was director of the Magistrate Department 27, where his responsibilities encompassed EU-Strategy and Economic Development at the Business Group Finance, Economic Policy and Wiener Stadtwerke. He received a Master’s Degree in Legal Studies from the Danube University Krems.

### Mr. Peter Buchas



*Business Consulter & Member of the Austrian Chinese Business Association, Austria*

Mr. Peter Buchas, BSc, ME, works as trainer, coach and consultant. Since 2009 he supports enterprises in their organisational development and holds lectures at the TU Munich, WU Vienna and FH Kufstein. Peter contributes to executive development programs of international companies and accompanies them in setting up innovative corporate cultures. He studied physics at the University of Vienna, speaks fluent Mandarin and holds a Master’s Degree in Chinese Economic Policies of Xiamen University. He is associated researcher at the Institute for Peace Support and Conflict Management at the Austrian National Defence Academy.

### Mr. Bartosz Piziak



*Project Coordinator – Researcher, Department of Economic Processes National Institute for Spatial Present Policy and Housing, Research, Poland*

Mr. Bartosz Piziak, received his Ph.D. in Earth sciences (socio-economic geography) from the Jagiellonian University in 2013. After completion of his degree he worked as an assistant in the Institute of Geography and Spatial Management at the Jagiellonian University with project entitled: “Geographical Proximity of Knowledge-Intensive Companies and Knowledge Flows: Interactions, Mechanisms and Dynamics” funded by the National Science Centre.

Dr. Piziak is presently a project coordinator and researcher in the National Institute for Spatial Policy and Housing (Department of Economic Processes Research). His interests are focused on the tourist space of the city, smart city concept, smart solutions for Polish cities and knowledge flows in Knowledge-Intensive Companies. He is author or co-author of over a dozen papers on regional development and tourism in cross-border regions.

**Ms. Julia Grübler**

*Economist, Vienna Institute for International Economic Studies, Austria*

Ms. Julia Grübler is Economist at wiiw, where she holds a pre-doc position at the Research Centre, International Economics (FIW). Her research focuses on international (trade) relations with special focus on the policies of the European Union and its Member States. Julia Grübler has obtained her Master's degree in Applied Economics at the University of Innsbruck. In the course of her studies, she has spent one semester at the Solvay Brussels School of Economics and Management of the Université Libre de Bruxelles. Currently, she is enrolled in the joint PhD programme in Economics of the Johannes Kepler University Linz (JKU) and the University of Innsbruck (LFU) and is external lecturer at the Vienna University of Economics and Business (WU).

## CULTURAL PERFORMANCES

### Moderator

**Ms. Sofya Parfenova**

*International Consultant, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

Ms. Sofya Parfenova is an experienced manager of international projects with extensive experience in the cultural and business fields. With a Master's degree of International Relations, she continues her academic qualification at the University of Vienna in the Cultural Differences and Transnational Processes program. Being an international consultant in UNIDO she works in the Department of Programmes, Partnerships, and Field Integration supporting the BRIDGE for Cities project.

### Performances

**Philippines Culture Group**

The VIC Club Filipino Folklorico dance group – with support from the European Network of Filipino Diaspora – will feature one dance from each region of the country and will culminate its performance with the official Philippines' tourism song.

**Indonesia Culture Group**

This performance will showcase the rich and multifaceted cultural heritage and traditions of Indonesia.

**VIC Jazz band performance**

The jazz band "Melting Bop" will close the Cultural Performance session with a brief jazz concert.

## SESSION 2 – FINANCING THE FUTURE: STRENGTHENING MULTI-STAKEHOLDERS PARTNERSHIPS TO FINANCE INCLUSIVE AND SUSTAINABLE URBAN-INDUSTRIAL DEVELOPMENT

### Moderator

#### Mr. Marco Sorge



*Principal Investment Officer, World Bank Group - Vienna Office (IFC)*

Mr. Marco Sorge heads the IFC municipal infrastructure team in Europe, Middle East and North Africa. His team helps leading cities in the region to develop and finance urban transport, water and other urban infrastructure investments with no need for sovereign guarantees. Marco's team is responsible for selection of eligible investments, structuring and execution. In Turkey, Marco and team have lent over EUR300 million for urban transport and water projects in three cities. Recently, the team has moved to Vienna and diversified its focus of operations across Ukraine, Morocco and the Balkans. Marco is a financial economist by background and holds a Ph.D. in economics from Stanford University.

### Keynote Speaker

#### Ms. ZHENG Quan



*Director General, Policy and Strategy Department, Asian Infrastructure Investment Bank*

Ms. ZHENG Quan serves as Director General for Policy and Strategy Department at the Asian Infrastructure Investment Bank. She previously served as Deputy Director General of Department of International Economic and Financial Cooperation of Ministry of Finance, China. She joined the Ministry of Finance in 1996, and worked in several departments of the MOF including State Debt Management Department, Finance Department, International Department, External Economic Exchange Office, China CDM Fund and International Cooperation Department. Ms. Zheng was Senior Advisor in China's Executive Director's Office of the World Bank from late 2002 to early 2005. Her portfolio includes AIIB, NDB, G20 Investment and Infrastructure Working Group, etc.

### Panellists

#### Mr. Stefan Dörfler



*CEO and Chairman of Board, Erste Bank*

Mr. Stefan Dörfler currently serves as Chairman of the Management Board and Chief Executive Officer of Erste Bank Der Oesterreichischen Sparkassen AG since October, 2016. Mr. Dörfler also serves as Head of Group Capital Markets of Erste Group Bank AG. He previously served as Head of Group Markets at Erste Bank Der Oesterreichischen Sparkassen AG. Mr. Dörfler has held various managerial positions at Erste Bank and Erste Group. He also serves as a Member of Supervisory Board at Wiener Börse AG. Mr. Dörfler began his career in banking at Giro Credit before joining Erste bank in 1997. He studied technical mathematics at the TU Wien.

**Mr. Roberto Dipiazza**

*Mayor of Trieste, Italy*

Mr. Roberto Dipiazza is an Italian Entrepreneur and Politician, currently serving as the Mayor of Trieste after being re-elected for the seat in 2016 for a third 5-year term as Mayor, second in Trieste. He was first elected Mayor of Muggia (Trieste) in 1996. Mr. Dipiazza began his career as a large scale retail manager before starting his own business enterprise in Trieste and before joining politics.

**Mr. HUANG Feng**

*Managing Director, Asia-Pacific Model E-port Network Operational Center*

Mr. HUANG Feng is the Director-General of Asia Pacific Model E-port Network (APMEN). APMEN is a project focusing on trade facilitation and supply chain connectivity, launched by APEC Economic Leaders' Meeting 2014 in Beijing. Mr. Huang holds an M.A. in Economics from FUDAN University, MSc Management from London School of Economics and Political Science, and B.A. in World Economics from Shanghai University of Finance and Economics.

Mr. Huang has served as Deputy Director-General of the Department of Foreign Investment Administration, MOFCOM, China from August 2011, the Vice Chairman of Shanghai Municipal Commission of Commerce from June 2010, and other official positions since he joined Shanghai Municipal Government in 1992. Besides, he also served as Arbitrator of China International Economic and Trade Arbitration Commission and Shanghai International Arbitration Commission, and Researcher of Free Trade Pilot Zone research center in Shanghai University of Finance and Economics.

### SESSION 3 – CITIES OF TOMORROW: TECHNOLOGICAL SOLUTIONS AND HOLISTIC APPROACHES FOR SUSTAINABLE CITIES

**Moderator****Mr. Dennis Pamlin**

*Senior Advisor, RISE Research Institutes of Sweden AB*

Mr. Dennis Pamlin is an entrepreneur and founder of 21st Century Frontiers. His background is in engineering, industrial economy and marketing. Mr. Pamlin worked as Global Policy Advisor for WWF from 1999 to 2009. During his tenure, he initiated WWF's Trade and Investment Programme work in the BRICs and led the work with companies (especially high-tech companies such as ICT) as solution providers. From 2010 to 2013 he was the Director for the Low Carbon Leaders Project under the UN Global Compact. He is currently a Senior Associate at Chinese Academy of Social Sciences, Senior Advisor at RISE, a visiting research fellow at the Research Center of Journalism and Social Development at Renmin University, and advisor to Centre for Sustainable Development at Confederation of Indian Industries (CII). Current work includes establishing a framework that can identify winners in a sustainable future, building a platform for global trend assessment, promoting clusters capable of delivering transformative solutions, exploring the impact of our "digital twins" and developing tools that allow public procurement to support sustainable solutions. Mr. Pamlin is also leading work to develop tools for companies, organizations and cities to measure and report their positive impacts, focus on climate, water, health and poverty.

## Keynote Speaker

**Ms. YANG Wei** (Please see page 114)

*Founder and Chairman of Wei Yang & Partners, United Kingdom*

## Panellists

**Ms. Simonetta Di Pippo** (Please see page 112)

*Director, United Nations Office for Outer Space Affairs*

**Mr. GAO Jianjun**



Deputy Secretary General, Chengdu Municipal Government, China

Mr. GAO Jianjun is responsible for development and reform, price, finance, statistics, taxation, legal system, government services and open government affairs, archives, local chronicles and investment related fields. He has deeply studied and practiced in the government administrative efficiency reform, green low-carbon city construction, macroeconomic analysis and research, financial management and construction of government legal system.

**Mr. Richard Gauss**



*Head of Department, Municipal Department 24 – Health Care and Social Welfare Planning, City of Vienna*

Mr. Richard Gauss was born in Linz and studied economics there. In 1987 he began his career in the budget section of the Ministry of Finance. In 2002, he became head of the Budget - Labor, Social Affairs, Health and Pensions Department. In 2010, he moved to the higher administrative service of the City of Vienna as Division Manager for Financial Management in the Business Group Health and Social Affairs.

## WRAP-UP REMARKS AND ACHIEVEMENT HIGHLIGHTS

**Ms. Fatou Haidara**



*Managing Director, Directorate of Corporate Management and Operations, United Nations Industrial Development Organization*

Ms. Fatou Haidara holds a Master's degree in Economics and Business Management from the University of Reims, France. Prior to joining UNIDO, she served the Government of Mali for eight years in several ministerial positions, including as Minister of Employment and Vocational Training and Minister of Industry, Trade and Private Sector Development. Ms. Haidara joined UNIDO in 2004 as Director of the Africa Programme. In 2006, she was appointed Director of the Special Programmes Group which was in charge of promoting UNIDO's cooperation with the Least Developed Countries (LDCs) in the implementation of technical cooperation projects. From January 2011, as Director of the Policymaking Organs Secretariat, Advocacy and Communications, Ms. Haidara was responsible for coordinating and liaising with Member States and providing substantive support to the governing bodies of the Organization. In 2013, she mobilized the UNIDO team and, together with the Government of Peru, coordinated the historic 15th General Conference of UNIDO which culminated in the adoption of the Lima Declaration that set the foundation for a renewed mandate of inclusive and sustainable industrial development (ISID). Ms. Haidara holds the title of "Commandeur de l'ordre National du Mali", awarded by the President of the Republic of Mali.

## RECEPTION HOSTED BY UNIDO'S DIRECTOR GENERAL

## Master of Ceremonies

**Mr. Hiroshi Kuniyoshi**

*Deputy Director General, United Nations Industrial Development Organization*

Mr. Hiroshi Kuniyoshi was appointed earlier this year to be UNIDO's Deputy to the Director-General and Managing Director of External Relations and Field Representation. He was previously head of the agency's Investment and Technology Promotion Office in Tokyo, where he worked closely with Japanese industries in areas related to technology transfer and investments to developing countries. Prior to that that, he served four years as Executive Director of the New Energy and Industrial Technology Development Organization (NEDO), one of Japan's largest public organizations in research and development, where he supervised global collaborative projects for the development of low carbon technologies such as renewable energy, battery storage and smart grids. Earlier in his career, Mr. Kuniyoshi was Professor at the Frontier Research Centre of the Tokyo Institute of Technology, served in various positions at Japan's Ministry of International Trade and Industry (now known as METI), and was an advisor to the UNIDO Director General. He holds a Master's degree in International Relations from the University of Cambridge and a Ph.D. in Energy Science from Kyoto University.

## Remarks by Sponsor

**Mr. Gerhard Hirczi**

*Managing Director, Vienna Business Agency*

Mr. Gerhard Hirczi has been leading the Vienna Business Agency as its Managing Director since 2009. Following his graduation in macroeconomics at the University of Graz, he started his career with a Viennese consulting company in 1985. From there he changed into the Department of Economics of the Austrian Federal Chancellery and later joined the Cabinet of the former Chancellor Franz Vranitzky as a consultant for economic policy. From 1997 to 2000, Mr. Gerhard Hirczi acted as Siemens Austria's Secretary General, and later as Head of Group HR for Siemens's CEE cluster, overseeing a staff of over 40.000.

## Toast Remarks

**Mr. LI Yong** (Please see page 111)

*Director General, United Nations Industrial Development Organization*

# BIOGRAPHIES

DAY 2 | 10 October 2018

## MAYOR AND AMBASSADOR BREAKFAST

### Welcome Remarks

**Mr. LI Yong** (Please see page 111)

*Director General, United Nations Industrial Development Organization*

## URBAN ISSUE HUB (I) SUSTAINABLE CITY: URBAN PORT INDUSTRIAL SYMBIOSIS

### CASE CITY: TRIESTE

### Moderator

**Mr. Carlos Chanduvi Suarez**



*Senior Coordinator, Climate Technology & Innovations Division, Department of Energy, United Nations Industrial Development Organization*

Mr. Carlos Chanduvi previously held the title of Director, Latin American and the Caribbean Programme for UNIDO after serving as the Senior Field Operations Officer for the UNIDO Latin American Programme for 5 years and the Senior Field Operations Officer for the UNIDO Arab Programme for 4 years. He has more than 25 years of experience in international consultancy, working with public and business sectors. He has experience in project management, strategic and organizational innovation and knowledge management. He has multilingual skills, sustained with PhD in Advanced Materials and Diploma in Economics and International Relations, from the London School of Economics. He is member of the Executive Board, Austrian-Venezuelan Association, Academia for Quality Issues - Russian Federation, and British Open University Business School Knowledge Managers Network.

### Keynote Speaker

**Mr. Zeno D'Agostino**



*President, Port System Authority of the Eastern Adriatic Sea, Italy*

Mr. Zeno D'Agostino is the President of Port System Authority of the Eastern Adriatic Sea – Port of Trieste from 9 November 2016. From April 2017 he is the Chairman of “Assoporti”, the association of the Italian Port Authorities. Currently, Mr. D'Agostino is also member of the board of Special Company for the Port of Monfalcone and President of the Trieste Passenger Terminal (TTP). He has been involved in numerous research projects in transport economics, logistics, sustainable transport, promotion and demand growth. Mr. D'Agostino has significant experience in intermodal freight transport, railway operation, international port development projects, PPP, financial investment, logistic centers and Free Zones projects. He has a background in teaching and training, he is Professor of Logistics and Transport at the master ELEO “Economics and East European Languages” Ca' Fosfari headquarters of Treviso. Moreover, he was General Secretary of Naples Port Authority, CEO LOGICA scarl, Agency of the Region of Campania for the promotion and research in logistics and freight, and Responsible for strategy, development and marketing Consorzio ZAI - Interporto of Verona.

## Panellists

### Ms. Giulia Catini

*Institutional Relations EMEA & APAC, CNH Industrial Representative Office to the European Union, Italy*

Ms. Giulia Catini works for CNH Industrial Institutional Relations covering Europe, Middle East and Africa, and the Asia Pacific Region. She is currently based at the CNH Industrial Representative Office to the EU in Brussels, working with the EU Institutions and Trade Associations.

CNH Industrial is a global leader in the capital goods that includes several brands with major international force in its specific industrial sector: Case IH, New Holland Agriculture and Steyr for tractors and agricultural machinery; Case and New Holland Construction for earth moving equipment; Iveco for commercial vehicles; Iveco Bus and Heuliez Bus for buses and coaches; Iveco Astra for quarry and construction vehicles; Magirus for firefighting vehicles and FPT Industrial for engines and transmissions.

Ms. Catini joined CNH Industrial six years ago as Sustainability Project Manager, after short-term collaborations with the United Nations and WTO in Geneva. She was born in Italy where she studied Economics and Public Policy, with a major in Diplomatic Affairs.

### Mr. Sandro Chiarandini

*Director of Regional and Local Public Transport of Friuli-Venezia Giulia Region, Italy*

### Mr. Giulio Bernetti



*Director, Department for City Planning, City of Trieste, Italy*

Mr. Giulio Bernetti was born in Trieste, Italy. He has a background in engineering and a PhD in Transport Engineering from the University of Trieste. He was a professor for many years at the University of Trieste. He is manager, designer and project leader of several public works and plans of various Italian cities (Trieste, Milano, Gorizia, Grado). In 2014 he lived in Oman as expert advisor of the Ministry of Transport and Communication of the Sultanate. He currently holds the position of General Manager of the Urban Planning and Environment Department in the Municipality of Trieste and he is a member of the Port Authority Committee of Trieste.

### Mr. Sergio Paoletti



*President, AREA Science Park, Trieste*

Mr. Sergio Paoletti was born in Trieste, Italy. He graduated in Chemistry at the University of Trieste and is a professor of Biochemistry at the same university. Currently he is a member of the Board of Directors of Elettra Sincrotrone Trieste, winner of several European research projects. He received an honorary degree from the Norwegian University of Science and Technology of Trondheim.

### Mr. Enrico Samer



*President of the World Trade Center Trieste, Italy*

Mr. Enrico Samer is Chairman and CEO of Samer & Co. Shipping S.p.A., a company operating in the maritime and insurance industry, as well as port terminal operator, through its subsidiaries Samer Seaports & Terminals S.r.l., T.I.M.T. S.r.l., Frigomar S.r.l. and Seaway of S.r.l.. Mr. Samer is also CEO of Edgar H. Greenham & Co. S.r.l., a company in the insurance sector.

He is the President of the World Trade Center Trieste, a company operating in the “World Trade Centers Association” network of New York. Mr. Samer is Honorary Consul-General of the Republic of Turkey for

the regions Friuli-Venezia Giulia and Trentino-Alto Adige since 25<sup>th</sup> September 1998, and past Doyen of the Trieste Consular Corps. He is Chairman of Agentimar S.r.l., a service company connected to the Friuli-Venezia Giulia Ships Agents' Association. He previously served as Vice-President of "Federagenti", the Italian National Federation of Shipowners' Agents and Ship Brokers, Board Member of the Port Committee of the Trieste Port Authority and Member of the Committee keeper of the Roll of Ship Agents, for the provinces of Trieste, Udine and Gorizia, at the Trieste Chamber of Commerce.

Decorated with the title of Knight ("Cavaliere") of the Order of the Italian Republic, by Presidential Decree of 27<sup>th</sup> December 2009.

## URBAN ISSUE HUB (II) SMART CITY: SMART PRODUCTIVITY AND TRADE

### CASE CITY: SHANGHAI

#### Moderator

##### Mr. Bernardo Calzadilla-Sarmiento



*Director, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization*

Mr. Bernardo Calzadilla-Sarmiento was previously Director of the Trade Capacity Building Branch at the United Nations Industrial Development Organization as well as a Senior Quality and Standards Expert. He also served as a former UNIDO Deputy Representative to the United Nations and Other International Organizations at UNIDO's office in Geneva. Mr. Calzadilla-Sarmiento was Director for Technical Assistance and Training Services at the International Organization for Standardization (ISO) as well as Secretary of the ISO Policy Committee on Developing Country Matters. In this position, he coordinated the development of the ISO 22000 Food Safety Management Systems, which is a training tool for setting up the implementation and certification of food-safety management systems in small businesses.

#### Keynote Speaker

##### Mr. GU Xianglin



*Vice President, Tongji University; Vice Chairman of Shanghai Association for Science and Technology, Shanghai, China*

Mr. Xianglin Gu is now the Vice President of Tongji University, the Vice Chairman of Shanghai Association for Science and Technology, and Vice Chairman of Shanghai Committee of the China Democratic League.

He also serves as the vice chairman of Chinese Civil Engineering Society, the Chairman of American Concrete Institute China Chapter, and the vice Chairman of the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM) China Chapter. Dr. Gu is also the leading talent of Shanghai Municipality and principal investigator of the National R&D program of China.

## Panellists

### Mr. Pascal Koster



*Managing Director, Malo Capitals & Consulting S.A., Luxembourg*

Graduate of the Swiss Federal Institute of Technology (ETH) and long-time “binomial” of Jean-Claude Bintz, with whom he supports the development of the mobile phone operator Tango, then VOXmobile in 2003 (became Orange Luxembourg in 2008 after his acquisition by Mobistar), Mr. Pascal Koster keeps his entrepreneurial spirit. In 2013, he decided to leave his CTO position at Mobistar and created a new operator, JOIN Experience, with Claude Lüscher and Frank Fischer: an operator presented as the first of type “3.0”, integrating directly and simultaneously the telecom components, IT and CLOUD.

### Ms. FAN Jingyan



*Executive Vice President, YITU Technology, China*

Ms. FAN Jingyan is Executive Vice President of YITU Technology. Mr. Fan used to work in the Ministry of Industry and Information Technology of the People’s Republic of China, and now serves as Vice Chairperson of China Artificial Intelligence Industry Development Alliance, Vice Chairperson of China Medical Equipment Artificial Intelligence Alliance, and a member of the 14th CPPCC National Committee of Xuhui District, Shanghai.

### Mr. YU Jie



*Founder of Ants Plan, China*

Mr. YU Jie holds a Doctor’s degree in Management from Fudan University, with over 12 years of entrepreneurship experiences. Mr. Yu is the co-founder of Hujiang Net Education Co. which provides an online education and training service platform with now over 180 million users registered online and 150 million mobile users. Mr. Yu initiated the Ants Plan in 2015, with a commitment to providing services to entrepreneurs (the ants), including the Ants Nesting incubator, investment funds, and the online talent program. He built up an Innovation Town which provides services of incubation and education. In doing this, he gained tremendous knowledge on the planning and operation of Innovation Park.

## INNOVATION, BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP: FUTURE PERSPECTIVES

## Moderator

### Ms. YANG Linda



*Executive Chairwoman of Yingke Global Board of Directors, China*

Ms. YANG Linda joined Yingke in 2009. The “Yingke Global Legal Service Alliance” established by Ms. Yang is the first international league of law firms to be named and led by a Chinese law firm. Up till now, it has covered 113 international cities in 53 countries, becoming one of the most globalized Chinese law firms. Driven by Ms. Yang, on November 21st, 2016, Yingke Law Firm signed a cooperation agreement at the South-South Cooperation Forum held at the United Nations Headquarters in New York, becoming one of the five founding institutions of the UN South-South Cooperation Global Think Tank. While building the Yingke Global Network, Ms. Yang founded and trained a team of lawyers with international standards. Ms. Yang received her Bachelor’s degree in English Language and Literature and International Trade from Ocean University of China, and her Master’s degree in International Law from China University

of Political Science and Law. Ms. Yang is the Executive Director of the China International Chamber of Commerce, Director of the Beijing Overseas Friendship Association, and a Joint Tutor for JM at School of Law of Tsinghua University.

## Panellists

### Mr. ZHANG Rong



*COO, Westwell, China*

Ms. ZHANG Rong, currently the chief Operating Officer (COO) of WestWell, was graduated from Institut National des Sciences Appliquées de Lyon (INSA Lyon, France) with a master's degree in Telecommunication and Information Technology.

Before joining WestWell, he has been working in Motorola, Oxyane Group, Dow Chemical and other well-known multinational companies by taking different leader roles. In WestWell, Mr. Zhang is mainly focusing on the overall business process improvement and participated to the product development of WellOcean®, WelltoDoc®, etc. He is also leading the company's AI in All strategy to help more customers in different industries.

### Mr. Christoph Matznetter



*Vice-President, Austrian Federal Economic Chamber, Austria*

Mr. Christoph Matznetter has acted as Vice-President of the Austrian Federal Economic Chamber since 2009. He is a member of the Social Democratic Party of Austria, and since 2005, has held the position of Chairman of the Social Democratic Party's Business Federation. He was Elected Representative of the National Council of the Social Democratic Party from 2008 until 2013, and from 2007 to 2008, he acted as State Secretary at the Austrian Federal Ministry of Finance. Mr. Matznetter holds a master's degree in Political Science and a PhD from the University of Vienna.

### Mr. Gerardo Patacconi



*Head of Operations, International Coffee Organization*

Mr. Gerardo Patacconi was appointed as Head of Operations of the ICO in January 2018. An Economist-statistician and Agribusiness development expert, after a significant experience with the private sector in manufacturing and banking in Italy, he joined the United Nations Industrial Development Organization in 1987 as associate Expert in Papua New Guinea and his latest position was Director (oiC) of the UNIDO Department of Agribusiness Development. In 2013 he was one of the two shortlisted candidates and run for the election for the post of Executive-Director of the International Sugar Organization (ISO).

At the core of his experience is policy and strategic advice, development, fund raising and management of large-scale operations, Public-Private Partnerships and projects covering the coffee sector and other agribusiness value chains.

An excellent communicator, Mr. Patacconi is often invited as a public speaker and a moderator in ministerial meetings, international conferences and events in English, French, Spanish and Italian and has also published on topics relating to development and industry, standards and sustainability with focus on agribusiness.

### Mr. GONG Weixi (Please see page 110)

*Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

## CULTURAL PERFORMANCES

### Moderator

**Ms. Sofya Parfenova** (Please see page 117)

*International Consultant, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

### Performance

#### 'Costumes of the World' parade

The International Cultural Diversity Organization (ICDO) – a Vienna-based international NGO with the objectives of promoting diversity, interculturality and raising awareness of different cultural expressions – will organize the 'Costumes of the World' parade.

The aim of the parade is to create awareness of how different cultures influence each other and promote unity. Participants will have the opportunity to admire traditional costumes from different parts of the world and experience the varied dressing styles and artistic performances, while appreciating the value of cultural diversity.

## URBAN ISSUE HUB (III) LIVEABLE CITY: SOFT ENVIRONMENT FOR URBAN INVESTMENTS

### CASE CITY: VIENNA

### Moderator

**Mr. GONG Weixi** (Please see page 110)

*Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

### Keynote Speaker

**Mr. Richard Gauss** (Please see page 120)

*Head of Department, Municipal Department 24 – Health Care and Social Welfare Planning, City of Vienna, Austria*

### Panellists

#### Mr. Rudolf Hundstorfer



*President, Austrian Sports Organization*

Mr. Rudolf Hundstorfer was unanimously elected as President of the Austrian Federal Sports Organization (BSO) at the 47th Austrian Sports Assembly. In 2008, Mr. Hundstorfer was sworn in as Minister of Social Affairs and Consumer Protection of the Republic of Austria. He was executive president of the ÖGB and became its President as well as a member of the executive committee in 2007, with a key responsibility for social affairs. He also worked as Vice President of the Austrian Trade Union Federation and first Chairman of Vienna's City Council.

Mr. Hundstorfer started his trade union activities as youth spokesman in the administration of the City of Vienna. From 1975, Mr. Hundstorfer was responsible for youth affairs in the Union of Municipal Employees (Gewerkschaft der Gemeindebediensteten - GdG) where he became expert on organisational questions in 1983 before being elected Secretary General and, in 1998, Chairman of the "Landesgruppe Wien" (Vienna's faction at the GdG). In 2001, he was elected Executive Chairman

of the GdG. Mr. Hundstorfer served as Chairman of the Social Democratic Trade Unionists (Fraktion Sozialdemokratischer GewerkschafterInnen - FSG) from 2003 to 2006 and was elected Chairman of the GdG until May 2007.

### **Ms. Tanja Wehsely**



*Member of Vienna City Council and Vienna State Parliament, Austria*

Ms. Tanja Wehsely is member of Vienna City Council and Vienna State Parliament. She is deputy speaker of the Social Democratic Councillors.

As member of the Vienna City Council Ms. Wehsely is chair of the Board for Economic, Financial and International Affairs. She is strongly involved in Labor market policy, especially youth labor market and as such is deputy chair of Vienna Labour Market Promotion Fund (waff) as chair of the Association for Viennese Youth Centers.

She co-founded the social innovation network and platform Social City Vienna, which is privately run, and acts as a bridge builder between private and public impact innovation, social business and entrepreneurship.

She also supports the volunteer organisation “Stadtmenschen” where interested locals support as social navigators through Vienna’s fantastic social landscape. They help others in need to find the right official office, organisation or bureau to receive professional help.

Ms. Wehsely has also been lecturer for Public Relations, Lobbying and Public Affairs at the FH Campus Wien – university of applied science for quite some time.

She holds degrees in Social Work and Public Relations & Communication.

### **Mr. Alexander Biach**



*Deputy Director, Vienna Economic Chamber, Austria*

Since May 2017 Mr. Biach has been Chairman of the board of the main association of Austrian social security funds.

Alexander Biach, a well-known social insurance expert holds this leading position in the main association. A business economist from Vienna, he was previously the Vice-Chairman of the Social Security Institute for Industry and Commerce (SVA) for five years. Until his election as a member of the association’s governing body, he was appointed Deputy Assistant Representative of the Vienna Regional Health Insurance Fund.

After completing his studies at the Vienna University of Economics and Business Administration, Biach had a career in the Austrian Federal Economic Chamber and was the head of the office of the then General Secretary Reinhold Mitterlehner. In 2003 he moved to the Cabinet of VP Secretary of State Helmut Kukacka, where in 2004 he became Cabinet Chief. From 2007 to 2016 he was Director of the Vienna Business Association, since 2016 also Deputy Director of the Vienna Economic Chamber.

## URBAN ISSUE HUB (IV) PARK CITY: URBAN AGRIBUSINESS

## CASE CITY: CHENGDU

## Moderator

**Ms. Laurence Ansermet**

*Senior Industrial Development Officer, Department of Agri-business, United Nations Industrial Development Organization*

Following an international career in development cooperation, Ms. Laurence Ansermet has been working for UNIDO since 2006. She is now developing proposals in urban agriculture as well as projects using bamboo to create livelihood, alleviate deforestation in Africa and contributing to a new circular economy. She is a field person and from 2011 until 2016, Ms. Ansermet was the UNIDO Representative in Madagascar, covering also Seychelles, Mauritius and Comoros. From 2006 until 2010 she opened the UNIDO regional office in South Africa with a director. From 1999 until 2006 she was working for the Swiss State Secretariat for economic affairs, where she carried trade development projects in Vietnam, China and western Africa. Ms. Ansermet also worked in a war zone with the International committee of the Red Cross. She is an economist motivated to create, innovate and implement changes.

## Keynote Speaker

**Ms. Eva Gladek**

*CEO of Metabolic, Netherlands*

Eva was born and raised in New York City immersed in the international community surrounding the United Nations. She began her career as a molecular biologist with her first laboratory job at the age of 13, and continued on to work as a science journalist and television producer before developing her expertise in industrial ecology.

Eva founded Metabolic, her second start-up, in 2012. In her years of consulting work and concept development, she has advised over 150 companies and industry leaders in sectors ranging from electronics to agriculture. She is an expert in technical environmental management techniques such as Life Cycle Assessment and Material Flow Analysis, and has developed many frameworks for systems thinking and sustainable design.

Eva has a Master's in Industrial Environmental Management from Yale University and a Bachelor's in molecular biology from Amherst College.

## Panellists

**Mr. GAO Jianjun** (Please see page 120)

*Deputy Secretary General, Chengdu Municipal Government, China*

**Mr. YIN Ke**

*Deputy Inspector, Chengdu Development and Reform Commission, China*

Mr. YIN Ke is in charge of agro economy and foodstuff related jobs of Chengdu Development and Reform Commission. He has been working as the Director of Chengdu Economic Information Center, Dean of Chengdu Economy Development Research Institute, Director of Chengdu Government Investment Evaluation Center, Chairman of Chengdu Information Association, Chairman of Chengdu Project Evaluation Association, Assistant General Manager of Chengdu Petrochemical Base Construction Co., Ltd.

## Mr. Bon Tjeenk Willink



*Protix Director Business Development*

Mr. Bon Tjeenk joined Protix in 2016 and is responsible for the international growth of its black soldier fly larvae production facilities. He works closely with the Joint Venture between Protix and the Buhler Group.

Bon has a background in strategy consulting and worked for Bain & Company in Amsterdam, several African countries and the United States. In 2013 he joined the Coumantaros family and worked as a VP for Southern Star Shipping in New York, and as a senior advisor to Flour Mills of Nigeria. He spent significant time in Nigeria and saw the increasing demand and lack of protein first hand.

He also wrote a report on supply chain barriers to trade for the World Economic Forum in 2013. Bon holds an MBA from INSEAD and a Master in International Law from the University of Utrecht.

## WRAP-UP REMARKS AND ACHIEVEMENT HIGHLIGHTS

## Mr. ZOU Ciyong



*Director, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization*

Mr. ZOU Ciyong was Deputy Director General of the International Department in the Ministry of Finance prior to joining the United Nations Industrial Development Organization in 2013. Previously, he held positions as Alternate Chief Negotiator for China during the negotiations surrounding the establishment of a BRICS-led development bank in 2013 and Alternate to the Chinese Executive Director at the

World Bank from 2010 to 2011, as well as Global Environmental Facility Operational Focal Point for China from 2008 to 2009.

Mr. Zou, a Chinese National, obtained a PhD in Economics from the Graduate School of the Research Institute for Fiscal Science at the Ministry of Finance in Beijing and master's degrees in Public Policy and Management and Political Science from Manchester University in the United Kingdom and Peking University in Beijing, China, respectively.

# BIOGRAPHIES

DAY 3 | 11 October 2018

## WORKSHOP ON INDUSTRIAL POLICY ALONG THE BELT AND ROAD

### Moderator

#### Mr. Nobuya Haraguchi



*Senior Research and Industrial Policy Officer, Department of Policy Research and Statistics, United Nations Industrial Development Organization*

Nobuya Haraguchi is Industrial Research Officer at the Department of Policy Research and Statistics of UNIDO in Vienna. He led a research team for the production of UNIDO Industrial Development Report 2013, *Sustaining Employment Growth: The Role of Manufacturing and Structural Change*. He has published widely on structural change, patterns of manufacturing and industrial policy and practice. Recently, jointly with Wim Naudé and Adam Szirmai he was editor of the book *Structural Change and Industrial Development in the BRICS*, published by Oxford University Press in 2015. Before joining UNIDO, he taught macroeconomics at St. John's University in the United States. He holds a PhD from the University of London.

### Panellists

#### Ms. WANG Xiaojun Grace



*Deputy Director, Programme and Operations, United Nations Office for South-South Cooperation*

Ms. WANG Xiaojun Grace is the Deputy Director for Programmes and Operations at the United Nations Office for South-South Cooperation (UNOSSC). Ms. Wang brings to the position extensive senior leadership experience in brokering knowledge exchange, facilitating partnerships, and strengthening the capacities of countries to engage in South-South and triangular cooperation for sustainable development. Ms. Wang has most recently served as the Lead Advisor on South-South and Triangular Cooperation at the United Nations Development Programme's Bureau for Policy and Programme Support. In that capacity, she initiated and spearheaded the establishment of the Global Coalition of Think Tank Networks for South-South Cooperation – the South-South Global Thinkers Initiative, jointly supported by UNOSSC and UNDP. Prior to that Ms. Wang worked as UNDP's Poverty Practice Manager for five years. Between 2002 and 2009, Ms. Wang served in the UNDP Country Office in China where she was Team Leader for Democratic Governance and HIV and AIDS, and managed poverty alleviation programmes. Before joining UNDP in 2002, Ms. Wang worked with governments, international non-governmental organizations, academic institutions and media outlets. She holds a PhD in Education and International Development from the University of London.

#### Ms. YU Jia



*Director, Department of International Development Cooperation, Institute of New Structural Economics, Peking University, China*

Dr. YU Jia serves as Senior Operations Officer and the Director of International Development Cooperation at the Institute of New Structural Economics at Peking University. Previously, Dr. YU worked for State Power Investment Corp (SPIC) International Minerals & Investment Co., Ltd as the director of the Department of Business Development & Public Relations for more than 8 years. Before joining SPIC, Dr. YU started her career as a consultant for the utility industry with Accenture. Dr. YU received a double major in French and Economics from Peking University and was a scholarship recipient of the French government to

continue her studies in France. Dr. YU has completed two Masters' degrees, in Development Economics and Project Management, at CERDI-CNRS in France, where she also completed her PhD in Development Economics. Her research is focused on Chinese "Go Global" studies, Industrial Park and Special Economic Zones (SEZ), as well as China's foreign investment and the interaction of the manufacturing, energy and mining sectors as well as their roles in the process of industrialization for Belt & Road countries.

### **Mr. Robert Stehrer**



*Scientific Director, Vienna Institute for International Economic Studies, Austria*

Robert Stehrer is Scientific Director at wiiw. His expertise covers a broad area of economic research, ranging from issues of international integration, trade and technological development to labour markets and applied econometrics. His recent work has focused on the analysis and effects of internationalisation of production and value added trade on economic performance and labour markets. He has published in leading journals in these fields and has been working on numerous projects funded by European Research Framework Programmes, notably in EU KLEMS (FP6), WIOD, SPINTAN and PRONTO (all FP7), as well as for international and national clients, such as the European Commission, the Joint Research Council, the European Central Bank and OECD. He studied economics at the Johannes Kepler University Linz, Austria, and sociology at the Institute for Advanced Studies (IHS) in Vienna and is lecturer of economics at the University of Vienna.

## MATCHMAKING OF SMES ALONG BRI

### Moderator

#### **Ms. Lucia Cartini**

*Senior Industrial Development Officer, Department of Trade, Investment and Innovation, United Nations Industrial Development Organization*



Ms. Lucia Cartini is a Senior Industrial Development Officer in the Department of Trade, Investment and Innovation at the United Nations Industrial Development Organization. Ms. Cartini also serves as the Coordinator for the UNIDO Network of Investment and Technology Promotion Offices (ITPOs). This specialized Network includes offices in nine locations in emerging and industrialized countries.

Ms. Cartini has served UNIDO for the last twenty-one years in various roles. In 1994, she joined UNIDO as a Junior Professional Officer in Egypt and continued to serve in the country as an Investment Promotion Officer until 1999. After this field experience, she worked for several years as a Field Operation Officer in the UNIDO Arab Regional Bureau where she was in charge of the Technical Cooperation Programmes for several Arab countries. Subsequently, she was assigned to the Investment and Technology Promotion Division of UNIDO, to carry out both technical and managerial duties. From September 2006 to February 2011, Ms. Cartini was appointed Deputy to the Director of the UNIDO Regional Office in Egypt, where she worked to mobilize resources and partners to expand UNIDO's technical cooperation activities. Ms. Cartini is a national of Italy and holds a master's degree from the University Orientale of Naples in Economy and Development in the Arab Region. She also holds a postgraduate executive specialization in International Cooperation for Development.

### Keynote Speaker

#### **Mr. Alexander Biach** (Please see page 110)

Deputy Director, Vienna Economic Chamber, Austria

## Speakers

### Mr. XU Kemin



*Director General, Department of Industrial Policy, Ministry of Industry and Information Technology, China*

Mr. XU Kemin, born in Liaoning Province, graduated from Department of Engineering Economics of Shanxi Mechanical College with a bachelor's degree in mechanical engineering management. He has successively worked in the Ministry of Machinery, the State Machinery Industry Committee, the Ministry of Machinery and Electronics Industry, the Production Office of the State Council, the State Council Economic and Trade Office, the National Development and Reform Commission, and the Ministry of Industry and Information Technology, P.R.C.. He has long been responsible for the development of China's SMEs and the formulation of industrial policies, and is familiar with the orientation of SMEs development policy, as well as the policies of key industries such as machinery. He is currently the Director-General of the Industrial Policy Department of Ministry of Industry and Information Technology.

### Mr. YANG Yang



*Vice President of China Huayang Economic and Trade Group Co., Ltd. Chairman of the Board of Huayang International Industrial Investment Group Co. Ltd. Executive Vice President of China Asia Economic Development Association Ph.D. Economics.*

### Mr. Liu Yaozhong



*Deputy Chief of the Office of International Trade at the National Textile and Apparel Council of China*

## “BRIDGE for Cities” Closing Lunch

## Moderator

### Ms. Tally Einav

*Executive Officer, Office of the Deputy to the Director General, United Nations Industrial Development Organization*



Ms. Tally Einav is the Executive Officer in the Office of the Deputy to the Director General at the United Nations Industrial Development Organization. She joined UNIDO in 2008 and since then she has worked in the technical cooperation as well as in the corporate management and operations directorate. Currently, Ms. Einav is working in the external relations and policy research directorate of UNIDO, which oversees the Organization's normative contribution to Member States and global development community in achieving the Sustainable Development Goals.

Ms. Einav has a masters' degree in organizational development from the University of Tel Aviv.

## Remarks by Sponsor

**Mr. Alexander Biach** (Please see page 110)

*Deputy Director, Vienna Economic Chamber, Austria*

## Remarks on the role of women as creators of businesses, jobs and social cohesion



**Ms. Hedda Öhlberger-Femundsenden**

*Gender Coordinator, Office for Gender Equality and Empowerment of Women, United Nations Industrial Development Organization*

Ms. Hedda Öhlberger-Femundsenden has been Gender Coordinator at UNIDO since November 2015 and heads the Office for Gender Equality and Empowerment of Women. Before that, Hedda worked as an Adviser on Gender Issues at the Organization for Security and Co-operation in Europe (OSCE) and for UNIDO in various roles, including as Gender Officer in the Division for Programme Development and Technical Cooperation, Strategic Planning Officer in the Department for Strategic Planning and Cooperation, and Junior Programme Officer at UNIDO's Regional Office in China. Hedda has an MPhil in Development Studies from Oxford University and a Bachelor in Economics from Durham University, UK.

## Event Closing Remarks

**Mr. Hiroshi Kuniyoshi** (Please see page 121)

*Deputy Director General, United Nations Industrial Development Organization*







## RATIONALE

The 3<sup>rd</sup> “BRIDGE for Cities” event, which revolves around sustainable urban-industrial development, aims to advance the implementation of the Belt and Road Initiative (BRI) in tandem with the 2030 Agenda for Sustainable Development, with which the BRI shares many similarities. The goal is to establish a platform centered on demand-driven matchmaking through which government stakeholders, development agencies and business-sector investors can share their demands and challenges, forge partnerships and negotiate investment.

The 3<sup>rd</sup> “BRIDGE for Cities” event aims to showcase concrete examples of urban-industrial solutions with 4 case cities and their municipal leaders highlighting ongoing and future projects in a variety of sectors. This document has been drafted to facilitate the preparation of an overall case, including potential projects, for each case city. The contents of this document will be presented during the city-centered ‘Urban-Issue Hub’ sessions during the second day of the 3<sup>rd</sup> “BRIDGE for Cities” event.

This document was prepared, with support of UNIDO technical departments and the case cities, to showcase the cities’ potential by providing comprehensive information on their challenges, solutions and priority sectors, while highlighting their competitive advantage to attract potential investors.

© United Nations Industrial Development Organization, 2018

## TABLE OF CONTENTS

<b>TRIESTE – FRIULI VENEZIA GIULIA AUTONOMOUS REGION, ITALY.....</b>	<b>140</b>
<b>SHANGHAI, CHINA .....</b>	<b>147</b>
<b>CHENGDU, CHINA.....</b>	<b>154</b>
<b>ANNEX 1.....</b>	<b>160</b>

# 1. TRIESTE – FRIULI VENEZIA GIULIA AUTONOMOUS REGION, ITALY

## EXECUTIVE SUMMARY

Friuli Venezia Giulia is a strategic Region in the heart of Europe at the cross-roads of major European transportation routes and renowned for its multicultural and economic dynamism.

## INTRODUCTION ON THE CITY OF TRIESTE

Friuli Venezia Giulia and in particular the City of Trieste are considered a bridge between Western and Eastern Europe and a platform towards the Mediterranean area. On many occasions the international relations of our Region have played an essential role contributing to the stability of the Western Balkans area and, thanks to the Port of Trieste, provided a hub for building up new connections for the Adriatic cross border and transnational cooperation of South East Europe and its macro-regional development strategy. Furthermore, the geographic position allows Trieste to play a strategic role in the industrial and economic connection between Europe and Asia as well, mainly taking into consideration the Belt and Road Initiative.

Trieste, first Italian port in terms of tonnage and largest port with a railway connection, is a perfect port gate with deep water (18 m) able to quickly ensure the connections between the heart of Europe and the Far East in a sustainable way, with direct shipping lanes and intermodal terminal services through the railway. Moreover, Trieste is a free port with a unique scheme in Europe for the development of a sustainable global industry.

The Port Network Authority collaborates actively with other territorial entities to realize an innovative port system on the northernmost point of the Mediterranean, at the crossing of the “European corridors” East-West and South-North, and along the New Maritime Silk Road and the BRI railway lines, strongly oriented on internationalization and with the capacity to be a driver for the coastal area between Trieste and Monfalcone. To do so, international developers can find a system of infrastructures and professionals operating in the global supply chains (starting from those interested in improving environmental performances through the use of railway), with the opportunities offered by the high tech industry of the whole regional territory (for instance in the shipbuilding or circular economy sectors), which take advantage of the condition of “international free port area” as well as the tradition and expertise of the manufacturing industry of the territory. The project of territorial development, supported also by the Port Network Authority is based on the realization of the new operational areas, regulated by a development plan (2016) which authorizes the expansion up to 93% of the current operational areas due to interventions with a low environmental impact. Indeed, the recent “management integration” carried out between the port and the local development agency (Coselag”), and the projects of collaboration with innovation and research centers, contribute to making Trieste a leading example of institutional collaboration for the development of an innovative and sustainable industry, on the footsteps of the great industrial leaders of the territory (e.g. Fincantieri, Illycaffè).

## CHALLENGES AND PRIORITIES

The Region is tackling some important issues such as land-locked productive areas, ICT development and full integration of research infrastructures in the core of the city.

At the regional and EU levels, the Friuli Venezia Giulia Region supports the European corridors through France, Italy, Slovenia and Hungary and along a northern route from the North Adriatic to the Baltic sea. The FVG Region is the only region in Italy to have reached a special agreement with Bavaria towards the aim of promoting mutual trade from and to the port of Trieste. Finally, the region, together with Turkey, benefits from the high-functioning motorways of the sea.

In order to challenge new forces which aim to reshape the global investment landscape, we must adopt an even more comprehensive and systematic approach for improving investment conditions.

This includes:

- Implementing policies and strategic infrastructures to facilitate and reward long-term investments;
- Fostering skills that are essential for more resilient economies and more inclusive societies;
- Supporting innovation.

In the framework of the development model of the “port-city” of Trieste, the Port Network Authority, in a triangular perspective “Port-City-Industrial parks”, is working in order to:

- a) Promote, together with international investors, (in particular those interested in the development of the Maritime New Silk Road and the BRI) the development of the new infrastructure included in the development plan of the port to serve the East-West commercial routes;
- b) Promote, through investments in production capacity (stations, lines) and operational capacity (managed with its own company), a system even more strongly oriented to the integration between ship and train, in order to further increase the already consistent part of the railway within the port, in favor of sustainability;
- c) Promote the territory of the Friuli Venezia Giulia Region and its c) intermodal railway platforms, as an Italian railway hub also for the terrestrial Silk Road (the “South” entry via Budapest) in synergy with the rail flows connected to the port;
- d) Focus on the development of the potential, not yet totally expressed of the “International Free Port” established by the International Paris Treaty which is not amendable, through the progressive creation of demarcated free industrial areas (brand “FREESTE”) and by applying the new Government Decree of 2017 which indicates the Port Network Authority as the entity in charge of the regime of the free port, with relevant customs benefits for foreign investors;
- e) Promote further use of advanced technology in the management of the port and the systems of data interchange, by developing, in collaboration with international stakeholders, crucial innovations for the future of logistics (e.g. IoT, Blockchain, data-ports, etc.);
- f) Focus on the development of the territory, of advanced industrial parks, in collaboration with local scientific and innovation institutions (e.g. Science Park), attracting also in BRI areas, innovative and knowledge-intensive companies (e.g. new companies from the “circular economy”, companies involved in the management of big data) in order to create mutual benefits for foreign investors and local partners;
- g) Promote international corridors of “trade facilitation” with relevant ports of the Far East (starting from Shanghai) involving if possible the authorities (e.g. Customs) in order to facilitate the bilateral exchange between companies from both sides.

## WHY INVEST IN THIS CITY? SUCCESS STORIES AND EXISTING SOLUTIONS

For logistics players, to invest in Trieste means to invest in a strategic port with deep waters (within reach by ships of every dimension) which has extensive opportunities to grow arising from a development plan recently approved, and to serve the European territory from South (e.g. Germany) in a sustainable way through the railway, reducing by almost 5 days the route, in comparison with the ports of Northern Europe. In recent years, following the internationalization, large international players of shipping and logistics (e.g. Steinweg, MSC, Dsd) decided to enter with new capitals and activity in the port of

Trieste, to benefit from the expected growth and to participate in the development of infrastructures and services related to the railway connection (e.g. successful opening of the railway connection with Budapest – 12 intermodal trains by week). Wartsila, the Finnish multinational located in Trieste and world leader in “marine technologies” has become a dealership platform of the industrial port, to manage the huge transport of motors and generators that are sent all over the world from the port of Trieste.

In 2018 the free logistic zone “FREEESTE 1”, with large covered spaces (including those for the controlled temperature) will be opened.

In 2019 the new terminal will be opened (“Logistics Platform”), built with high environmental quality systems, that will allow the port to develop opportunities for break-bulk logistics;

In 2020, the railway capacity (today of about 12.000 trains per year) will exceed 20.000 trains, resulting from construction of the new Campo Marzio terminal (co-financed by the European Union) and other local facilities.

The project TRIHUB, for the development of the hub function of the FVG Region within the European framework, is one of the six projects which has currently been included in the group of projects of the initiative through the European Union/China Connectivity Platform. The integration of academia, science, industry, finance, and management as well as public and private institutions, in line with international experience, demonstrates that successful programmes supporting trade and economic activities can no longer be separated from synergic and combined actions within the modern consolidated global economy. The common thread must be integration, no longer regional or national, but international, through a network of systems encouraging and supporting the creation, growth and consolidation of technological companies.

The peculiarity of the Trieste System, see below, allows the planning and implementation of a regional development program that is unique at the international level, which is illustrated by the presence of the Free Port becoming fully implemented. In such a framework, the idea of the Agreement signed by Area Science Park and Samer Group & Co. Shipping SpA to launch the FREEWAY TRIESTE project in 2018, has been developed and is instrumental to the territorial integration playing an important role into the global market of opportunities.

<http://www.freewaytrieste.it/>

The FREEWAY TRIESTE is a public and private programme designed to create the best and most effective conditions and services for the establishment of new industrial activities in the Port Area of Trieste. In this case, industrial activities are characterized by innovation of product, process and market, as well as interesting advantages of both the intermodal logistics of Trieste and its competitive advantages induced by the international free port regime: for deposits transits and handling of goods, outside European Union or from Extra European Countries to European Union.

An Indonesian company importing and distributing algae in the European food sector is the first player to take advantage of Freeway Trieste. The food additive industry is facing a shortage of good quality red seaweed to be used as raw material for the production of gelling and texturizing agents. The proposed project looks to develop seaweed cultivations (specifically *Gracilaria* spp, *Gelidium* spp, etc.) in lagoon areas and along the costal belt of the Southern Mediterranean, territories that were historically dedicated to this kind of farming. The added value and technical and scientific support have been studied and will be implemented.

Coastal areas of the southern Mediterranean Sea are characterized by the presence of small villages with populations having a low economic income.

The project will have different objectives, among them:

- Improve the quality of life of rural populations by providing a sustainable source of income that doesn't compete with fertile land usage;
- Improve the environmental condition of the coastal areas by increasing biodiversity;
- Reduce the impact of CO<sub>2</sub> emissions by creating a biomass able to absorb them in part.

The following benefits can reach local communities:

- Fishermen communities would see the immediate economic benefit of the activity which would bring earnings through the sale of the dried seaweed to various consolidators;
- Seaweed-based food additives' producers would see an increase in the supply of good quality raw material;
- Local food manufacturers will find food additives (agar-agar, carrageenan, alginates, etc.) at a more competitive price.

Finally, the sustainability of the entire project will be secured by the Indonesian company that is ready to sign agreements to acquire algae production from Mediterranean Countries and with the technical contribution of Freeway Trieste and possibly UNIDO, to develop finished products for the biomedical sector.

## POTENTIAL LOCATIONS IN CITY OF TRIESTE

Friuli Venezia Giulia is a region with the potential to boast an extraordinary system of enterprises, infrastructure and production chains and clusters. A "knowledge system" and tradition of cooperation with both neighboring and distant regions, make Friuli Venezia Giulia an area that stands out, even at the European level, for its excellence in research and innovation, by hosting internationally renowned scientific and technological companies.

The infrastructure system of Friuli Venezia Giulia consists of over 466 km of railway lines, an airport, a motorway network connected with those of Austria and Slovenia, three ports, one of which is substantial in Trieste with boatyards, an industrial terminal and an oil terminal as well as touristic ships and ferry traffic. The infrastructure network can also count on the inland terminals/logistics hubs for the trade of goods and change of transport mode (air, water, road, rail).

Within the port facility of Trieste, there are many opportunities for the localization of new initiatives of logistics or industrial development, in particular:

- Area of the industrial canal of Trieste (specialized logistics heavy lift, logistics for controlled temperature, etc.);
- Areas and buildings included in the territory controlled by the agency for local economic development ("Coselag") – opportunity for the development of industrial parks on innovative supply chains;
- Sites of covered depots within the new logistics area FREEESTE 1, in Bagnoli della Rosandra.

Friuli Venezia Giulia, has an economy based on small and medium-sized enterprises among the most developed in Italy and has a high concentration of scientific excellence centres and technology and research parks. The region pays close attention to economic development policies, thus being in one of the top positions in Italy for guaranteed business support. The Region is also a tourist destination of excellence, owing to the seaside and mountain resorts and historical cities which are concentrated within an hour's drive. All of this is enhanced by the excellent food culture and locally produced wine. You can enjoy numerous sports by way of the 7 golf courses, 130 km of ski slopes, 14 horse riding schools and 23 marinas or you can simply relax in one of the beautiful spas in the area.

Friuli Venezia Giulia is characterized by a significant number of scientific institutions, structures of fundamental and applied research as well as national and international training institutions, operating mainly in the fields of life sciences, physics, mathematics, environment, engineering, social sciences and humanities. Together with the Ministry of Research, the regional administration supports the development of a very effective network system for technology transfer. To promote the enhancement of scientific potential for economic and social purposes, Friuli Venezia Giulia's Science and Innovation System (SiS) is active. It aims to set up a "Scientific network of excellence" for the development of the territory. Together with the AREA Science Park (Trieste), a leading science and technology multi-sector park in Europe, the Science and Technology Park Luigi Danieli of Udine, the Technology Centre of Pordenone and the Consorzio Innova FVG work together as mediators for innovation.

## **SUPPORT PROVIDED BY CITY ADMINISTRATION, AND REGIONAL AND NATIONAL LEVEL ADMINISTRATION**

A strong commitment of the regional Government in the framework of the European Smart Specialization Strategy led to a complete reform (the so called "Rilancimpresa FVG" package), which contributed to reducing the red tape, the credit crunch among the regional enterprises and which stressed the importance of some strategic sectors such as Advanced Manufacturing (ADMA), biotech, domotic and smart health. The Regional Investment Agency is active in catalysing capitals and know-how also through cooperation with the main regional financial institutions.

The Friuli Venezia Giulia Region represents an innovation ecosystem which interacts globally and which seeks to become increasingly attractive to highly qualified human resources, to companies and start-ups and to financial capital and which continues to develop and fine-tune its policies of innovation and smart specialization. The development plan for the industrial sector of the region calls for the revival of the manufacturing and service sectors through the improvement of governance and the framework of the industrial areas, the attraction of entrepreneurial initiatives, the creation of new enterprises and their consolidation, the revitalization and specialization of businesses in line with the areas identified by the Regional Smart Specialization Strategy (on which measures were focused to stimulate private investment in research development and innovation) coordinated with support instruments called for by the community programming to maximize the efficiency of the public resources invested.

The key sectors are agri-food, mechanical engineering, home system, and maritime technologies. Agri-food is one of the most significant sectors of the regional economy with over 527 million Euros turnover in exports (+12% compared to 2014), more than 1,100 companies and 7,800 employees (2.2% of the regional total and 7.3% of manufacturing) in late 2015. Notable among the most representative products in exports are: coffee (Trieste is one of the centres of European excellence in this field), wines and cured meats.

**Mechanical Engineering:** the engineering industry, which includes the metallurgy sector, the manufacture of metal products and of machinery and equipment, is the leading sector of the region's exports, amounting to around 6 billion euros a year, with approximately 57,000 employees and over 3,700 businesses in 2015.

**Home system** is a sector that has traditionally characterized the Friuli Venezia Giulia region, and consists of all the production activities of manufacture goods that are placed in households. Its most important components are the timber and wood industry and the enterprises that manufacture furniture, with more than 1,440 million euros in export turnover in the first three quarters of 2014, more than 2,800 companies at the end of 2014 and approximately 20,000 employees in 2015.

**Maritime technologies:** the sector of the economy of the sea is one of the most significant in the regional economy (3.6% of companies) with more than 995,3 million euros in export turnover in 2015 which equals 26.8% of the nation-wide 'blue' economy (3.7 billion euros). Between 2011-2015 Italy's

north east saw an increase of 1.5% for companies in the sector, in marked contrast with national and European data, owing to the diversification implemented by many operators, again as part of the ‘blue’ economy and with attention given to this sector by the regional strategy.

## **SUPPORT PROVIDED BY CITY ADMINISTRATION, AND REGIONAL AND NATIONAL LEVEL ADMINISTRATION**

Smart health: this sector includes over 150 companies in the region active in the field of healthcare in three closely related areas - biomedical technologies, bio-informatics and the development of innovative therapies. Facing powerful markets worldwide in recent years, this sector has increased staff and turnover, confirming its high potential.

The Port System authority and the Consortium of local development, controlled by the authority, operates as a “one stop shop” and has specific technical offices at the disposal of interested stakeholders, to illustrate the investment and business opportunities within their respective areas of responsibility, and in particular for the evaluation of the possible models for use of the benefits derived from the “free zone” in relation to the requested specific activities.

## **INVESTMENT INCENTIVES**

The Region supports businesses that want to invest and produce in Friuli Venezia Giulia through incentives and benefits that can also be tax related, for structural needs as well as for research, development and innovation.

Link to contributions, subsidized financing and tax incentives: <http://www.investinfg.it/cms/en/index.html>

Regarding the internationalization process, the Region gives technical assistance facilitating access to regional stakeholders to programs, grants, and projects from international organizations of the UN system, World Bank, IMF, OECD , EBRD and EIB.

## **FURTHER INFORMATION**

<http://www.investinfg.it/cms/en/index.html>

Port Network Authority of the Eastern Adriatic Sea

**Vittorio Torbianelli**  
Special Projects Units  
vtorbianelli@porto.trieste.it  
+39 3471407944

Communications and Media Relations  
**Vanna Coslovich**  
vcoslovich@porto.trieste.it  
+39 3316542551

Consorzio per lo Sviluppo Economico Locale della Venezia Giulia  
 (“Coselag”)

## UNIDO “BRIDGE FOR CITIES” ROADSHOW IN TRIESTE, ITALY

26 March 2018

The Trieste Roadshow was held on 26 March 2018 during the “Belt and Road Forum – Friuli-Venezia Giulia: A Strategic Partner for Europe – China Economic Relations” (“Belt and Road Forum”).

The organization of the Roadshow was made possible thanks to the strong support from UNIDO’s Investment and Technology Promotion Office in Italy, which gathered together relevant stakeholders at national, regional and municipal levels.

One of the successful outcomes of the Roadshow and of the Forum in general was the wide participation from different actors involved in the economic development of the City of Trieste and of the Region Friuli-Venezia Giulia at large.

Representatives from local Chambers of Commerce and from the business sector, as well as diplomatic, regional and municipal representatives, took part in the event and discussed the potential of the Belt and Road Initiative for local development, notably from an infrastructural point of view.

The major output achieved by the Roadshow was to secure the full engagement from local government in UNIDO activities and to make Trieste one of the case cities for the 3rd “BRIDGE for Cities” event.

Moreover, the foundation for cooperation between UNIDO and the World Trade Centers Association – which will be crowned by the signing of a Memorandum of Understanding during the 3rd “BRIDGE for Cities” event – was laid on that occasion.



Trieste roadshow with a strong attendance of urban-industrial stakeholders.

## 2. SHANGHAI, CHINA

### EXECUTIVE SUMMARY

Shanghai is an international center of economy, finance, trade, shipping, scientific & technologic innovation and a cultural metropolis as well as a national historical city, aiming to be an excellent global city and a modern socialist international metropolis with world influence. The drive to implement the Shanghai 2017-2035 master plan of striving for city excellence is leading to opportunities that are expanding connectivity across almost every aspect of city life. These range from the provision of healthcare and education, to the environment in which citizens live and business opportunities in the fields of smart city, circular economy and intelligent manufacturing. To facilitate industry transformation from factor- and investment-driven to an innovation-driven model, the Shanghai Municipal Government has introduced a series of initiatives, consisting of redefining industry development as an engine for innovation, encouraging intelligent manufacturing based on the application of information and communication technology, and mainstreaming green industry concepts into a new low-carbon pattern of development. The bold moves Shanghai is making today is firmly believed to help it become one of the world's truly smart cities, thereby having a greater contribution to the world's better future.

#### Strategic Target of Shanghai:

- To speed up the development of an advanced manufacturing industry.
- To enhance the development of a modern service sector.
- To actively cultivate new patterns of technologies and new industries.
- To realize the modernization of agriculture.
- To expand a new space for the “going global” strategy.
- To deepen the domestic regional economic co-operation and exchange.
- To facilitate key projects.

### INTRODUCTION TO CITY OF SHANGHAI

Shanghai is the core of the world class city cluster in the Yangtze River Delta area, with a population of more than 24 million as of 2017. The average yearly growth rate of GDP in the past five years reached 7.1%. In 2017, total GDP was reported at over RMB 3 trillion. Shanghai is a bustling commercial city, with revenues from commodity sales exceeding RMB 1.1 trillion, placing the city first amongst all major Chinese cities. Shanghai is an international trade center with annual container throughput originating in Shanghai exceeding 40 million TEUs. The total import and export volume of goods in the Shanghai customs area was 5 trillion 969 billion and 24 million yuan in 2017, an increase of 14% over the previous year. The China International Import Expo will be held in Shanghai, and new types of trade such as cultural trade, technology trade and cross-border e-commerce will continue to develop rapidly.

The number of national level financial institutions in Shanghai has reached 13 and has formed a complete multi-level financial market system with the establishment of a global RMB product innovation, trading, pricing and settlement center. There are 1,537 financial institutions of various types in Shanghai, including the Shanghai Stock Exchange, Shanghai Futures Exchange, China Financial Futures Exchange, inter-bank currency and bond market, gold exchange and foreign exchange trading center. Shanghai is also home to many commercial bank headquarters as well as the headquarters of the People's Bank of China Shanghai Branch. Shanghai is a vibrant city famous for innovation, with thousands of companies being registered here daily; the company vitality index level reached 80%. The total R&D expenditure of the whole city is equivalent to around 3.8% of the city's GDP. To support the development of the private sector in Shanghai, the municipality has launched a specialized service platform named as “Shanghai Enterprise Service Cloud” to boom the development of SMEs in value chains, and connect relevant resources needed.

## CHALLENGES AND PRIORITIES:

### Challenges:

Shanghai is under the pressure of function transformation, continuous population growth and environmental resource constraint, hence the city must break through the development bottleneck, curb urban malaises and achieve transformation of the urban development model from factor- and investment-driven to innovation-driven in the future.

### Priorities:

#### More Dynamic: An Innovation City

- Construction of a national innovation system.
- Lead the growth of the Yangtze River Delta region.
- Bridgehead of the Belt and Road Initiative.
- World-class Yangtze River Delta Urban Agglomerations with competitiveness.
- R&D input will be 5.5% of the gross regional product.
- Added value of finance will be 18% of the entire city's GDP.
- Total annual inbound tourists will be 14 million.
- Industrial land for development of advanced manufacturing in the industrial base will be no less than 150 square kilometers.
- International travelling passenger volume will reach 38%, and the rate of international container transit will be no less than 13%.
- The coverage of high-speed wireless data communication network will be up to 100%.

#### More Attractive: A Humanistic City

- The birthplace of Haipai culture, which combines southern and Western cultures.
- The city is, and has always been, a melting pot of different ethnic groups, both domestic and international.
- Magnanimousness to innovation and toleration to failure.
- A city beaming with stylish charm, resorts to the unswerving quality improvement create a happy and healthy humanistic city.
- High approval from its citizens with active participation and profound cultural heritages.

#### More Sustainable: An Eco-City

- Develop pilot spaces and infrastructures for green, low-carbon and sustainable development.
- Increase ratio of renewable energy sources in primary energy sources.
- Reduce total carbon emissions by about 5% compared to the peak in 2025.
- Annual mean concentration of PM<sub>2.5</sub> will be controlled at around 25mcg/m<sup>3</sup>.

## WHY INVEST IN THIS CITY? SUCCESS STORIES AND EXISTING SOLUTIONS:

### COMPETITIVE ADVANTAGES OF INVESTING IN SHANGHAI

#### Talent Highland

Shanghai has a total of 64 higher education institutions (including private colleges) with more than 500,000 students enrolled and more than 130,000 graduates per year. 48 institutions provide graduate and postgraduate programs, with more than 140,000 graduate students enrolled and around 50,000 graduates. There are 300 schools specializing in middle to higher education for adults and nearly 700 vocational training schools. In 2017, the average monthly salary of a fresh graduate in Shanghai was RMB 5,386. The average monthly salary for undergraduates was RMB 4,793 and for graduates holding a master's degree or above the average salary was RMB 8,001. More and more foreigners have chosen to work in Shanghai in recent years. So far, There are about 88, 000 foreigner experts and 86,000 foreign employees in Shanghai. 120,000 overseas students choose to work or start their own business

in Shanghai. Foreign employees in Shanghai are engaged in a variety of sectors from advanced manufacturing to modern services, and from traditional business to newly booming industries.

### **Gateway for the “Belt and Road Initiative”**

Shanghai will strategically strengthen the internal and external linkage to the Yangtze River Economic Belt to integrate the mission of the national “Belt and Road Initiative”, “Four Centers Initiative”, the construction of a science and technology innovation center and the establishment of the Shanghai Free Trade Zone. Shanghai will also establish strategies to undertake a number of national key functions and to create a few open collaborative platforms. The city will fully match the demand of the market and the role of the market in resource allocation decisions and company functions. Shanghai will be dedicated to solving the demands in the development of two-way investment and trade.

### **City Security**

Shanghai is one of the metropolises of the world with the lowest rate of public safety incidents such as criminal cases and fires and is therefore one of the safest cities. A third party company’s survey showed that Shanghai residents’ feeling of public safety and satisfaction has reached above 80 points for several consecutive years.

### **Protection of Intellectual Property Rights**

Shanghai Intellectual Property Court, Shanghai Intellectual Property Exchange and Shanghai Academy of International Intellectual Property Rights constitute a complete system for the protection of intellectual property rights in Shanghai.

### **City Infrastructure**

Shanghai has well-connected city infrastructure including two international airports, six railway stations and the longest metro transit mileage in the world.

### **Ecological and Liveable City**

In 2017, the overall air quality of Shanghai has been improving with the Air Quality Index (AQI) reaching 75.4%, which was 9.8% higher than the base year of 2013. The average annual PM2.5 concentration was 39 micrograms per cubic meter, which was 37.1% lower than that of 2013. Forest coverage rate of the whole city reached 16.2%. Shanghai has 24 city level and district level public libraries, 50 archives, 125 museums, and 24 cultural centers for the public. There are 273 performing arts groups and art exhibitions in the city, making Shanghai a must-visit city for internationally renowned performing art groups.

Success Story of Shanghai City can be found in **Annex 1**.

- Category 1. **INNOVATION AND ENTREPRENEURSHIP**
- Category 2. **INNOVATION ON CITY ADMINISTRATION**
- Category 3. **CIVIL SERVICE**
- Category 4. **DIGITAL DRIVEN DEVELOPMENT**
- Category 5. **INDUSTRY TRANSFORMATION**

## **POTENTIAL LOCATIONS IN CITY OF SHANGHAI**

### **Center of Economy:**

Xuhui District, Lingang Area

### **Center of Finance:**

Lujiazui Financial and Trade Zone

### **Center of Trade:**

Shanghai Hongqiao Central Business District (CBD), Waigaoqiao Free Trade Zone

### **Center of Shipping:**

Hongkou District, Baoshan District

### **Center of Scientific & Technologic Innovation:**

Zhangjiang Science City, covering 94 square kilometers, is located on a strategic position in New Pudong Area, between the city centre of Shanghai in the West and Pudong International Airport in the East. It is the largest and most important science city of China and aims to grow into a sub-center of Shanghai's scientific innovation, which can provide a dynamic entrepreneurship environment, complete living facilities, convenient transportation, beautiful environment and a unique cultural atmosphere.

As core park of Zhangjiang Science City, Zhangjiang Hi-Tech Park is one of China's first state-level high-tech zones approved by the State Council as well as the core park of Zhangjiang National Innovation Demonstration Zone. Through a strong innovation atmosphere, a plurality of talent accumulation and a powerful innovation platform, Zhangjiang Park attracted a large number of top hi-tech enterprises and small-medium sized innovative enterprises, and is the birth place of new technology, new pattern and new format. Over 10,000 companies have registered in the park mainly covering information technology, bio-medicine, cultural creativity and low-carbon environmental protection.

Zhangjiang Science City has also accelerated the construction of key national-level scientific projects. And a series of R&D centers of renowned universities will also be based in Zhangjiang. They include a University of Science and Technology of China innovation center focusing on quantum information science and technology, a stem cell research center associated with Tongji University and a robot research center associated with ShanghaiTech University.

The science city aims to attract 500 renowned scientists and experts by the end of 2020. Over 20,000 professionals from abroad and overseas graduates will work in Zhangjiang by then. The Administration of Overseas Talent offers a one-stop service for overseas professionals along with a batch of new policies to ease green card and work permit rules.

### **Yangpu District:**

The Yangpu District, located in the northeast of Shanghai, on the northwest bank of the lower Huangpu River, has created its own path of innovation-driven transformation and development from its previous role as one of China's oldest industrial centers and a hub of intellectuals. In 2010 Yangpu was nominated by the Ministry of Science and Technology as one of the country's first pilot innovation districts in 2010, and identified as a key base of Shanghai's efforts to become a global innovation center and demonstration zone.

Yangpu has taken advantage of its intellectual and educational resources to promote regional innovation and development. The district is home to 14 higher education institutes including Fudan University, Tongji University and Shanghai University of Finance and Economics, along with over 100 scientific research institutes. Yangpu authorities have launched cooperation with 11 universities within the district or around the city to build a number of key platforms. They also pair up with 23 local research institutes and enterprises to promote high-tech projects in the fields such as the Internet of Things and the application of China's self-developed Beidou Navigation Satellite System. The district government has been offering supportive policies, services and funds specifically for young entrepreneurs. For example, the district has explored the establishment of community banks devoted to small and medium sized tech firms and has looked into the cluster development of early-stage startup investment funds and international innovation acquisition funds via cooperation with foreign investors. In addition, the district has chosen banks and financial institutions to pilot the integration of equity and debt financing services for corporate innovation.

In the process of facilitating international talent attraction, Yangpu District seeks support from its overseas talent base and devotes to the nurturing of innovative talents and start-ups. New convenience-

granting entry-exit policies have been also officially released in 2016. Foreign talents who work with the innovation industry or own start-ups in Yangpu District and fulfill relevant conditions as required will be granted convenience in the application of a port visa, the change of an R visa, permanent residence and S1 visa. Yangpu will build an Innovation Economy Corridor in its west, a Makers' Eco-community in its central area and develop its riverside area into a waterfront innovation hub during the period of the 13th Five-Year-Plan (2016-2020).

## **SUPPORT PROVIDED BY CITY ADMINISTRATION, AND REGIONAL AND NATIONAL LEVEL ADMINISTRATION**

The Shanghai Municipal Government is now promoting a “One-stop Online Government Service” brand by launching online public service tools such as “One-stop Service Platform” and “Shanghai Enterprise Service Cloud”, which improves Shanghai’s business operations environment as well as government service standard.

“One-stop Service Platform” promotes the online and mobile service for personal affairs and business sectors, whilst, “Shanghai Enterprise Service Cloud” provides one-stop and integrated consulting service and support to enterprises. Meanwhile, Shanghai Municipal Government is streamlining its offline administrative procedures and the KPI of completing all the procedures in one application has been set. There are Shanghai Municipal Government documents that provide policy support for technology innovation and small-medium enterprises which are lacking technical and financial support.

Preferential policies related to Innovation can be found as below:

- “Opinions of the Shanghai Municipal Committee and The Shanghai Municipal Government on accelerating the construction of a world-renowned scientific and technological innovation center” highlights four critical points including:
  - Releasing market access controls in emerging industries such as “Internet plus” and increasing the proportion of purchases of innovative products and services by small and medium-sized technology companies.
  - Building “talent highlands” for innovation and technology enterprises and promoting international students work at Shanghai directly.
  - Encouraging researchers’ self-employment and part-time work in technology and innovation companies.
  - Promoting the listing of unprofitable but sizable technology innovation enterprises.
- “Carry out trials of comprehensive innovation reform in Shanghai and accelerate the construction of a world-renowned science and technology innovation center” provides guidance to set up innovation centers: By 2020, having a basic framework for a global influential center for scientific and technological innovation. By 2030, focusing on building the core functions of a global influential center for scientific and technological innovation. The guidance based on the reality of Shanghai breaks through the obstacles which restrict the development of innovation and technology, establishes the law of the government management system which is suitable for innovation development, constructs market-oriented scientific and technological achievement transfer mechanisms, implements the income distribution system, stimulates market innovation and the system of enterprise as the main body of innovation investment, establishes a positive and flexible innovation talent development system and promotes formation of cross-border integration of open cooperation.
- “Shanghai’s 13<sup>th</sup> five-year plan for scientific and technological innovation” highlighted that improving the support system for science, technology and finance forms an investment and financing system featuring active agglomeration of venture capital investment, strong credit support from commercial Banks and diversified social capital investment, and gives full play to the role of finance in promoting scientific and technological innovation and entrepreneurship. Efforts should be made to cultivate a large number of small and micro enterprises, and a number

of “hidden champions” with industry competitiveness as well as a number of enterprises with global or regional market advantages.

## INVESTMENT INCENTIVES

Shanghai has introduced and implemented a slew of preferential policies to facilitate the development of high-level free trade and investment, which is aimed at helping foreign investors navigate China’s market. Industrial development policies have been formulated by Shanghai authorities to promote the development of Intelligent Manufacturing, Bio-medicine, Artificial Intelligence, Block chain, Modern Service, Smart City, Software and IC Industry, Energy Industry and Circular Economy, Cross Board E-commerce and Science and Technology Innovation.

Preferential policies according to business nature include:

- R&D Center:
  - Several Opinions for Supporting Foreign R&D Centers to Participate in the Construction of Shanghai Science and Technology Innovation Center with Global Influence.
  - Notice on Continuous Implementation of the VAT Policy of Procurement Equipment in R&D Institutions.
  - Notice of the State Council on the Adjusting of Taxation Policies for Imported Equipment.
- Regional Headquarter:
  - Provisions of Shanghai Municipal Government on Encouraging Multinational Companies to Establish Regional Headquarters.
  - Notice on Issuing the “Measures for the Use and Management of Special Funds for Encouraging the Development of Multinational Companies Regional Headquarters in Shanghai”.
- Trade-oriented Headquarter: Several Opinions on Encouraging Companies to Establish Trade-Oriented Headquarters in Shanghai for Domestic and Overseas Markets.
- Foreign Talents: Notice on Issuing “the Measures for Foreigners to Enjoy Relative Treatments of Permanent Residence Status in China”.
- Science & Innovation Center:
  - Notice of Administration Measures on Supporting the Import Tax Policies for Scientific and Technological Innovation.
  - Ministry of Public Security’s Exit and Entry Policies on Supporting Shanghai Science and Innovation Center Construction.-Opinion of Shanghai Municipal People’s Government on Accelerating the Contributions of the Technology Innovation Center that have Global Influence.

In addition to the above stimulus, there are several economic zones located in suburban areas of Shanghai, which still provide incentives to enterprises that choose to register there. Foreign investors can take this opportunity to check and update their business strategy and take advantage of such incentives.

## FURTHER INFORMATION

ITPO Shanghai:

Ms. WANG Lihua l.wang@apmenet.org 86-21-38933833

Ms. WANG Chengling clwang@apmenet.org 86-21-38933830

## UNIDO “BRIDGE FOR CITIES” ROADSHOW IN SHANGHAI, CHINA

20 April 2018

The Shanghai “BRIDGE for Cities” Roadshow was conducted on 20 April in the afternoon session of UNIDO Day during the 6th China Shanghai International Technology Fair (CSITF).

Thanks to strong support from UNIDO’s Investment and Technology Promotion Office in Shanghai, the Roadshow gathered attention both at national and international levels, as the solutions proposed have been selected to be fully in line with the Shanghai’s development strategy. Government involvement was testified by the presence of representatives from the National Development and Reform Commission as well as Shanghai Municipality. The Shanghai Municipality was involved throughout all stages of preparation of the Roadshow as well as in the following steps necessary for the case preparation. Moreover, the representatives from Chengdu Government participated in the Roadshow to sign the agreement for the forthcoming Chengdu roadshow.

Equally decisive has been the involvement of investors and partners from the business sector. In particular, Vienna Business Agency attended the Roadshow and promoted the possibility of developing concrete projects involving investors from Vienna and Shanghai, notably in the field of Smart City.

As a concrete outcome, a business plan competition took place during the Roadshow. After preliminary screening, the top 5 finalists were selected to compete in an open competition where they presented their business plans in front of the audience and judges. Finally, Westwell Technology won, thanks to its smart port project and its innovative business plan. The project will be presented during the 3rd “BRIDGE for Cities” event.



Shanghai roadshow speakers and business plan competition winners.

### 3. CHENGDU, CHINA

#### EXECUTIVE SUMMARY

Chengdu, called by “Rong” for short, is the provincial capital of Sichuan, the most important economic, scientific and technological, financial, cultural and creative, foreign exchange center and integrated transport and communications hub. Chengdu vigorously develops a life-related service industry, accelerating the construction of a Beautiful and Liveable Park City. Adhering to the international and far-sighted vision, Chengdu plans the development outline for Tianfu New Area and updates the overall urban planning. Chengdu vigorously pushes the implementation of the policy of “Treatment of Three and Increase of One”, the construction of Tianfu greenway and Longquanshan municipal forest park. Chengdu deepens the management of basic service list and dynamically adjusts system reform, sparing no effort in making achievements in employment, housing and other practical matters that concern people’s life.

Chengdu initiates the construction of Longquanshan municipal forest park with an area of 1275 square kilometers and Tianfu greenway with a total length of 16930 kilometers. With a metro operation length of 180 kilometers, and the overall fulfillment of unified urban and rural social security system, Chengdu once again tops the list of China’s happiest cities.

Chengdu, the capital of Sichuan Province, PRC, is one of the three most populous cities of western China, located in the fertile Sichuan basin. It is subject to a mild, humid, monsoon influenced subtropical climate with typically at least 280 frost free days, and an average monthly summer temperature of about 25C°.

With over 4500 years of city civilization history and over 2300 years of city building history, Chengdu is reputed as “Land of Abundance”. With an area of 14.3 thousand square kilometers, Chengdu has over 16 million permanent residents and over 20 million people in management. In 2017, Chengdu’s GDP reached 1.39 trillion RMB, fixed-asset investment reached 940.4 billion RMB, fiscal revenue 420.7 billion RMB, urban and rural per capita disposable income 38918 RMB and 20298 RMB respectively.

As cities in China often comprise very large administrative areas, Chengdu in total covers about 12,400km<sup>2</sup>, including substantial peri-urban and rural areas of the fertile Chengdu plain. Registered household population in 2014 was about 14.4 million, of which 10.2 million are considered urban population. Estimates for population of the metropolitan area exceed 18 million inhabitants. Chengdu has the privileged status of a sub-provincial city, which ranks it above prefectural level in the Chinese administrative divisions. It has direct jurisdiction over 11 districts, 4 county level cities and 5 counties.

The state council of China has designated Chengdu as the western China centre of logistics, commerce, finance, science, technology, transport and communication, while it continues to have important functions in manufacturing and agriculture. The main industries include machinery, automobile, medicine, food, aerospace and information technology.

Chengdu is an important national and international air transport hub, ranking 4th place in the national air transport statistics by passenger turnover. It provides important national high speed railway links and economic services to the broader western region, functioning also as access point to the Tibetan plateau. Historically Chengdu played an important role as starting point of the southern silk road and the international significance as regional hub of western China remains vital: 16 nations maintain consular sections in Chengdu, and more than 282 of the “Fortune 500” companies have established branches in Chengdu. An additional international airport to be opened in 2020 is under construction, as an essential element to develop Chengdu as a global city. Since March 2018 Chengdu is also connected by direct freight rail connection with Vienna and other cities in Europe, reducing the container travel time to about 12 days, which is less than half the time required by conventional marine transport.

## CHALLENGES AND PRIORITIES

The development of Chengdu as **Park City** was declared as an explicit goal during a visit of president Xi Jinping in February 2018. While high-tech manufacturing, ICT-, new economy and trade are essentially driving the economic rationale of Chengdu, agriculture and agro-processing activities in peri-urban and rural parts continue to be significant, and are valued and promoted as a counterbalance. They are also recognized as opportunities for the further development of complementing the tourism-, hospitality-recreational-, and creative services industries.

A central feature of the urban development priorities of Chengdu as Park City is the goal to include a nearby mountain ridge, Longquan Mountain, into the urban fabric as “Urban Forest Park” of about 1200 km<sup>2</sup>. This is part of a substantive effort to change the spatial development trajectory of the city. At present the urban core activity and historic centre of Chengdu is located in a basin, surrounded by two mountain ridges (urban and rural form of “two mountains and one city”). Through expansion of the urban fabric towards south east, including the new airport development and massive investments in tunnelling and other transport infrastructure, the intended future urban form of Chengdu is envisioned as “one mountain with two wings”, with Longquan Mountain urban forest park as an integral core element. Currently land use at Longquan Mountain includes fruit tree cultivation and silviculture among others.

According to the terminology of the current Master Plan, the massive spatial urban restructuring effort will be realized through: “eastward development, southward extension, westward control, northerly reform, and mid-improvement” of urban Chengdu.

Tianfu New Area, (total planning area: 1573km<sup>2</sup>), located in the South-East of Chengdu, plays an essential role in this effort of spatial modification and reform of urban function and activity patterns: A newly developed world ranking science city and entrepreneurial innovation incubator are to be established, equipped and connected through a massive greenway program to allow and encourage non-motorized transport options (cycling, walking, etc). Components of Tianfu New Area include: Chengdu Hi-tech Development Zone (South), Chengdu Economic & Technological Development Zone, Shuangliu Economic Development Zone, Pengshan Economic Development Zone, Renshou Shigao Economic Development Zone, Longquan Lake, Sancha Lake and Longquan Mountain.

Chengdu intends to develop the East New Town along mountains and waters, and to press forward the urban and rural form of the city towards a multi-level networked urban structure featuring “one heart, two wings, three axes and several centres”. This includes ambitious expansion of a second international airport by 2020 and expansion of high quality public transport through new metro lines and intensified bus-transit systems. The subway currently features about 9 lines and 120 km and coverage is planned to be extended to 19 lines and over 500 km network length by 2025. In 2007 Chengdu was already awarded “national forest city” by the national greening committee and the state forestry administration. Since then additional urban tree cultivation, three dimensional greening of facades and rooftops, and other green space development initiatives were conducted to improve urban climate and living conditions.

The development of a green civilization was referenced by President Xi Jinping as key legitimation for the massive investment into green infrastructure. It includes aesthetic arguments and the broader goal to maintain ecologic integrity, and cultural heritage, but moreover specifies the intention to develop along industrial ecology principles, and in particular to realize:

1. A mode of production that is resource saving, environmentally friendly, based on circulating economy, and highly efficient by:
  - Strengthening a green industry network;
  - Building a clean and efficient green resources system;

- Innovating the industrial pattern of rural rejuvenation;
  - Creating new forms of business and fostering new scenes to drive new consumption.
2. A simple, low carbon, healthy and elegant way of life showing the value of life in the park city by:
    - Cultivating and inspiring the subject consciousness of citizens, including ecological ethics and green consciousness;
    - Optimizing the supply of green public service;
    - Creating a healthy and comfortable living environment.
  3. The transformation mechanism of ecological value by
    - Establishing an accounting system of green GDP;
    - Building a platform for ecological value;
    - Improving the price mechanism of resources and environment;
    - Perfecting the trading system of environmental resources and interests;
    - Promoting trading of rights of energy, water and carbon emissions.

Cities provide unique opportunities for the design of circular, regenerative and waste free economies. Their particular density and scale of activity allows them to lead the global transformation towards a resource efficient, resilient and sustainable future. A baseline assessment of Chengdu's material and energy flows (urban metabolism) is recommended to systematically link economic activity patterns to regional and global environmental pressures.

Chengdu holds a unique position within China, as a highly developed inland hub for research-, manufacturing- and service sector activity, counter-balancing the somehow un-even economic development pattern, which is skewed towards the coastal regions. It is intended to serve as a gateway between western China and the vast Euro-Asian markets with the new freight railway connection to Europe and the second international airport as crucial links. The development of Tianfu New Area as a state level development zone provides testimony for high level government commitment and support for investments in Chengdu, with the aim to develop it comparable to exceptional economic growth hubs like Shanghai's Pudong New Area, Tianjin's Binhai New Area, Chongqing's Liangjiang New Area and Shaanxi's Xixian New Area.

The park city development of Chengdu in itself is an outstanding example of integrated urban planning. This includes the recent master plan for development of a 1200km<sup>2</sup> urban forest and tree planting activities in the existing city structure, as well as development of new towns, with their economic strategies. In this context, several ongoing development projects should be emphasized to illustrate elements of the urban development dynamics:

1) Since urban agriculture is a central component of the Park city strategy, UNDO proposes a project for innovative urban agricultural production that simultaneously addresses environmental concerns, reduces food transport requirements, and improves self-sufficiency and production efficiency. Through the establishment of a Polydome, a scalable ecologic farming solution based on symbiotic agriculture principles will be demonstrated. Polydomes maximise species intercropping, and feature organic, toxin free integrated pest control management, aquaponics, vertical farming, as well as mushroom cultivation and animal production. They utilize ubiquitous sensing techniques, spatial/temporal system optimization, as well as robotics, all of which will be subject to research and demonstration. The Polydome unit will constitute an innovation hub to integrate research and education on agricultural activity with tourism, including hotels and conference facilities.

2) Marketing of horticultural products is a significant agricultural activity in Chengdu peri-urban areas. With the recently completed railway connection to Europe, export of cut flowers and leaves as well as potted plants becomes feasible. To safeguard against the unintended spread of

pathogens associated with distribution of living plants and soil or growth media, a phytosanitary clearing station for regulation of these business activities is under construction.

3) Greenway constructions for facilitation and amplification of non-motorized transport (walking, bicycles, etc.) are a remarkable element of the Chengdu Park city strategy that improves life quality. These planning elements also involve water flow regulation and flood-control features, which are integrated elements of the urban development strategy. Moreover they have a close link to agricultural practices such as paddy farming, and measures for control and improvement of water quality.

## POTENTIAL LOCATIONS IN THE CITY OF CHENGDU

As part of the nationwide China western development strategy it is anticipated that in the long run Chengdu will form a Megalopolis with Chongqing, about 250 km south-east (“two cores”). For that matter, in 2011 the plan for Chengdu-Chongqing Economic Zone was formulated.

Chengdu now has two state-level development zones, namely Chengdu Hi-tech Industrial Development Zone (established in 1991) and Chengdu Economic & Technological Development Zone (approved at state level in February 2000). Moreover, the Chengdu export processing zone was ratified in April 2000 and the Chengdu cross strait technology industry development park was established in 1992. Most recently The Tianfu New Area was launched in 2011 as the national level development zone of Sichuan Province was approved by state council (covering 1578 km<sup>2</sup>). It involves in total: 3 cities, 7 counties (city, district) and 37 towns and villages. Essential elements include the creation of a new Science City, and incubator for advanced manufacturing and high end service clusters.

Further details at:

Chengdu Municipal Government

[http://www.chengdu.gov.cn/english/business/2016-01/12/content\\_6316526e0cc047dbb17bc35928feb952.shtml](http://www.chengdu.gov.cn/english/business/2016-01/12/content_6316526e0cc047dbb17bc35928feb952.shtml)

## SUPPORT PROVIDED BY CITY ADMINISTRATION, AND REGIONAL AND NATIONAL-LEVEL ADMINISTRATION, IF APPLICABLE

The infrastructure of the development zones was constructed to meet the criteria of “seven accesses and one levelling”, which refers to access to roads, rainwater discharge, sewage discharge, tap water supply, power supply, telecommunication, gas supply, and one flattened land.

As component of the China Western Development Program, a series of preferential policies on fiscal taxation, finance, industry, land, ecological support, etc. have been issued for Chengdu. These are advantageous policy support relative to the coastal cities in eastern China.

Regarding overall industrial Development policy:

[http://www.chengdu.gov.cn/english/business/2016-01/12/content\\_093ff937155d413784ab9d9924088fa2.shtml](http://www.chengdu.gov.cn/english/business/2016-01/12/content_093ff937155d413784ab9d9924088fa2.shtml)

Regarding preferential tax treatment of foreign investors in Chengdu, including preferential policies of Tianfu New Area:

[http://www.chengdu.gov.cn/english/business/2016-01/12/content\\_4ccfb1e8bf444f578e4e0867ed15686b.shtml](http://www.chengdu.gov.cn/english/business/2016-01/12/content_4ccfb1e8bf444f578e4e0867ed15686b.shtml)

## INVESTMENT INCENTIVES

- Preferential policies for the Western Development Program include: Taxation (custom duties and enterprise income tax).
- Land related policies, (options for land tenure of up to 50 years, exemption of land transfer fees, and land compensation fees).

- Regarding introduction of foreign investment (capital), lower volumes of investment are required than in eastern China, and the operating period can be extended to 40 years, which is 10 years longer than in eastern China.

Further details are summarized at: [http://www.chengdu.gov.cn/english/business/2016-01/12/content\\_bfa801dabaof4c9580c59c458ac9fe18.shtml](http://www.chengdu.gov.cn/english/business/2016-01/12/content_bfa801dabaof4c9580c59c458ac9fe18.shtml)

## **FURTHER INFORMATION**

Chengdu Municipal Government

<http://www.chengdu.gov.cn/english/business/index.shtml>

<http://www.chengduinvest.gov.cn/index#/home>

Go Chengdu

<http://www.gochengdu.cn/news/invest-in-chengdu-ideal-place-for-innovation-entrepreneurship-c248p1.html>

Invest in Chengdu

<http://www.investinchengdu.com/>

Contact

Tel.: 86-028-61885500

Fax.: 86-028-61885504

## UNIDO “BRIDGE FOR CITIES” ROADSHOW IN CHENGDU, CHINA

29 August 2018

The Chengdu “BRIDGE for Cities” Roadshow was held in Chengdu, China on 29 August 2018. The Roadshow has been organized in close cooperation with the National Development and Reform Commission of China and with the Chengdu Municipal People’s Government.

The Roadshow focused on the concept of “Park City” and on how the principles of Green Economy, like the support for waste recycling, sustainable industry and urban agriculture, will contribute to the livability of modern cities. Chengdu was selected to be one of the cities for case studies, because of its experience and achievements in the field of ecological transformation. Chengdu can therefore help in identifying the steps necessary to balance industrial development and environmental protection, and how to balance rapid urbanization and improvement of urban residents’ living standards.

The debate was enriched by the presence of international economic and financial experts, representatives from Chengdu municipality, diplomatic envoys and UNIDO experts, and was followed by a series of study tours in Chengdu Jinjiang Green Park and in Guixu Ecological Park. One of the concrete outcomes of the Chengdu roadshow has been the conduction of a “Business Plan Competition”, which gathered a number of enterprises operating in smart urban technologies, urban cultural industries, circular economy and urban agriculture related to Chengdu’s concept of “Park City”.

After a pre-selection process, the top five business plans were selected and presented at the roadshow. SkyFarm – the winning company – presented an innovative project for urban agriculture, which envisages the creation of sustainable urban farms, maximizing the use of urban surfaces. The intentions of investment were also signed with the winners of the competition. The involvement of potential investors and venture capitalists in the competition ensured all the business plans to be transparent, bankable and sustainable.

In addition, several projects were collected to explore potential cooperation opportunities between Chengdu and UNIDO, including but not limited to, Dujiangyan irrigation area restoration, aquaponics farm, farmcity skyfarm, as well as e-charging.



Chengdu roadshow dignitaries with Mr. Xie Ruiwu, Executive Vice Mayor of Chengdu.

### 3. ANNEX 1

#### CATEGORY 1. INNOVATION AND ENTREPRENEURSHIP

#### CASE 1. BIG-DATA EXCHANGE PLATFORM

#### CASE INTRODUCTION

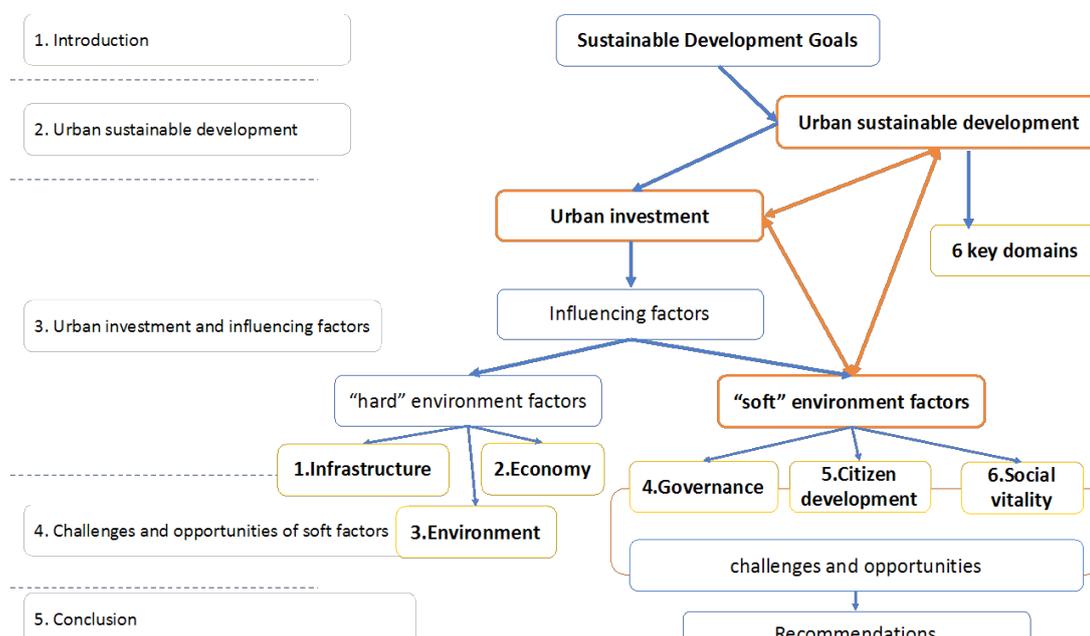
The big data transaction platform for the public described in this case study (i.e.: “data online transaction and distribution system”, hereinafter referred to as data transaction system), realizes big data for the public with the focus on these three aspects: data mining, data transaction and data application. Furthermore, the System is divided into three levels: price discovery, value transfer, and business application and thus provides a highly efficient environment for further development in the field of big data.

In light with Shanghai Municipal Government’s overall requirements like “risk controllable, technology-led, and leading in scale”, the platform construction focuses on the key issues of large-scale data circulation security. The core idea for our approach is combining technology with rules. The use of our innovative IKVLP six-element technology, independent property rights identification technology, data distribution technology with twofold encryption and data interconnection rules for application scenarios will promote data aggregation in a new way and enable the comprehensive protection of personal privacy and data security.

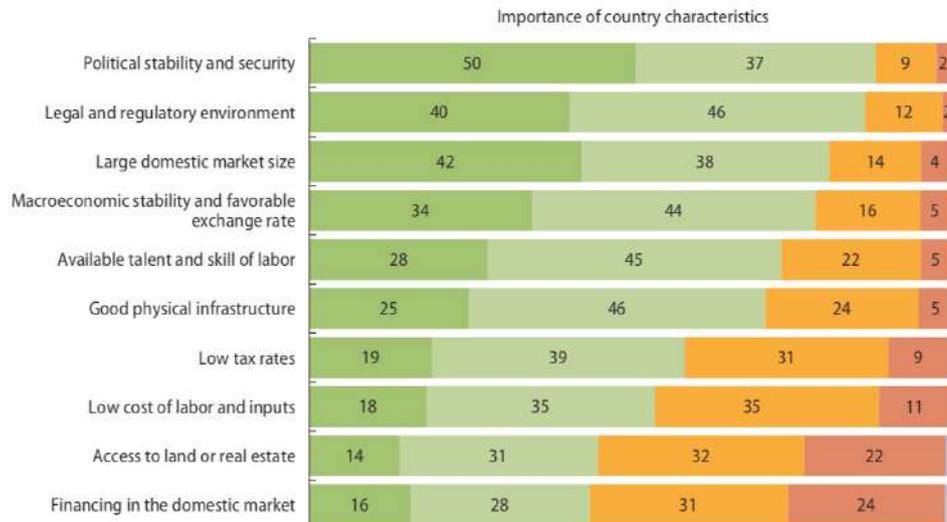
“IKVLP” six-element data control technology, innovative use of K-anonymous technology and “software-defined” front-end technology are used to strictly prohibit the transaction of raw data resources and ensure that only data which is anonymous and untraceable, enter the network.

#### CASE CONTRIBUTION

After establishment of Big Data Platform, the present data-collecting method will be greatly enriched so that more data resources could be used to empower various industries including finance, education, medical treatment, etc. Moreover, the platform could also bring about indirect economical increase by industries of data evaluation, data processing, and data liquidation service. A new business model is created by Data-Exchange Platform and the case is of great significance and highly innovative in data related industries.



Flow Chart of Data Exchange.



Data Connection Diagram.

## CASE 2. SHANGHAI PUDONG SMART CITY RESEARCH INSTITUTE – A RESEARCH INNOVATION PRACTICE

### CASE INTRODUCTION

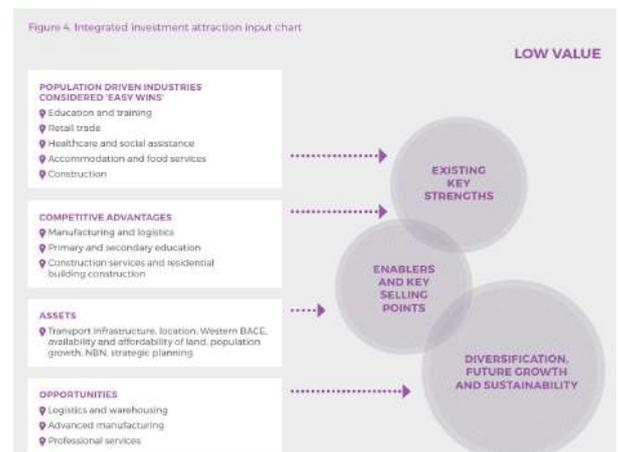
Shanghai Pudong Smart City Research Institute is one of China’s leading research institutes in the field of Smart City. Business scope of the institute covers areas of strategic planning and solution of Smart City, research on development of Information Technology industry, Smart City Standard and Evaluation Index, and Capacity Building on Smart City. Besides, the Institute holds annually the China (Shanghai) Smart City Innovation and Development Summit. Holding the mission of developing into world-renowned research institute on Smart City, the institute is striving to build up a platform for governments, agencies, enterprises and other stakeholders to work together to implement the Smart City of Shanghai.

### CASE CONTRIBUTION

Ever since its establishment in 2012, the institute focuses on the field of Smart City, and has provided top-tier policy planning services to a number of major cities in China, including Shanghai. Also the institute has launched and published the “Smart City Evaluation Index Version 1.0”, and the “Smart City Evaluation Index 2.0”.

The Smart City Evaluation Index developed and released by the institute has offered a valuable theoretical foundation, implementation guidance, and an evaluation method for Shanghai in its effort to transform into a Smart City. Also the Smart City Evaluation Index will be applicable to other cities to some extent.

Indicator set	What is measured
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
Getting electricity	Procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs
Registering property	Procedures, time and cost to transfer a property and the quality of the land administration system
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders’ rights in related-party transactions and in corporate governance
Paying taxes	Payments, time and total tax and contribution rate for a firm to comply with all tax regulations as well as post-filing processes
Trading across borders	Time and cost to export the product of comparative advantage and import auto parts
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency



## **CATEGORY 2. INNOVATION ON CITY ADMINISTRATION**

### **CASE 3. SMART TRANSPORTATION IN SHANGHAI**

#### **CASE INTRODUCTION**

A national research undertaken in June 2016 shows that out of the 70 super and middle size cities in China, Shanghai ranks first in the number of users of Internet + public affairs mobile application, and the most popular application is the “Smart Public Transportation”, which accounts for 22.24% of users. The Application has become the instant helper for Shanghai citizens. Developed and put into use in the end of 2013, the Smart Public Transportation mobile application has currently covered 970 public transportation routes and 14 thousand buses.

In the bus station of Heng Feng Road in Shanghai, Miss SUN who is waiting for her bus to come comments that she needs to take Bus No. 109. Previously she always has to rush to the bus station for fear that she may miss one. Ever since she downloaded the mobile application of Shanghai Smart Public Transportation, she no longer needs to rush down as she can check the arrival time of the next bus any time she wants, which puts her mind at ease a great deal. The mobile application consists of four major functions: map of buses, bus exchanges, buses nearby, and instantaneous bus arrival. The function of Buses Nearby allows you to check bus routes within distances of 300 meters, 500 meters, and 1000 meters; the Instantaneous Bus Arrival function provides information of the arrival time and present position of the next 3 buses from your bus stop.

#### **CASE CONTRIBUTION**

Up to now there are 3.5 million downloads of the mobile application with hits amounting to 20 billion per day. Moreover Shanghai has launched other relevant transportation mobile applications including Shanghai Subway, Shanghai Parking, and Shanghai Traffic Jam Index. These applications have contributed to more smooth transportation in Shanghai by providing accurate information and instant guidance on highway, subway, parking lots, etc. It is expected that by doing so, the expressway congestion will be decreased by 20% and driving efficiency of city roads in peak hours will raise by 20%.

## **CATEGORY 3. CIVIL SERVICE**

### **CASE 4. AI CARE AND AI FINANCE, ALL FOR A BETTER LIFE**

#### **CASE INTRODUCTION**

YITU’s AI + Finance is the largest AI service provider in the sector, which has covered many areas of finance including banking, Internet finance, securities, fund, insurance, and auto finance. We are already an industry leader with 50% of market share in some segments within the FSI industry in China. YITU Healthcare owns a world-class interdisciplinary team, including technology scientists, big data experts and senior medical consultants. YITU is the first of its kind to successfully apply AI technology to clinical medical detection use for higher efficiency and accuracy at prestigious hospitals in China.

YITU is partnering with around 100 of the top Triple A hospitals on scientific research projects to constantly improve our solutions for the sector. Key partners include West China Hospital (Huaxi Hospital), Zhejiang Provincial People’s Hospital, Guangzhou Women and Children Medical Center, Zhejiang University School of Medicine Children’s Hospital, and others. Solutions for healthcare help doctors diagnose lung cancer and other diseases much more quickly by reading CT scans and identifying what might be suspicious. The products expand the doctors’ capability to make diagnoses more efficient and accurate and remarkably relieve the pressure of doctors from too much medical demand.

## CASE CONTRIBUTION

YITU Technology offers a wide range of High-tech products that contribute to the Smart City construction of Shanghai. Product Categories include, but are not limited to:

- **Branch Intelligence Solutions**

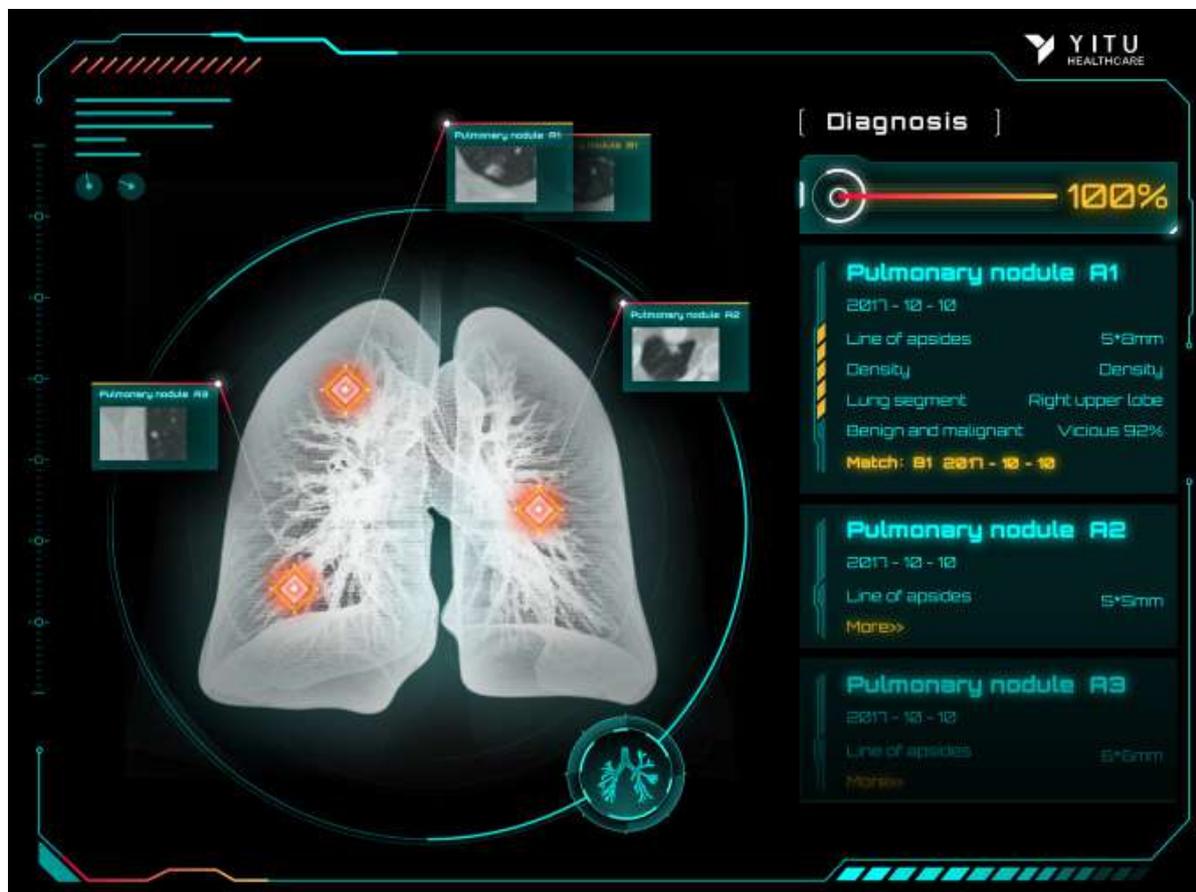
BI system can realize video surveillance and intelligent analysis on BI data on the basis of front-end snapshot camera and background public cloud.

- **Remote Identify Verification Solutions**

YITU provides identity verification by three functions including liveness detection, face verification and identity card OCR in verification SDK of mobile phone.

- **Intelligent Auxiliary Diagnosis on Chest CT Image**

Based on deep learning technology, this system can read Chest CT image within seconds, analyze sizes, characters and anatomical locations of lesions, diagnose whether they are benign or malignant by combining clinical information, and provide structured diagnosis reports.



- **Intelligent Auxiliary Diagnosis on Children's Skeletal Age**

Based on deep learning technology and TW-3 standards of bone age measurement, this system can automatically calculate children's bone age with precision of +/- one month compared to experts' diagnosis.

- **Ultrasonic Intelligent Auxiliary Diagnosis**

Based on deep learning technology and doctors' clinical diagnosis experience, this product can automatically detect suspected lesions from different types of ultrasonic images of mammary gland, thyroid gland and other organs, and provide diagnosis reports for lesion classification.

- Intelligent Auxiliary Diagnosis on Pediatric Outpatients**  
 This is a pediatric clinical assisted diagnosis product based on pediatric experts' experience, mass clinical medical records and advanced deep learning technology.
- Intelligent Medical Record Search Engine**  
 This is an intelligent platform for searching, viewing and analyzing electronic medical records, which is based on advanced deep learning and NLP technology.
- Clinical Intelligent Scientific Research Platform**  
 This assisted scientific research platform covers the entire research work flow, including clinical data preparation, data processing and data analysis.



## CASE 5. ANTS PLAN – TO MAKE EVERYONE EDUCATED

### CASE INTRODUCTION

With the belief of that “we strongly believe that only through education, can we solve the problem of poverty; only through internet, can we make the education fairer”, Ants Plan was set up by Huijiang, the largest online learning platform of China, a high-speed road of learning, which provides equal learning opportunities for learners and equal sharing opportunities for knowledge workers. Huijiang has become a successful company with 180 million registered users and 150 million mobile users, valued at over 1 billion USD and preparing IPO in Hongkong.

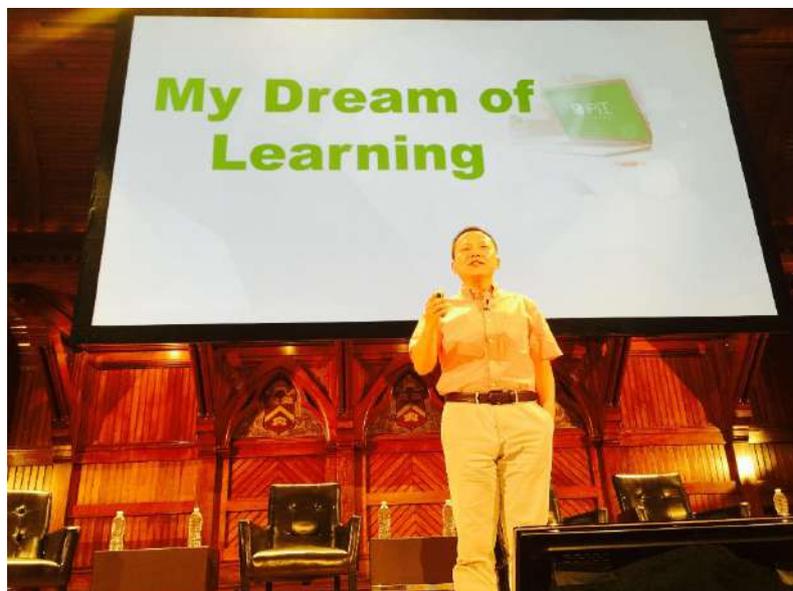
Responding with the national call for “Mass Innovation and Entrepreneurship”, since it’s set up in March 21, 2015, Ants plan has established nine entrepreneurial bases and a makers’ town in Shanghai. It has invested in more than 100 high-tech educational enterprises, served thousands of educational creators and provided tens of thousands of jobs. With a clear goal, it has iterated four times in the past years. The 1st version is a traditional incubator to provide education startups much cheaper office space than the market. In the small ecosystem, high-tech makers in the educational industry communicate with each other and share resources. It makes us realize that only when industries gather, can they have nuclear fusion and make great power. With start-ups developing fast, it upgraded to version 2.0, maker’s town to build a home for young makers in August 2017, by cooperating with Gaoqiao Town government to build the first educational makers town in China with lower price office and lower price apartments. Now after one year, it has become a scenic spot for innovation and entrepreneurship, receiving many visitors from governments, companies and overseas groups. Meanwhile, it also entered version 3.0. Education is the infrastructure of all industries. The core of any industry’s transformation and development is not lands or capital, but talents, so it plans to focus on the local leading industry to create an ecosystem. Ants Plan has also entered version 4.0. Last year, it received more than a hundred

batches of overseas visits. Recently, China promoted the bridgehead strategy of one belt, one road; responding to it, calls for online education to take the lead.

## CASE CONTRIBUTION

Through restless efforts, Ants Plan has built the educational entrepreneurial ecosystem. The first section is basic education. With technology and the Internet, we expect to make learning easier, fairer and happier. In the second section of vocational education, we aim to improve the level of employment. We establish skill colleges with secondary technical colleges and undergraduate institutions. The third section is industrial education. The core of industrial reform is talent. To promote industrial transformation, the best means is to cultivate talents to serve the local leading high-tech industries.

Ants Plan is the accompanying runner of educational makers by providing Ants Nesting to build a home for all the youth in the world. Ants Fund will incubate Ants Empire and invest in leading high-tech industries as well as Ants Education to train talents precisely serving makers. Ants Plan is also the dream partner of government in precise investment on the leading industry. Ants Plan will serve for the building of smart city by improving education.



Presentation at Harvard University.



Educational maker's Town in Gaoqiao.

**CATEGORY 4. DIGITAL DRIVEN DEVELOPMENT**  
**CASE 6. SMART PORT SOLUTION BY WESTWELL**

**CASE INTRODUCTION**

Shanghai WestWell Information and Technology Company Ltd., a leading AI solution provider with core competitiveness from China. WestWell is committed to empowering various industries such as smart port, smart mines, industry 4.0 with full stack of AI solutions, with a combination of brain-inspired intelligence chips and AI algorithm. The self-developed DeepWell, is the world's 1st embedded "on-chip learning" AI chip. Referring to the bionic brain treatment method, DeepWell uses Sodium and Potassium processor architecture. After deeply studying the clients' industry operation process, WestWell team's self-developed AI solution integrated with industry operation environment that could truly solve their pain points.

Until now, WestWell has achieved commercial breakthroughs in computer vision, autonomous driving, and big data applications. Its clients are from various well-known port groups, customs supervision sites and mining companies in China.

**CASE CONTRIBUTION**

As the autonomous driving pioneer in China, WestWell has developed the world's 1st autonomous container truck and world's 1st autonomous straddle carrier in January 2018. Westwell's autonomous container trucks and autonomous straddle carriers can help logistics companies and terminals improve work efficiency and save labor cost by more than 50%. In September 2018, WestWell launched an electronic autonomous heavy truck, named Q-Truck. The Q-Truck is cab-free, with a multi-caliber customizable standard towed saddle that could adapt to needs of different manufacturers and multi-scenarios. The Q-Truck could be fully charged within 2 hours, or change battery within 3 minutes, and the mileage is more than 30km.

Since 2015, WestWell has released an AI terminal tally system called WellOcean. The system can self-identity the info of the containers and trucks. Now, WellOcean has already deployed over the terminals in mainland China. Like the company slogan says "From Human to Human", WestWell is committed to let machines imitate the way a human brain processes issues, thinking like a human, brings more AI intelligent solutions to different industries.



The world's first truly full-time driverless electric Q-Truck by WestWell.



The world's 1st driverless container truck developed by WestWell.



Q-Truck Launch Ceremony.

## CATEGORY 5. INDUSTRY TRANSFORMATION & UPGRADING

### CASE 7. BIG DATA ANALYSIS SYSTEM OF CIVIL AIRCRAFT SAFETY MONITORING

#### CASE INTRODUCTION

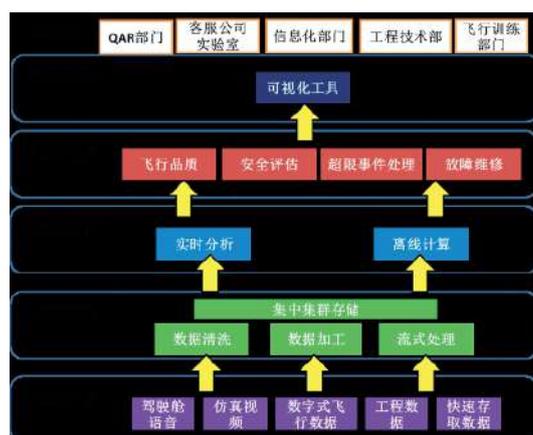
Along the new generation of IT, timely grasping the health status of the global aircraft fleet by analyzing flight-data collected cyclically, flight quality monitoring and providing the flight safety analysis as a service to customers is inevitable for the entire period an aircraft is operated. The big data analysis about civil aircraft safety monitoring in this case provides flight quality monitoring services to airlines. This system can read and download the digital flight recorder (DFDR) or cockpit voice recorder (CVR) and receive data from the airline's uploaded Quick Access Recorder (QAR) through dedicated hardware and software. At the same time, the wireless fast access recorder (WQAR) data can be pushed to the commercial data receiving server through GSM/WCDMA and the Internet.

For the ARJ21 and C919 models, the binary data of QAR, WQAR and DFDR is decoded into engineering

values in the decoding software such as AirFASE according to the aircraft parameter specification manual and synchronizes the time of CVR cabin sound script and flight data, in order to use the generated engineering value data to realize flight simulation reproduction. Based on the system, it can carry out over-limit event detection, data analysis and statistical analysis of different needs and assist the bureau and airlines in conducting unsafe incident investigations. It can also provide customized parameter interface services for commercial customer's service, design, and production departments as well as airlines to meet the customized flight data requirements of different business departments.

## CASE CONTRIBUTION

The application of the civil aircraft safety monitoring big data analysis system built by COMAC can provide flight quality monitoring commissioning services, and the accumulated data of flight quality monitoring can also provide essential information for aircraft design department, flight training, maintenance engineering, etc. Analytical data and feedback suggestions, assisted in the development of aircraft-based management during the entire life cycle of aircraft and provides added value to the commercial aircrafts ARJ21 and C919 in operational safety and improves the competitiveness of domestic aircraft. Based on the analysis of big data, the maintenance plan of the aircraft and the commercial operation of the enterprise are reasonably arranged, which saves maintenance and operating costs. It is also possible to reduce fuel consumption and greenhouse gas emissions through analysis of jet fuel consumption. In addition, enhancing the civil aircraft safety. The monitoring big data analysis system can provide aviation operators with aircraft safety data support, which can reduce the delay and unplanned suspension caused by flight safety reasons and ensure the convenience and safety of passengers.



Civil Aircraft Monitoring System



Simulation of airplane flying.

## CASE 8. TESLA'S NEW INVESTMENT IN SHANGHAI

### CASE INTRODUCTION

Tesla Inc. is an American electric vehicle company, headquartered in Silicon Valley, California, USA. The sales volume in 2017 reached 103,000. Shanghai Municipal Government fully supports the construction of intelligent manufacturing industry's development such as Tesla. Whilst, National Development and Reform Commission released a document that canceled the restriction of foreign proportion of shares (no more than 50%) and the number of joint ventures, which has paved the way for Tesla's deal with Shanghai Lingang Area Development Administration and Lingang group to build a new auto plant in Shanghai, its first factory outside the United States, that would double the size of the electric vehicle maker's global manufacturing.

## CASE CONTRIBUTION

The project may be seen as a demonstration one in that it will only be implemented in Shanghai. However, if successful, it is envisaged that the project may be up scaled to include more industrial sectors and/or regions and cities in China.

## CASE 9. TRANSFORMATION & UPGRADING OF INDUSTRIAL PARKS

### CASE INTRODUCTION

Long Yuan Tian Ce (LYTC) is headquartered in Shanghai, China, and takes “Industrial Park + PPP” and “Industrial Town + PPP” as its core products. At present, LYTC has invested in, constructed and operated a number of industrial parks and industrial towns, and has built a complete, green, low-carbon, modern industrial system.

### CASE CONTRIBUTION

LYTC practices ecological concepts; adheres to green development; and infiltrates the concept of “green and low carbon” into the whole process of design, planning, construction and operation management services in the park. LYTC also builds a green and intelligent energy management platform, enterprise energy management center, green ecological livable environment service, green transportation system, green energy supply system, etc. in the park, so to provide green and intelligent one-stop service solutions for enterprises participating in the park construction; promote the greening of industrial forms; help transform and upgrade local government industries; aim for an efficient, clean, low-carbon and circular economy; and promote “inclusive and sustainable industrial development”. With the aim of efficient, clean, low-carbon and circular economy, we will promote inclusive and sustainable industrial development and achieve high-quality development.



FOOTNOTE: Special Thanks to Shanghai Pudong Smart City Research Institute, who has made tremendous contribution to the selection of the Best Practices in Shanghai.



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心



# BRIDGE FOR CITIES

Belt & Road Initiative:  
Developing Green  
Economies for Cities

## 3<sup>rd</sup> “BRIDGE for Cities” Event

9 to 11 October 2018  
Vienna International Centre  
Vienna, Austria

ISSUE PAPER NO. 4

# Soft Environment for Urban Investments

with a Case on City of Vienna



# ISSUE PAPER #4

## Acknowledgements:

The authors would like to express their thanks to Mr. Ciyong Zou, Director of Department of Programmes, Partnerships and Field Integration at the United Nations Industrial Development Organization, for his guidance and support throughout the writing and editing process. In addition, thanks go to Mr. Kanishka Raj Rathore and Ms. Samantha Pilato for their support in editing and finalizing the report, and to Ms. Sofya Perfenova for her assistance in formatting the report prior to publication.

The contents of this document were further reviewed and enriched by the advice and feedback received from external experts Ms. Margarethe Rammerstorfer, Professor for Energy Finance and Investments, Vienna University of Economics and Business, and Mr. Karl Weinmayer, Researcher, Vienna University of Economics. The authors thank them for their valuable contributions to this report.

The views and opinion expressed herein do not imply the expression of any opinion whatsoever on the part of the United Nations Industrial Development Organization. This document has not been formally edited.

© United Nations Industrial Development Organization, 2018

## **Soft Environment for Urban Investments**

**with a Case on City of Vienna**

Weixi Gong  
Richard Gauss  
Hui Lyu

September 2018

## TABLE OF CONTENTS

1. INTRODUCTION .....	175
2. CHALLENGES OF SUSTAINABLE URBAN AND INDUSTRIAL DEVELOPMENT .....	177
3. URBAN INVESTMENT AND SOFT ENVIRONMENT .....	177
4. BENCHMARK FOR SOFT ENVIRONMENT DEVELOPMENT .....	187
5. CONCLUSIONS AND RECOMMENDATIONS .....	194
REFERENCES .....	195
APPENDIX 1: SOFT ENVIRONMENT PERFORMANCE SURVEY (V2.0 20180727) .....	196

## 1. INTRODUCTION

As pointed out in previous issue papers<sup>1</sup>, cities are at a turning point (UNIDO, 2016, 2017). More than 54% of the global population lives in cities. In addition, it is expected that more than 60% of the global population will live in cities within the next two decades (UN, 2016). The ongoing rapid urbanization is a huge magnet for talent and investment as more and more people choose to live in cities, making cities the world's major growth engine. At the same time, the urban areas across the whole world are facing more complex and rapidly evolving challenges, such as environmental and societal problems. Rising to these challenges, it is extremely important to build our cities more sustainable and more liveable.

Faced with these common global challenges, the United Nations has raised 17 Sustainable Development Goals (SDGs) within the 2030 Agenda in 2016, which are associated with new investment needs. The SDGs will require a step-change in the levels of both public and private investment in all countries. At current levels of investment in SDG-relevant sectors, developing countries alone face an annual gap of \$2.5 trillion (World Investment Report, 2014).

However, investment incentives mostly focus on economic performance objectives, and less on sustainable development. To attract investment, incentives are widely used by governments as a policy instrument which could be more closely aligned with the SDGs. On the urban dimension, SDG 11 aims to “make cities inclusive, safe, resilient and sustainable”, which is directly connected with cities, with emphasis on comprehensive goals for cities to achieve, along with other goals directly or indirectly affecting the development of a city. Actually, economic growth and prosperity is part of the SDGs` long term target.

In this context, the soft environment of a city becomes a significant aspect both for city development and urban investment attraction. The soft environment is a definition widely used in Chinese social sciences and economics areas. According to A Dictionary of Current Chinese Language, the soft environment refers to the non-physical environment, such as policy, regulations, management, services, human resources and so on. From the perspective of UNIDO (2016), urban sustainable development, urban investment and quality of urban life are closely connected and support each other in development, while urban soft environment is a crucial linkage between these concepts.

In general, the soft environment factors for urban investment can be categorized in two different types: soft company-related, and soft personal factors.

Companies make clearly “spatial” decisions - “location” decisions - and in doing so, determine where they want to carry out production, trade, research or administrative activities. Company-related factors are directly relevant to the competitiveness of a company. This can be, for example, the economic climate of a city or region: how quickly inquiries will be answered, how long the processing of applications will take and how public administration works. It is very important for companies, that regulatory hurdles are not too high. Because time is only one of many important roles, permits of all kinds are the basis for efficient work for every company. At the same time, the image of a city or a region also plays a major role. Other company-related factors include higher education and research institutions, an innovative environment and the performance of business associations. Similar to companies, private households also make “location” decisions. For example if a household relocates, it is called migration. Private households are usually involved in a complex network of spatial relationships and have a specific job in a specific enterprise or company, buy different products in different shops or attend cultural and entertainment events. One of the most important relationships of a person is their work in an enterprise, company or office.

<sup>1</sup> W. Gong, K. R. Rathore, H. Lyu, V. Haykin, *Issue Paper #1 - Cities at a Crossroads: Unlocking Industries' Potential for Sustainable Urban Development*, UNIDO, 2016;

W. Gong, H. Lyu, *Issue Paper #2 - Sustainable City Indexing: Towards the Creation of an Assessment Framework for Inclusive and Sustainable Urban-Industrial Development*, UNIDO, 2017

W. Gong, G. Zhang, K. R. Rathore, *Issue Paper #1 - Sustainable Cities and Investments: Addressing the Bottlenecks to Urban Infrastructure Development*, UNIDO, 2017

Since workers and employees are only rarely able to work directly at the location of their home, they are usually forced to bridge the gap between home and the work place - commuting is the result - directly from the tension between the location decisions of private households (place of residence) and companies (place of work). By commuting people, (larger) companies can gather the number of workers in a location needed for production. Depending on the level of economic development, people often decide to take a job in company “x” rather than in company “y” because they prefer to commute to city “u” more than into area “w”. These personal, soft factors are particularly important for employees’ quality of life. This includes the quality of housing, the living environment, the quality of schools and training facilities, the environment and leisure facilities and especially the social infrastructure.

In this sense, this issue paper consequently highlights current issues and challenges and aims to engage readers in further discussion. Issues to be addressed include an analysis of the role that soft environment plays in achieving the Sustainable Development Goals at the city level, how soft environment influences urban investment and urban development and what could be done to improve the soft environment to effectively attract investment for inclusive, vibrant, smart and sustainable urban development. The paper attempts to elaborate these issues in a holistic manner.

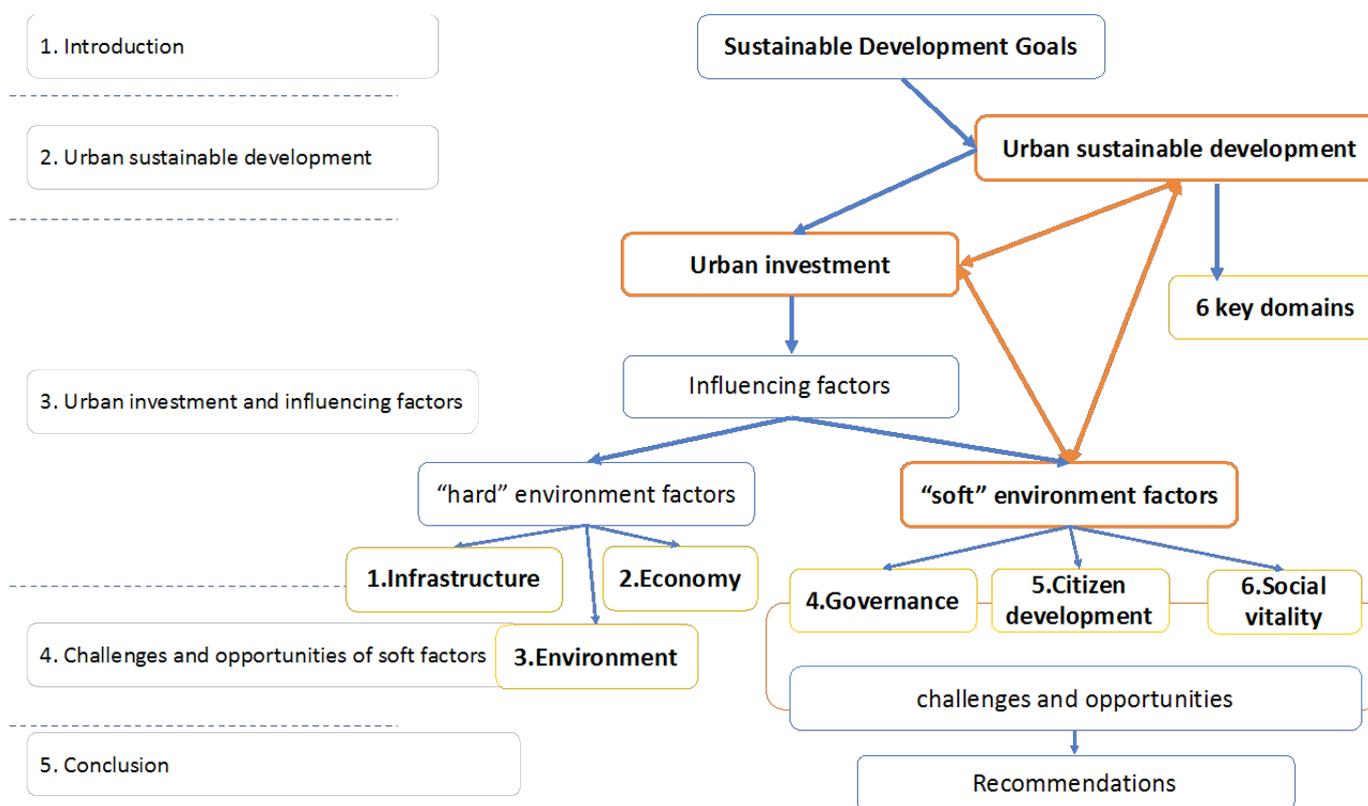


Figure 1: Methodology Structure of the Issue Paper  
(Source: UNIDO, 2018)

The writing structure of this issue paper is divided in five basic parts (Figure 1). Starting with this introduction, the urban sustainable development challenges will be discussed in the second part in the background of SDGs. Then the triangular relationship between urban investment, soft environment and urban sustainable development will be cleared in the third part, with discussion and summarization of key factors and indicators of soft environment for urban investment. An index framework will be introduced to describe soft influencing factors of the investment environment. Based on that, the fourth part focuses on the current challenges and coping strategies in different soft environment factors. Lastly, recommendations and conclusions will be given for future urban sustainable development in regard to soft environment building.

## 2. CHALLENGES OF SUSTAINABLE URBAN AND INDUSTRIAL DEVELOPMENT

In today's urban age, cities are playing a pivotal role in development. Cities contribute up to 55% of gross national product in low-income countries, 73% in middle-income countries and 85% in high-income countries (UN-Habitat 2006). At the same time, cities generate the major part of the global emissions and become the major source of environmental pollution. Cities contribute greatly to global sustainability challenges, but are also the key to resolving these same challenges.

The United Nations formulated SDGs in the 2030 Agenda and raised 169 concrete targets for the 2015-2030 period which can be used as a framework to address the development challenges in a much broader manner. As their name suggests, the SDGs have adopted "Sustainable Development" as a leading principle for international cooperation, and are meant to engage governments, the private sector, international organizations, non-governmental organizations (NGOs) and other stakeholders worldwide that are working together within this framework. Although only SDG 11 is directly about cities, the other SDGs affect almost every aspect of urban development. In general, "Economic development", "Social development" and "Environmental sustainability" are the three major pillars.

On the economic front, SDGs promote decent work and economic growth, responsible consumption and production and so on. All of which requires economic transformation from focusing on economic growth, to long-term sustainable economic development. In this transformation context, many cities are faced with the challenge of industry transformation, for which investment is an important issue.

On the social front, SDGs promote many related goals such as gender equality, reduced inequalities, peace justice and strong institution, etc. As cities are prone to social inequalities including income gaps, social exclusion, gender inequality, and so on, an inclusive and responsive governance and cooperation between different institutions and organizations must be an integral part of urban development and urban sustainability.

On the environmental front, most of the SDGs are related to environmental problems. The tremendous size and speed of urbanization has created different environmental side effects, which are the major problems to conquer when achieving sustainable development. However, a sustainable city is not only about reducing pollution and emissions; the ultimate goal of a sustainable city is to improve the life quality of its citizens, to become a more liveable city.

Based on these three major pillars, the SDGs are both a logical next step and a more ambitious comprehensive undertaking towards the 2030 Agenda. They represent a concerted effort to shift global development from an economic growth first mode to a sustainable-centric long-term development mode. Compared with Millennium Development Goals (MDGs), which were agreed in 2000 and aimed to reduce extreme poverty requiring significant investment on focused development programmes, SDGs will present a broad request for investment in economic transformation, social inclusion and environmental sustainability. In the urban investment context, these investment requests are overlapping with the urban soft environment.

## 3. URBAN INVESTMENT AND SOFT ENVIRONMENT

### 3.1. Urban investment and sustainable development

Urban sustainable development cannot be achieved without urban investment. In the New Urban Agenda, investment is taken as an elemental concept for sustainable development in public and private urban development fields stating "investment and innovation are major drivers of productivity, inclusive growth and job creation, and that private investment, particularly foreign direct investment (FDI), along with a stable international financial system, are essential elements of development efforts." (New Urban Agenda, 2016)

The investment on sustainable development could also bring in fiscal revenue; improvement in the quality of environment is beneficial for economic development and the tourist industry. Furthermore, eco-friendly public transport systems can reduce traffic congestion, making cities more efficient.

According to World Bank, the private sector has been at the forefront of leading economic growth and poverty reduction around the world. Foreign investment is a major contributor to development, especially in developing countries (World Bank, 2018).

### 3.2. Urban investment and its influence factors

Investment decisions are always made based on a system of information from different aspects. From the economic perspective, factors directly influencing the attractiveness of cities for investors include interest rate, expectations, the level of economic activity, the stock of capital, capacity utilization, the cost of capital goods, other factor costs, technological change, and public policy (Principles of Economics, 2016). From the urban perspective, the investment environment may include every aspect of a city, such as natural environment, political environment, economic status, social status and citizen development.

There are plenty of studies on this topic, with many indicators available that can be used to analyze the overall investment environment.

#### 3.2.1. Global Investment Competitiveness Survey

In its Global Investment Competitiveness Survey Report 2017/2018, World Bank shows national level countries' ability to bring in, retain, and leverage private investment for inclusive and sustainable economic growth.

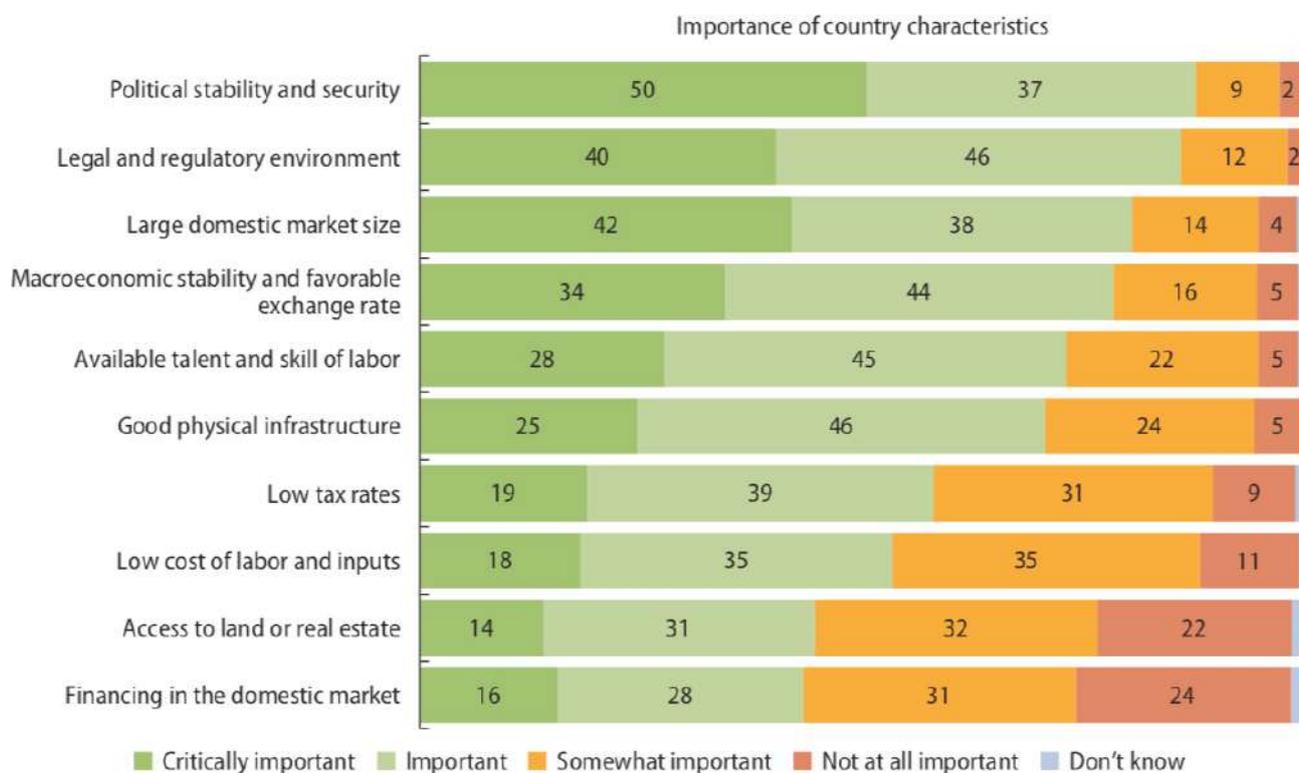


Figure 2: Factors Affecting Investment Decisions Share of respondents (percent)  
(Source: World Bank, 2018)

According to this survey of 754 business executives, political stability and a business-friendly regulatory environment are two of the most influencing factors of investment decisions.

### **BOX 1: Top Five Findings of the Global Investment Competitiveness Survey**

Through interviews with 754 executives of multinational corporations with investments in developing countries, the GIC survey finds the following: Investors involved in export-oriented efficiency-seeking FDI that look for internationally cost-competitive destinations and potential export platforms value linkages, incentives, trade agreements, and investment promotion agency (IPA) services more than other investors. Incentives such as tax holidays are important for 64 percent of investors involved in efficiency-seeking FDI, compared to only 47 percent of their counterparts involved in other types of FDI. IPA services are rated important by about half of investors involved in efficiency-seeking FDI but by only about a third of those involved in other types of FDI. More than a third of investors reinvest all of their profits into the host country. Investors value policies that help them expand their business more than just policies used by governments to attract them. Investment protection guarantees are critical for retaining and expanding investments in the long term across all types of FDI. Over 90 percent of all investors rate various types of legal protections as important or critically important, the highest rating among all factors included in the survey. These guarantees include the ability to transfer currency in and out of the country, and existence of legal protections against expropriation, against breach of contract, and against non-transparent or arbitrary government conduct. Investors strongly value the existing capacity and skills of local suppliers, but also find that government support, such as providing information on the availability of local suppliers, matters. With foreign investors sourcing about 43 percent of their production inputs locally, supplier contracts and linkages with local businesses have the potential to create significant benefits for the local private sector. For close to 30 percent of investors that have experienced shutting down an affiliate in a developing country, some reasons for exiting the investment could have been avoided, such as unstable macro-economic conditions and increased policy and regulatory uncertainty. Three-quarters of investors have experienced disruptions in their operations due to political risk forces and events. A quarter of investors that did experience disruptions cancelled or withdrew their investment. Severe cases occur fairly infrequently—about 13 percent for breach of contract and 5 percent for expropriation—but when they do, the negative impact is strong. In cases of breach of contract, over a third of investors cancel or withdraw investments, and for expropriation almost half do so.

(Source: World Bank, 2017)

### **3.2.2 Doing Business 2018 - The World Bank**

Compared to the World Bank Enterprise Surveys, The Doing Business survey focuses more on laws and regulations. The index averages the country's percentile rankings on the following 11 areas covered in the World Bank's Doing Business project.

Table 1: Indicator Set in Doing Business Project

Indicator set	What is measured
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
Getting electricity	Procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs
Registering property	Procedures, time and cost to transfer a property and the quality of the land administration system
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders' rights in related-party transactions and in corporate governance
Paying taxes	Payments, time and total tax and contribution rate for a firm to comply with all tax regulations as well as post-filing processes
Trading across borders	Time and cost to export the product of comparative advantage and import auto parts
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency
Labor market regulation	Flexibility in employment regulation and aspects of job quality

(Source: World Bank, 2017)

### 3.2.3. Investment attraction factors for eastern European countries

The European Commission has carried out a study on FDI and regional development. In the final report, an econometric location choice model is built, combined with case evidence, showing the factors that affect the location choice of firms.

The following factors are used to explain the firm's choice:

#### Regional and national characteristics

- Market size
- Host country's development level
- Agglomeration (localization and urbanization)
- Share of foreign direct investment
- Taxes
- Infrastructure, accessibility and proximity to home region, capital dummy
- Skills
- Unemployment rate
- Language in common with host region
- Level of innovation and ICT

According to the empirical research, the most important two factors are market size and skilled workforce.

## BOX 2: Investment attraction strategy - City of Melton

The City of Melton is one of Australia's fastest growing municipalities with a current annual population growth of 4%. City of Melton's Gross Regional Product (GRP) is estimated at \$2.552 billion which represents 8.61% of Melbourne's Gross Regional Product (GRP) of \$29.656 billion and 0.73% of Victoria's Gross State Product (GSP) of \$350.343 billion.

The city promotes investment attraction as a long term process and tries to facilitate the creation of the right type of environment for investors and other key stakeholders.

Figure 4. Integrated investment attraction input chart

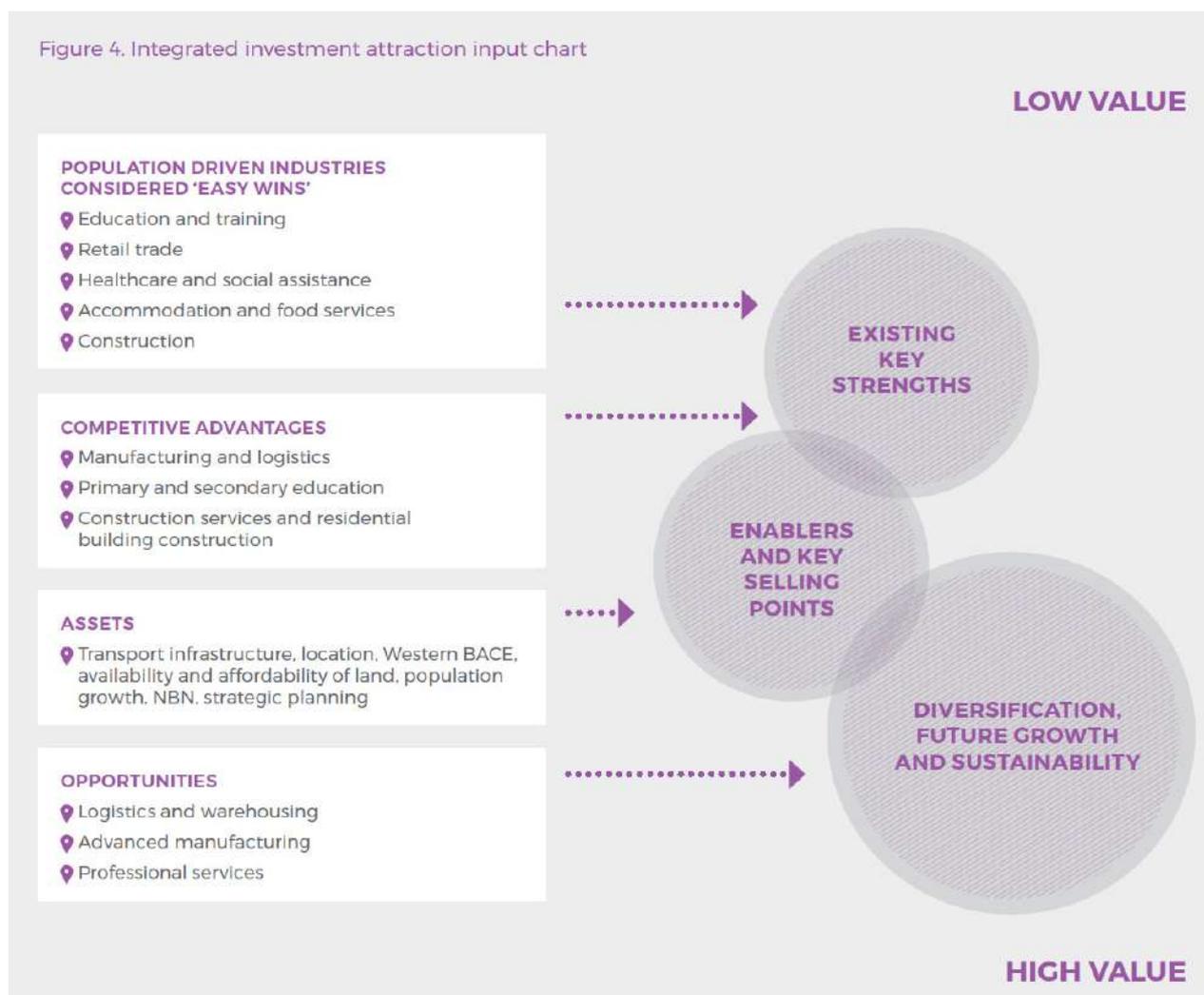


Figure 3: Integrated Investment Attraction Input Chart  
(Source: Melton, Investment Attraction Strategy 2016-2019)

### 3.3. Influencing factors of investment environment

Based on previous studies, the investment influence factors can be summarized in three categories: economic factors, physical factors, and other factors. The most important factors for investment are of course the economic factors, for example the economic growth and the market size of the target city. From the economic point of view, non-economic factors are the so called other factors (Pettinger, 2017). Actually, this category of indicator includes various factors: policy, regulation, infrastructure and so on. From the environmental point of view, these other factors can be divided into hard environment factors and the soft environment. The hard environment factors include infrastructure construction, natural resources and so on, which are important influencing factors to investors. There are already many discussions on these hard factors. It is also worth to notice the soft factors, which are the hiding

influential elements, as sometimes they can be very decisive. These soft factors are also crucial elements of sustainable urban development, especially connected to the liveability of cities (Figure 4). The soft environment of city is closely related to the hard factors and they are among each other in the urban development process. Based on the comprehensive discussion in last issue papers, the less analyzed soft factors will be focused to reveal their crucial role in improving urban investment as well as achieving SDGs at city level.

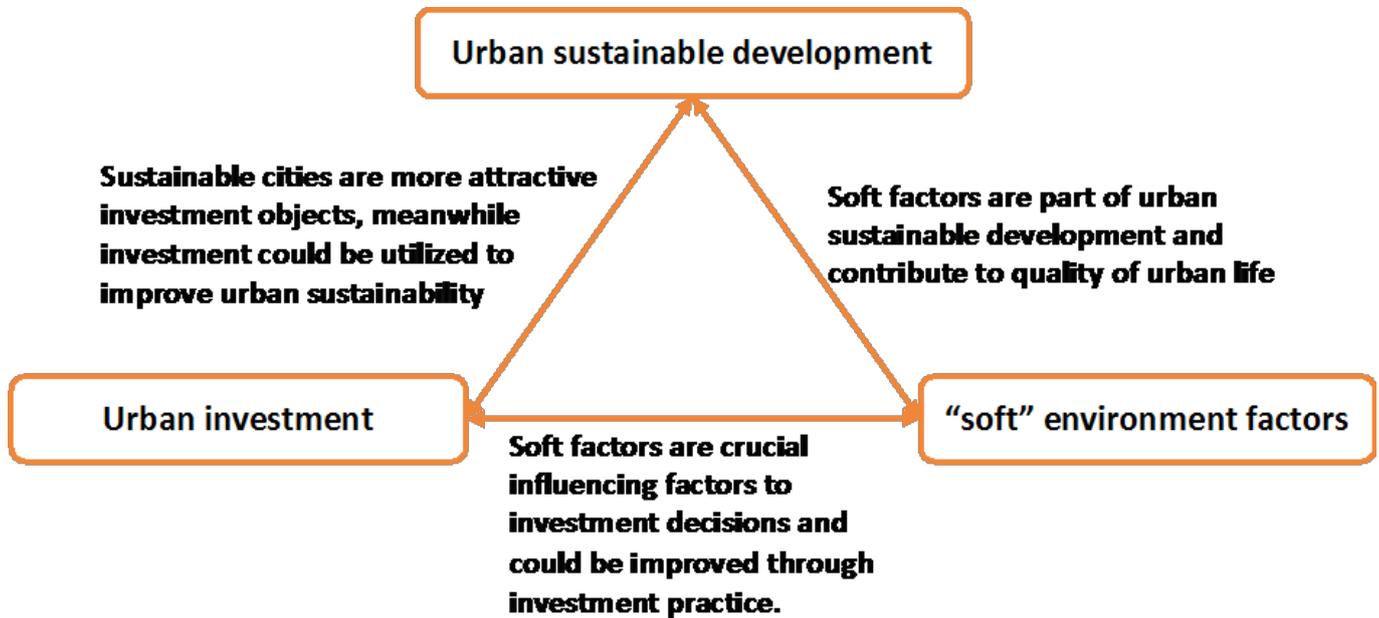


Figure 4: The Triangle of 3 Key Concepts: Urban Sustainable Development, Urban Investment, and Soft Environment (Source: UNIDO, 2018)

At the UNIDO’s Bridge for Cities conference 2017, a sustainable city index framework was presented, and a three-layer structure was constructed (Figure 5).

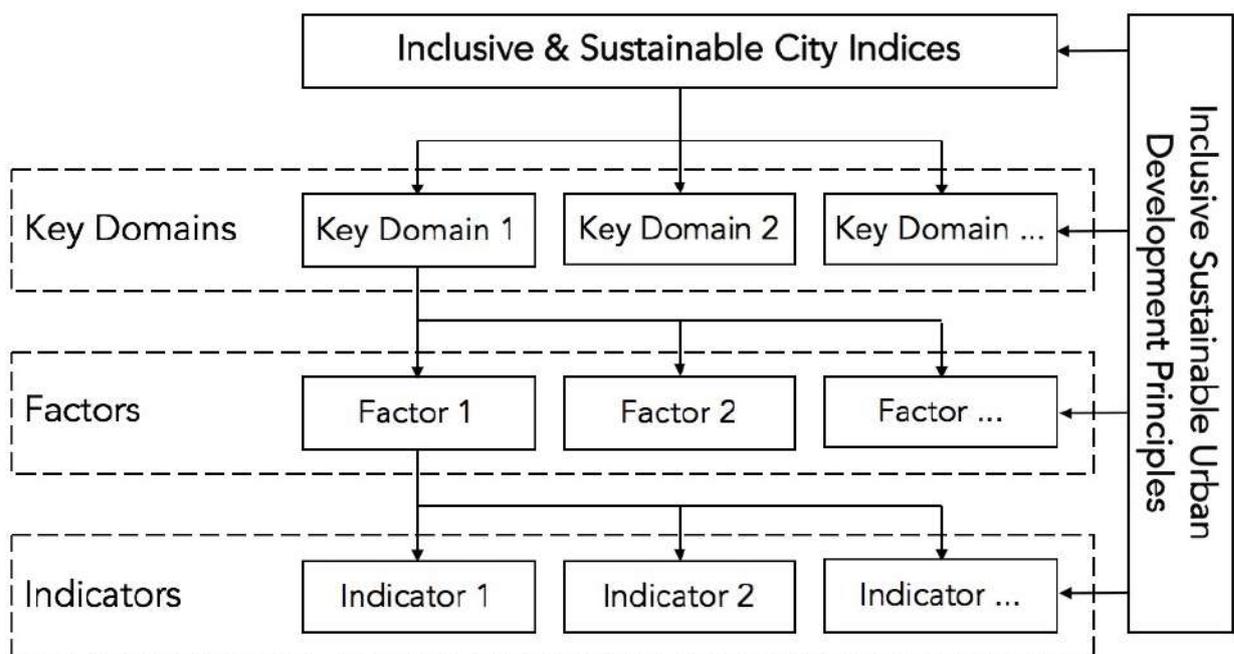


Figure 5: A Three-Layer Structure: Key Domains, Factors and Indicators (Source: UNIDO, 2017)

In the framework there are six key domains, and each key domain comprises three to four factors. The six domains can be categorized according to their “hard” or “soft” attribution. Infrastructure, industry and innovation, and environment are classified into hard aspects while the other three, namely the governance, citizen development and social equity are classified into soft aspects (Table 2).

Table 2: A Framework of Inclusive and Sustainable Urban-Industrial Development Indices

KEY DOMAINS	FACTORS	Attribute
Infrastructure	Mobility	More leaning towards hard environment
	Water treatment	
	Waste management	
	ICT infrastructure	
	Green economy	
Industry and innovation	Innovation	
	Competitiveness	
	Industrial clusters	
	Energy efficiency	
Environment	Pollution control	
	Nature condition	
	Public participation	
Governance	Urban strategy and planning	More leaning towards hard environment
	Multi-level involvement and cooperation	
	Political transparency	
	Safety and health	
Citizen development	Education	
	Human capital	
	Culture development	
	Employment	
Social equity	Housing	
	Social cohesion	

(Source: UNIDO, 2017)

As previously mentioned, this issue paper focuses on the soft aspects of investment environment and will construct the index based on the inclusive and sustainable urban-industrial development indices. The framework is optimized on the basis of characteristics of investment environment, as shown in Table 3.

Table 3: An Optimized Framework For Urban Soft Investment Environment Index

Key domains	Factors
Governance	Policy and regulation
	Political efficiency
	Involvement and cooperation
	Safety and stability
Citizen development	Health
	Education
	Human capital
	Employment
Social vitality	Culture development
	Leisure
	Inclusion
	Internationalization

(Source: UNIDO, 2017)

Based on this framework, a number of indicators are selected to illustrate respective factors. Totally, there are 12 factors and 36 indicators (Table 3-4). Indicators are chosen based on the analysis of global investment environment indicators and could reflect properties of different factors. In the following table, some indicators are interpreted in detail.

Table 4: Suggested Indicators For Urban Soft Investment Environment

KEY DOMAINS	FACTORS	SUGGESTED INDICATORS	INTERPRETATION OF INDICATOR
Governance	Policy and regulation	Standard rate of taxation on corporate income	
		Preferential tax rate	
		Quality of public services	Rated based on survey
	Political efficiency	Level of corruption	Rated based on survey
		Level of censorship	Rated based on survey
		Availability of open public data	Categories of available data combined with survey
	Involvement and cooperation	Participation rate of citizens in government	Rated based on survey
		Freedom of expression and free media	Rated based on survey
		Percentage of voter turnout	Average election participation rate (district level and above)

KEY DOMAINS	FACTORS	SUGGESTED INDICATORS	INTERPRETATION OF INDICATOR
	Safety and stability	Violent crime rate	Number of violent crime in the city per 100,000 inhabitants
		Cost of public security per capita	The expenditure or financial budget on public security
		Approval rate of government	Approval rate or rated by questionnaire
Citizen development	Health	Universal health care service coverage	SDG indicator 3.8.1
		Life expectancy at birth	
		Number of doctors per thousand population	
	Education	Share of labor force with a tertiary education level	
		Share of labor force with secondary education level	
		Total education, schools and science expenditure (share of financial investment)	The expenditure or financial budget on education
	Human capital	Population growth rate	
		Skill training rate of labor	Percentage of labor with skill certifications
		Percentage of population with foreign language skills	
	Employment	Average unemployment rate	Percentage of unemployment
		Net employment growth	Percentage of employment growth
		Youth neither in employment nor education and training	Unemployment rate for youth under 25 years
Social vitality	Culture development	Total art, culture and religious expenditure	The expenditure or financial budget on art, culture and religious development
		Share of different religions in city	
		Amount of cultural buildings (museums, theaters) per capita	
	Leisure	Amount of sport grounds per thousand population	
		Amount of public park per thousand population	

KEY DOMAINS	FACTORS	SUGGESTED INDICATORS	INTERPRETATION OF INDICATOR
		Amount of celebrations, festivals, fairs and parades per thousand population	
	Inclusion	Gender employment rate gap	Gap between female employment rate and male employment rate
		Gini index	
		NGOs per thousand population	Total number of NGO in the city per thousand population
		Number of international passengers	Number of international travelers
		Number of international events	Total number of international events that happened in the city
		Percentage of foreign-born population	

(Source: UNIDO, 2017)

Soft environment plays a key role in both urban liveability and urban investment. Soft environment is a comprehensive concept, including factors of macro, average and micro levels. At the same time, it is a dynamic concept that can be improved or changed in time. In this case, the index system of soft environment can be divided into different levels and developed in time.

### BOX 3: The RICl tool for improving investment climates

According to the Boston Consulting Group, it is important to answer two questions that are related to the attractiveness to prospective investors:

Will it be easy to develop my business here?

And is the economy strong enough to support my plan?

The Boston Consulting Group and the Russian Agency for Strategic Initiatives (ASI) developed the Regional Investment Climate Index (RICl)—a 44-factor index to compare the investment climates within a nation across different regions. The RICl focuses on the investment climate across four main business concerns:

- Regulatory environment
- Institutions that support business
- Infrastructure and resources
- The strength of small and medium-sized businesses.

In each area, RICl assesses a number of individual factors such as the efficiency of enterprise registration procedures, the efficiency of government and nongovernmental business support tools, labor quality and availability, and the maturity of small businesses in the region. The model incorporates multiple indicators for each key parameter using a combination of

statistical and survey data and expert opinions. In all, RICI assesses 44 parameters.

Based on analysis, BCG makes specific recommendations and also works together with regional development offices.

As a result, in the past two years the use of the RICI tool has catapulted Russia from the 51<sup>st</sup> to the 35<sup>th</sup> place on the World Bank's global ranking of the best countries to do business in.

(Source: BCG, 2018)

## 4. BENCHMARK FOR SOFT ENVIRONMENT DEVELOPMENT

### 4.1. Set a benchmark for urban case study

A framework index is developed to assess urban soft environment. But we still need a benchmark to measure for assessment. In 2018, Vienna was named as the best city to live in the Mercer Quality of Living Survey (Mercer, 2018). Besides, the city is in the top 10 most sustainable cities (No. 4) according to the sustainable cities index of 2016 published by Arcadis in the UK. In this study, Vienna will be used as the benchmark for other cities. Data collected from other cities will be compared to the benchmark data, which is from the city of Vienna, in order to formulate a score. The data of Vienna is given a baseline score of 10 for each indicator and the total base score of Vienna is 360.

Based on the indicators framework, a general process of analysis is designed to practice urban case studies: first indicator data will be collected, then based on analysis of the data, will be compared to the benchmark data. Indicators are graded and scored by expert groups. Finally, analysis results and recommendations will be given on the soft environment development of the case city.

### 4.2. Vienna's soft investment environment

Vienna, located in central Europe, is the federal capital and largest city in Austria. It is the political, economic and cultural center of Austria. Vienna has a good reputation as a city of music, culture, innovation, living quality and so on. In 2018, the annual Mercer survey has taken Vienna as the city with the best living quality in the world for the ninth year in a row.

The city of Vienna has put forth much effort on sustainable development, especially regarding the quality of living in different areas, such as housing, mobility, economy and so on. Since 2011, a Smart City Wien strategy has become a focus of Vienna's urban development, which aims to improve the general living quality of the city while reducing resource usage through innovation (Vienna City, 2016). In July 2018, the City of Vienna and the Austrian Economic Chamber in Vienna (WKO Wien) published a three-year plan on the city's economic development. The plan reveals three priorities and focus areas of the city of Vienna: (1) business management, (2) digitalized training for specialists, and (3) infrastructure transport and urban planning (Stadt Wien and Wirtschaftskammer Wien, 2018). In the efforts to ensure a prosperous future of Vienna, it could be seen that urban soft environment as well as the urban physical environment are taken into consideration.

Vienna's urban soft environment is reflected in several factors, and it is managed by different city departments. In order to illustrate the soft environment of Vienna, it is necessary to investigate and discuss with these departments.

As described above, there are 3 key domains, 12 factors and a series of indicators to investigate a city's soft investment environment. Most of the indicators are quantitative indicators but there are also several qualitative indicators such as the level of corruption, availability of open public data and so on.

Hence, in order to support the establishment of the benchmark case of Vienna, an Expert Group Meeting (EGM) on “Soft Environment for Urban Investments” was organized to seek inputs on the Vienna case, particularly on “What soft factors make Vienna an attractive investment location and one of the most liveable cities in the world”. In this meeting, not only quantitative data was provided by different city departments, but also a survey for qualitative indicators, which was carried out among city experts from various areas.

During the meeting, participants also gave their comments on Vienna’s urban soft environment from their respective expertise perspectives. Generally, it was agreed that Vienna has one of the best urban soft environments, because it has a strong government with most infrastructure business in hand, and also because it has fine management in the subdivision of urban development.



Figure 6: Expert Group Meeting on Soft Environment for Urban Investments at UNIDO  
(Source: UNIDO, 2017)

#### **Box 4: City of Vienna and Health**

In addition to household income, health status is one of the most important indicators of the “life satisfaction” of Viennese residents. The maintenance and expansion of the health system as well as its accessibility and affordability are estimated to be high for all population groups. Therefore, Vienna can build upon a well-functioning healthcare system and a wide range of health-promoting measures. The need for hospitals, (specialist) physicians and pharmacies in general is covered for Vienna as a whole on a very high level, although there may be some regional imbalances in the distribution of large institutions (hospitals) within the city borders.

In addition, for many years the City of Vienna offers gender-specific counselling centers and various health officers, who specifically address health risks and thus act in a preventive, advisory way. In recent years, not only has the number of inhabitants in the different districts grown at different rates, but the age structure of the population has also changed in the different districts. In line with this trend, hospital capacity will have to be shifted from the west to the northeast region of the city.

Further integration of the city with the surrounding area means that the exchange relations within the region (Lower Austria, Burgenland) will intensify. More and more people will commute. This will also apply to the health sector. As in other areas, more intensive cooperation beyond administrative boundaries will be necessary.

Migrants belong to a group of people with particularly high health burdens. Using the example of the situation of migrants, it becomes clear how important it is to set social preventive measures and thus indirectly to promote health. Cities health planning aims to offer balanced and comprehensive basic medical and nursing care. The aim is a mixed supply of health and social services in a small-scale decentralized but interlinked distribution.

Vienna's residents are getting older. Life expectancy for women is still higher on average, but life expectancy for men is now rising compared to the "war generation".

However, not only is the population getting older, but because of changes in society and family structures (increasing worker mobility, rising female employment rates, etc.), family members are also receiving less and less care. Thus, the demand for offers and facilities in the nursing and care sector will continue to increase in the future.

On the one hand, public health planning reacts with modernization and increases standards in the existing facilities and on the other hand, pushes for the construction of new long-term care facilities. The wish of the people to live as long as possible in their own home is taken into account by the fact that both the outpatient and the care at home - through mobile services - are further accelerated and expanded.

One central goal is to enable the elderly to live independently for as long as possible while also offering local services in line with the requirements of customer-oriented supply planning. In addition, the trend is moving away from a nursing chain (which ultimately ends with permanent care) to a care network, within which the selection can be made from diversified offers, depending on the individual circumstances of life. An interdisciplinary "case management" is intended to guarantee the permeability of all outpatient, semi-inpatient and inpatient facilities. A central contact point supports the orientation of the customers.

### 4.3. Benchmark data of Vienna

Data collection was greatly supported by the city of Vienna. Further data will be collected by a survey aimed at collecting data for qualitative indicators. Valid questionnaires collected at the EGM were analyzed to get average data for such indicators. Preliminary data is shown in the following table with sources. Data of several indicators are to be supplemented or adjusted but the nominal score of each indicator for Vienna is 10 and the total score is 360.

Table 5: Data Collection and Assessment of Urban Soft Investment Environment

KEY DOMAINS	Factors	Indicators	Data	Year	Source	Nominal Score
Governance	Policy and regulation	Soundness of urban finance				
		Preferential tax rate				10
		Quality of public services	8.71	2018	Expert survey	10
	Political efficiency	Level of corruption	2.14	2018	Expert survey	10
		Level of censorship	3.29	2018	Expert survey	10
		Availability of open public data	6	2018	Expert survey	10
	Involvement and cooperation	Participation rate of citizens in government	6.29	2018	Expert survey	10
		Freedom of expression and free media	8.43	2018	Expert survey	10
		Percentage of voter turnout				10
	Safety and stability	Violent crime rate	1.26	2017	City of Vienna	10
		Cost of public security per capita				10
		Approval rate of government				10
	Citizen development	Health	Universal health care service coverage	100%	2017	City of Vienna
Life expectancy at birth			80.7		City of Vienna	10
Number of doctors per thousand population			3.6		City of Vienna	10
Education		Share of labor force with a tertiary education level	46.6%	2017	Eurostat	10
		Share of labor force with secondary education level	41.6%	2017	Eurostat	10
		Total education, schools and science expenditure share of financial investment)	+1.1%	2017-2018	City of Vienna	10

KEY DOMAINS	Factors	Indicators	Data	Year	Source	Nominal Score
	Human capital	Population growth rate				10
		Skill training rate of employed population	20.8%	2017	Eurostat	10
		Percentage of population with foreign language skills				10
	Employment	Average unemployment rate	10.4%	2017	Eurostat	10
		Net employment growth	+1.7%	2017	Eurostat	10
		Youth development: neither in employment nor education and training	9.6%	2017	Eurostat	10
Social vitality	Culture development	Total art, culture and religious expenditure per capita				10
		Share of different religions	7	2018	Expert survey	10
		Amount of cultural buildings (museums, theaters) per capita				10
	Leisure	Amount of sport grounds per thousand population				10
		Public park area per capita	6.8m <sup>2</sup>		City of Vienna	10
		Amount of celebrations, festivals, fairs and parades per thousand population				10
	Inclusion	Gender employment rate gap	10.6%	2017	Eurostat	10
		Gini index				
		NGOs per thousand population				10
		Number of international passengers per thousand population				10
		Number of international events per thousand population				10
		Percentage of foreign-born population	35.3%		City of Vienna	10

(Source: UNIDO, 2017)

Based on the data set from the city of Vienna, a benchmark is set to assess urban soft environment of case cities. The case city analysis is operated in the following process as shown in Figure 7. First, data will be collected, with quantitative data from statistics and qualitative data from the expert survey. Then data from the case city will be compared to reference data from the benchmark city, Vienna, to get a score for each of the indicators. Finally, recommendations and conclusions would be given on the urban soft environment development for the case city.

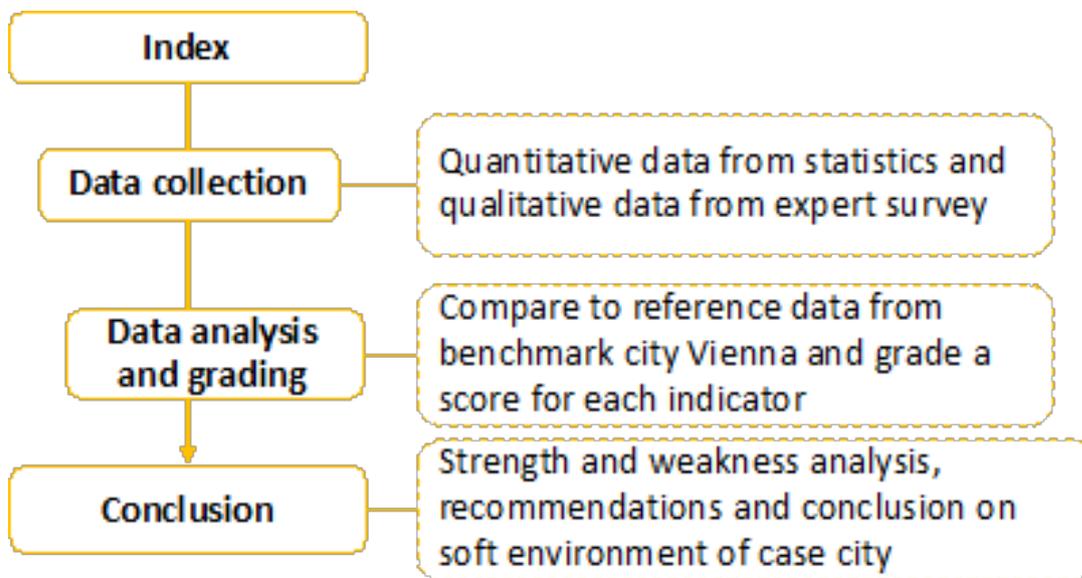


Figure 7: Basic Process of Case City Analysis  
(Source, UNIDO 2018)

#### 4.4. Benchmark of urban soft environment

Based on the data set from the City of Vienna, a benchmark will be produced in order to compare data from other cities to assess their urban soft environment.

**BOX 5:** Apply the soft environment index to small or medium cities: an assessment of Pingyao, Shanxi

As there are differences between big cities, medium cities and small cities, the index cannot be directly used in small and medium cities. It is instead suggested to adjust the index in the indicators level, so that the index would be more suitable for a specific city or town.

Pingyao, a famous ancient city as a UNESCO World Heritage Site, is located in central Shanxi, China. It has an important role in Chinese economic history and was a financial center in ancient China during the Qing Dynasty until the late 19th century.

For a city like Pingyao, features of the city’s culture and history should be reflected in the assessment. With the stability of index structure in domains and factors, changes will be made on the indicator level to adapt to the specific situation of Pingyao as

a historical small city. It allows the assessment results to be comparable with other cities within a similar index structure but also fits for characteristics of a small city.

During the international forum in the Sculpture Projects Ping Yao, a specific survey was designed for the research of development characteristics of Pingyao City. Based on the urban soft environment index, the questions in the survey were focused on two aspects of the qualitative content of urban social vitality, which were the culture development and internationalization. The target group of the survey includes experts within and outside the Pingyao city, who are familiar with Pingyao’s urban development and urban soft environment.

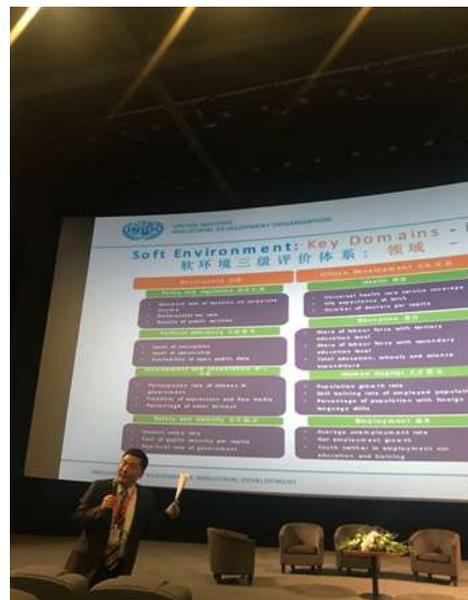


Figure 8: International forum in Pingyao (L); Mr. Weixi Gong from UNIDO introduced UNIDO study and the urban soft environment survey in Pingyao (R)

Table 6: Survey Content of Pingyao Case

Social vitality*	Culture development*
	Leisure
	Inclusion
	Internationalization*

\*focused factors in the survey

(Source: UNIDO, 2017)

In the 7-question survey, 4 survey questions were related to culture development and 2 questions were related to internationalization, the last one was an optional open question for additional suggestions. Totally, 84 feedbacks were collected from the expert meeting.

It could be summarized from the survey result that Pingyao has a relatively good development in both aspects of culture development and internationalization. Particularly, attractiveness to international tourists, and the usage of historical feature of the city are most recognized by city experts. Some opinions and advices were given on culture development, such as the diversity of culture, smart tourism and so on. Generally, the cultural feature of Pingyao is highly appraised and the survey respondents are confident about the overall attractiveness of the city.

## 5. CONCLUSION AND RECOMMENDATIONS

Urban investment environment is often viewed as a limited component of the investment landscape, with particular attributes making it different from investments in general. Urban investments are exposed to more people and impact them more substantially. There are more rules and requirements in relation to urban investments, and urban areas of the world have a lot more capacities and challenges. The most pronounced difference is in relation to the human aspect of the investment environment, which presents unique opportunities and challenges in terms of urban investment. These so called ‘soft’ components of the investment environment for urban investments encompass support for an open society, which spurs ideas, entrepreneurship, innovation, growth, and ultimately attracts investments for urban development, while creating a liveable environment. This report provides a review of concepts and presents ideas in relation to the soft environment of urban investment, making recommendations as to further investigating and shaping this environment in order to promote liveable cities around the world.

This issue paper discusses three questions:

- What is the role of soft environment in sustainable urban development and urban investment?
- What are key influencing factors of soft environment in urban investment and urban development?
- What could be done to improve the soft environment for urban investment?

Soft environment for urban investment consists of mostly non-production factors and intangible factors, such as policy, institutions, culture and so on. These factors could influence liveable urban development in two aspects: as part of the urban development issue and by taking an active role in attracting more investment in order to promote urban development. In that perspective, building soft environment is an effective effort to promote liveable urban development and support long-term economic growth. As the core of soft environment, the quality of urban life for citizens is the most important measure for it, and so the opinions from citizens as well as experts from the city should be taken into consideration in the measurement.

### Lessons from Vienna:

The personal factor, quality of life, which is gaining more and more importance as a “soft” environment factor for the attractiveness of a city, is based in Vienna on

- The favorable geographical climatic and natural conditions (for example urban and superregional natural space, air, water, etc.).
- The orientation of urban policy towards sustainability, environmental orientation and implementation and especially the principles of gender mainstreaming and diversity management.
- The traditional and comprehensive communalization of social and technical services (for example health, housing, water supply, public transport etc.).

The focus on this last point is the secret of the famous “Viennese Model”, which is confirmed regularly by consulting companies like Mercer in some “Quality of Life” studies with foremost placing in rankings. Ensuring the quality of life in Vienna means equal opportunities and accessibility to services of general interest, no matter gender, age, social and ethnic origin. This basic principle applies in general and in particular to the social, health and educational policy of the City of Vienna.

## REFERENCES

Arcadis (2016). Sustainable Cities Index 2016.

<https://www.arcadis.com/media/0/6/6/%7Bo6687980-3179-47AD-89FD-F6AFA76EBB73%7DSustainable%20Cities%20Index%202016%20Global%20Web.pdf>

EIU (2017). The Global Liveability Report 2017: A free overview.

EU Committee of the Regions (2016). Using the Quadruple Helix Approach to Accelerate the Transfer of Research and Innovation Results to Regional Growth.

Eurostat (2017). Final report of the expert group on quality of life indicators.

Woo, F. (2013, August 13). Sustainable urban development: it's time cities give back.

Retrieved from The Guardian: <https://www.theguardian.com/global-development-professionals-network/2013/aug/13/sustainable-urban-development-regeneration>

Melton City Council (n.d.). Investment attraction strategy 2016-2019.

Mercer (2018). QUALITY OF LIVING CITY RANKING.

<https://mobilityexchange.mercer.com/Insights/quality-of-living-rankings>

Stadt Wien and Wirtschaftskammer Wien (2018). Zukunftsvereinbarung für Wien 2018-2020.

Pettinger, T. (2017). Factors affecting investment.

<https://www.economicshelp.org/blog/136672/economics/factors-affecting-investment/>

UN-HABITAT (2016). New Urban Agenda 2016.

UNCTAD (2014). World investment report 2014.

Vienna City Administration (2016). Smart City Wien Framework Strategy Overview. July 2014. 2nd Edition 2016.

World Bank (2017). Doing Business 2018: Reforming to Create Jobs.

World Bank (2017). Global Investment Competitiveness Report 2017/2018: Foreign Investor Perspectives and Policy Implications.

## APPENDIX 1: SOFT ENVIRONMENT PERFORMANCE SURVEY

### Purpose of the survey

As part of the UNIDO's 3rd "Belt & Road Initiative: Developing Green Economies for Cities" Event, this survey aims to provide qualitative data for the urban soft environment index, in order to do further analysis and evaluation of the soft environment for case cities. Urban soft environment is an important element for urban development and urban investment. As defined in previous issue papers of the event, the urban soft environment includes governance, citizen development and social vitality. Through the establishment of an urban soft environment index, comprehensive assessment of urban soft environment could be carried out to provide suggestion and recommendation for urban development and urban investment. The index system is composed of quantitative indicators and qualitative indicators, which need the support of both statistical data and qualitative evaluation. The purpose of this survey is to collect data for qualitative indicators through experts' opinion.

### Scope of the survey

The index of urban soft environment covers 3 key domains and 12 factors (see table 7 below). This survey is designed for the research of development characteristics of the target City. Based on the urban soft environment index, the questions of the survey are focused on the aspects of the qualitative content of 12 factors. The target group of the survey includes experts within and outside the city.

Table 7: Urban soft environment index and focused factors of this survey

Key domains	Factors
Governance*	Policy and regulation
	Political efficiency
	Involvement and cooperation
	Safety and stability
Citizen development	Health
	Education
	Human capital
	Employment
Social vitality*	Culture development
	Leisure
	Inclusion
	Internationalization*

\*focused factors in this survey

### Example question

The questions in the survey require the survey object to judge the content described in the question, according to their own experience and subjective judgment, and select the closest value. All questions are single-choice, usually with a progressive score of 1-10 points.

Example question:

On a scale of 1-10 with 1 being the lowest and 10 being the highest, how do you think the importance of urban soft environment for urban development and urban investment:

1 2 3 4 5 6 7 8 9 10

You think that the soft environment is very important for urban development but is not completely decisive, and it can get a score of 8:

1 2 3 4 5 6 7 8 9 10

Please answer the following 12 questions based on your experience and subjective judgment. Thank you very much for your participation and contribution!

Q1. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the financial health of your city?

1 2 3 4 5 6 7 8 9 10

Q2. On a scale of 1 - 10 with 1 being the poorest and 10 being the most excellent, how do you think the quality of public services in your city?

1 2 3 4 5 6 7 8 9 10

Q3. On a scale of 1 - 10 with 1 being the least corrupt and 10 being the most corrupt, how do you think the level of corruption in your city?

1 2 3 4 5 6 7 8 9 10

Q4. On a scale of 1 - 10 with 1 being the least censorship and 10 being the most censorship, how do you think the level of censorship in your city?

1 2 3 4 5 6 7 8 9 10

Q5. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the availability of open public data in your city?

1 2 3 4 5 6 7 8 9 10

Q6. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the participation of citizen in government in your city?

1 2 3 4 5 6 7 8 9 10

Q7. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the diversity of religious in your city?

1 2 3 4 5 6 7 8 9 10

Q8. On a scale of 1 - 10 with 1 being the poorest and 10 being best, how do you think the quality of art and cultural service in the city?

1 2 3 4 5 6 7 8 9 10

Q9. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the diversity of culture in your city?



## BIOGRAPHIES

### **Mr. GONG Weixi, Senior Coordinator for South-South and Triangular Industrial Cooperation, Department of Programmes, Partnerships, and Field Integration, United Nations Industrial Development Organization**

Mr. GONG Weixi has over two decades of professional experience, with positions and expertise in the Aviation Industry, Systems Analysis as well as Technology Transfer and its negotiation, theory and practice. In 1997, he was recruited by the United Nations Industrial Development Organization (UNIDO), where he undertook various responsibilities in the area of information and knowledge management, business sector development, sector-specific value chain development, technology transfer, programme evaluation, human resources development, field operations, and South-South cooperation. Since 2012, Mr. Gong has been engaged in the area of sustainable cities and urban-industrial development at UNIDO. He has previously served as the UNIDO representative in Iran and as the chairperson of the Operations Management Team of the United Nations in Iran. Currently, Mr. Gong is serving as the Senior Coordinator for South-South and triangular industrial cooperation at the Department of Programmes, Partnerships, and Field Integration at UNIDO.



### **Mr. Richard Gauss, Head, MA 24, Head of Health and Social Planning for the City of Vienna**

Mr. Gauss was born in Linz in 1963 and studied economics there. In 1987 he began his career in the budget section of the Ministry of Finance. In 2002, he became head of the Budget - Labor, Social Affairs, Health and Pensions Department. In 2010, he moved to the higher administrative service of the City of Vienna as Division Manager for Financial Management in the Business Group Health and Social Affairs.



### **Mr. Hui Lyu, Urban Expert, United Nations Industrial Development Organization**

Mr. Lyu is an urban development specialist with expertise in sustainable urban development and smart-city planning. Currently, he is working at UNIDO as an international consultant while completing his PhD on the topic of smart cities as a social-technical process in urban and regional development at the Vienna University of Technology. Mr. Lyu holds a Bachelor of Engineering from Tongji University in Shanghai, a Master of Science from Bauhaus-Universität Weimar and a Master of Engineering from Tongji University.





**SAVE THE DATE**  
**4<sup>th</sup> “BRIDGE for**  
**3 to 5 Sept**  
**Vienna,**



**THE DATE**

**for Cities” event**

**September 2019**

**, Austria**

# CASE CITIES: Trieste, Italy; Shanghai, China; Vienna, Austria; Chengdu, China

## CITIES: 188

Abuja	Dongen	Limassol	São Paulo
Accra	Eching	Linz	Sarajevo
Addis Ababa	Edmonton	Liuzhou	Shahkot
Agogo	Erbil	Ljubljana	Shanxi
Aguascalientes	Fort Lauderdale	Lodz	Shanghai
Amman	Frankfurt am Main	Lomé	Shenzhen
Amsterdam	Freiburg	London	Sialkot
Ankara	Fuzhou	Luxembourg	Singapore
Apapa	Geneva	Madrid	Siraf
Arnoldstein	Gothenburg	Managua	Sontheim
Assaluyeh	Granada	Manama	Sousse
Astana	Graz	Manila	Stockholm
Baden	Grossgmain	Maria Anzbach	Stuttgart
Balykchy	Guadalajara	Mexico City	Surabaya
Banda Aceh	Guangzhou	Minden	Taif
Bangkok	Guiyang	Mistelbach	Tallinn
Barcelona	Hangzhou	Moedling	Tashkent
Basel	Hanoi	Monrovia	Tbilisi
Bayreuth	Havana	Montevideo	Tehran
Beijing	Helsinki	Moscow	Tel Aviv
Berlin	Hong Kong	Muenster	Telfs
Bhubaneswar	Houston	Munich	The Hague
Bhopal	Islamabad	Nairobi	Thessaloniki
Bisamberg	Istanbul	Nakhon Si Thammarat	Tianjin
Bishkek	Izmir	Nanning	Tirana
Bogota	Jakarta	New Delhi	Torino
Bonn	Nanchang	New York	Toronto
Bratislava	Jijel	Novosibirsk	Trieste
Brazzaville	Kadamjay	Oleggio Castello	Ulaanbaatar
Bremen	Kairouan	Oslo	Valencia
Brussels	Kampala	Ouagadougou	Veracruz
Bucharest	Karachi	Oxford	Venice
Budapest	Kathmandu	Padua	Vienna
Buea	Katowice	Paris	Vientiane
Cairo	Khartoum	Paynesville	Warsaw
Cambridge	Kherson	Peshawar	Wels
Caracas	Kidapawan	Pittsburgh	Wenigzell
Chengdu	Köln	Pressbaum	Wenzhou
Cheongju-si	Korneruburg	Qingdao	Wiener Neustadt
Chicago	Krems an der Donau	Quito	Wolfurt
Chisinau	Kumasi	Rabat	Xi'an
Colombo	Kyiv	Rio de Janeiro	Xuzhou
Cracow	Lagos	Riyadh	Yantai
Curitiba	Lahore	Roma	Yerevan
Dakar	Lalitpur	Salzburg	Yiwu
Damascus	Lanzhou	San Salvador	Zagreb
Dhaka	Latakia	Santiago	Zürich

# COUNTRIES: 87

Albania  
Algeria  
Angola  
Argentina  
Armenia  
Austria  
Bahrain  
Bangladesh  
Belgium  
Bolivia  
Bosnia and Herzegovina  
Brazil  
Burkina Faso  
Cameroon  
Canada  
Chile  
China  
Colombia  
Congo Democratic Republic  
Cote d'Ivoire  
Croatia  
Cuba  
Czech Republic  
Dominican Republic  
Ecuador  
Egypt  
El Salvador  
Estonia  
Ethiopia  
Finland  
France  
Georgia  
Germany  
Ghana  
Greece  
Hungary  
India  
Indonesia  
Iran  
Iraq  
Italy  
Jordan  
Kazakhstan  
Kenya  
Kyrgyzstan  
Laos  
Liberia  
Luxembourg  
Mexico  
Mongolia  
Morocco  
Nepal  
Netherlands  
Nigeria  
Norway  
Pakistan  
Philippines  
Poland  
Republic of Cyprus  
Republic of Moldova  
Romania  
Russia  
Saudi Arabia  
Senegal  
Serbia  
Singapore  
Slovakia  
Slovenia  
South Korea  
Spain  
Sri Lanka  
Sudan  
Sweden  
Switzerland  
Syrian Arab Republic  
Thailand  
Togo  
Tunisia  
Turkey  
Uganda  
Ukraine  
United Kingdom  
United States of America  
Uruguay  
Uzbekistan  
Venezuela  
Vietnam

**More than 1050  
participants  
attended the event**



## “BRIDGE for Cities” - Belt & Road Initiative: Developing Green Economies for Cities

Organized conjointly by the United Nations Industrial Development Organization and the Finance Center for South-South Cooperation, the “BRIDGE for Cities” annual event promotes the implementation of the 2030 Agenda for Sustainable Development via the Belt and Road Initiative at city level, to encourage municipal officials to scale up their engagement in inclusive and sustainable urban-industrial development initiatives, and to establish a platform through which cities can share their development successes and challenges and ultimately upscale their capacities.

The 3<sup>rd</sup> “BRIDGE for Cities” event attracted over 1050 Participants from 188 Cities in 87 Countries, representing urban-development stakeholders from public and private sector, as well as from academia and international organizations. At the 3<sup>rd</sup> “BRIDGE for Cities” event, four case cities, namely Trieste, Italy; Shanghai, China; Vienna, Austria and Chengdu, China, showcased their development plans and investment opportunities and highlighted the role of UNIDO’s technical competencies in facilitating the achievement of their urban-industrial development strategies. With increasing attendance and the successful case city approach, the event has justified its importance as an effective and innovative platform for connecting cities along the Belt and Road and beyond.

Building upon the outcomes of the 3<sup>rd</sup> “BRIDGE for Cities” event, the event will continue to build new bonds with new case cities next year, while making the linkages with this year’s case cities stronger through follow-ups and partnership facilitation.

### SAVE THE DATE

**4<sup>th</sup> “BRIDGE for Cities” event**  
**3 to 5 September 2019**  
**Vienna, Austria**

More information will be shortly available at: [www.unido.org/bridge](http://www.unido.org/bridge)



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria  
Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69  
E-mail: [unido@unido.org](mailto:unido@unido.org), Internet: [www.unido.org](http://www.unido.org)



FINANCE CENTER FOR  
SOUTH-SOUTH COOPERATION  
南南合作金融中心

FCSSC

Finance Center for South-South Cooperation, 1102-1106, 11/F,  
Two Pacific Place 88 Queensway, Admiralty, Hong Kong, China  
Telephone: +852 3758-2366, Fax: +852 3758-2879  
Email: [general@fc-ssc.org](mailto:general@fc-ssc.org), Internet: [www.fc-ssc.org](http://www.fc-ssc.org)