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Soft Environment for Urban Investments

with a Case on **City of Vienna**

City of  Vienna



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Soft Environment for Urban Investments

with a Case on **City of Vienna**

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September 2018

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1. INTRODUCTION

As pointed out in previous issue papers, 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. 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.

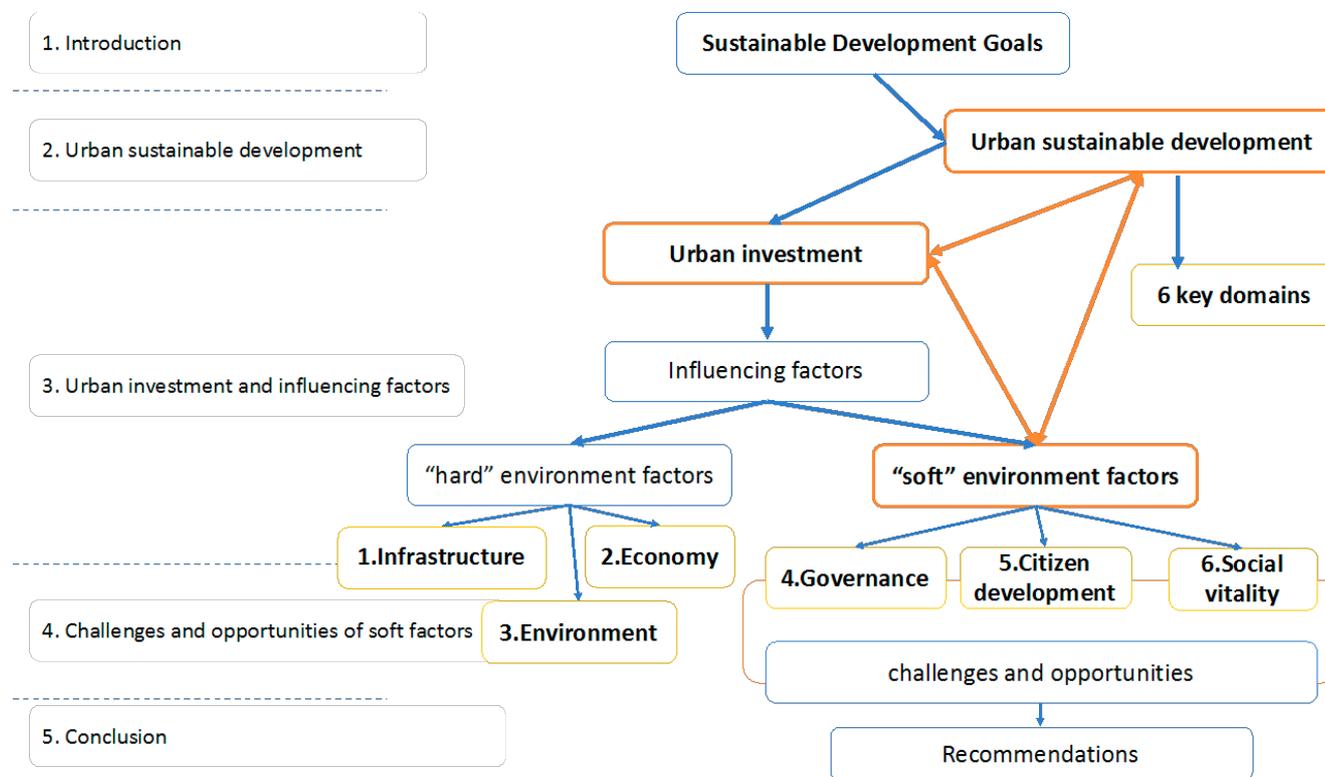


Figure 1: Methodology Structure of the Issue Paper (Source: UNIDO, 2018)

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)

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.

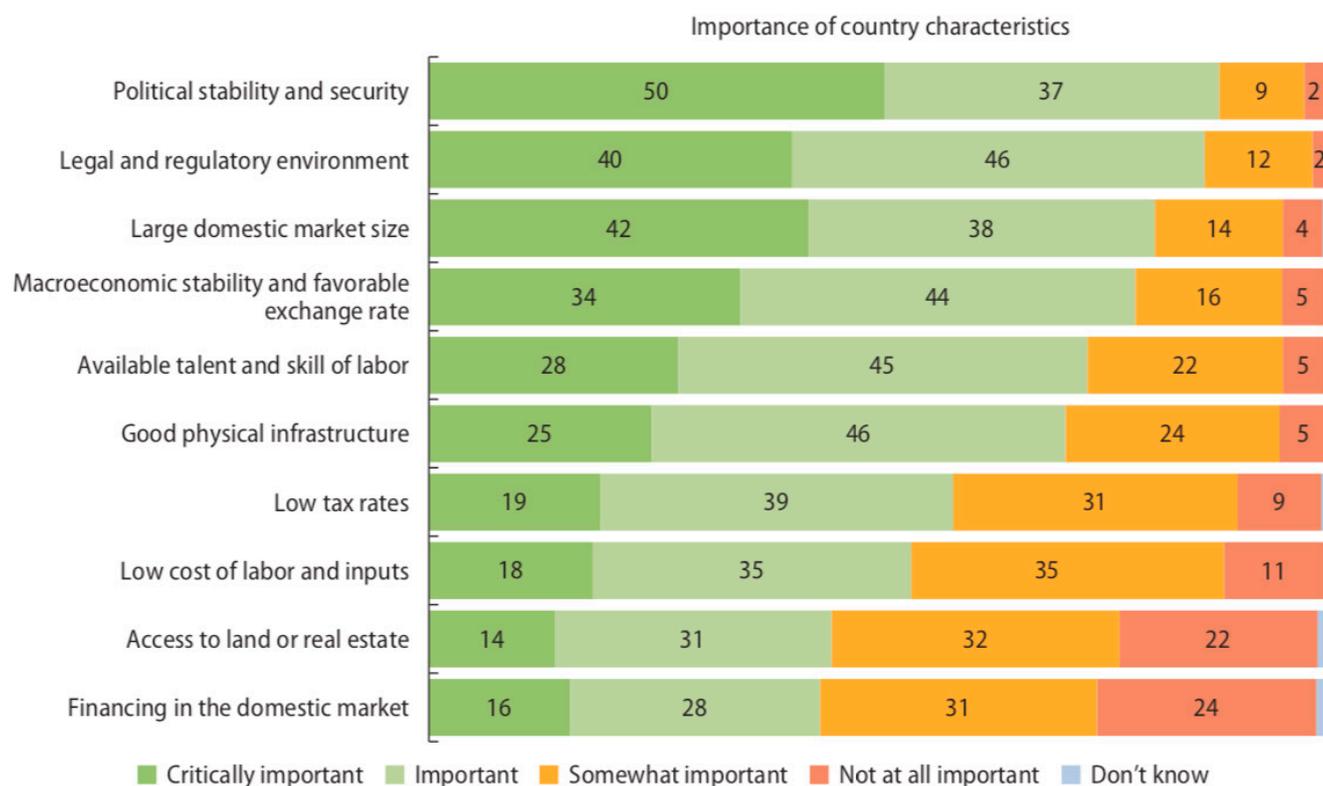


Figure 2: Factors Affecting Investment Decisions Share of respondents (percent)
(Source: World Bank, 2018)

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.

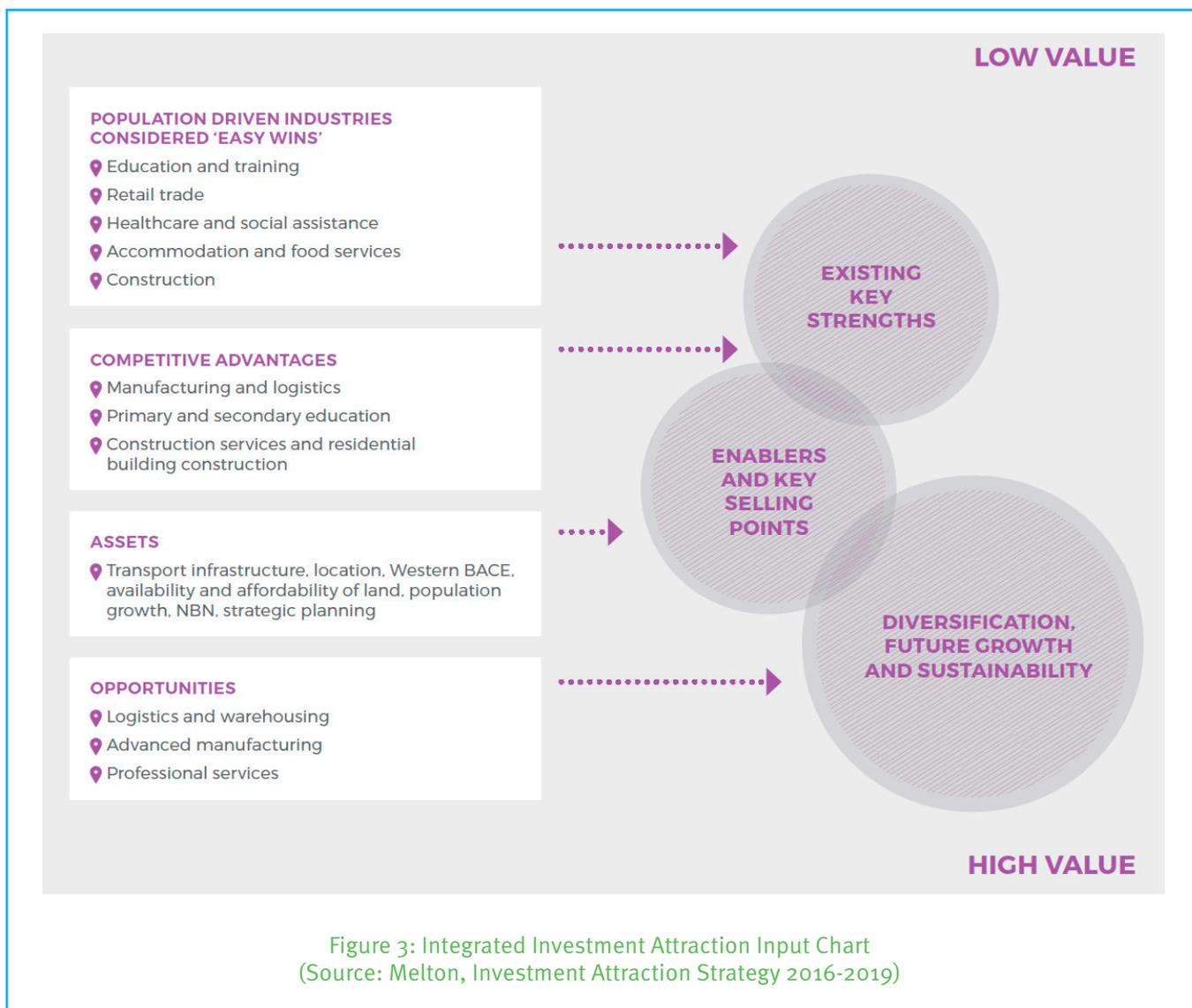


Figure 3: Integrated Investment Attraction Input Chart
(Source: Melton, Investment Attraction Strategy 2016-2019)

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.

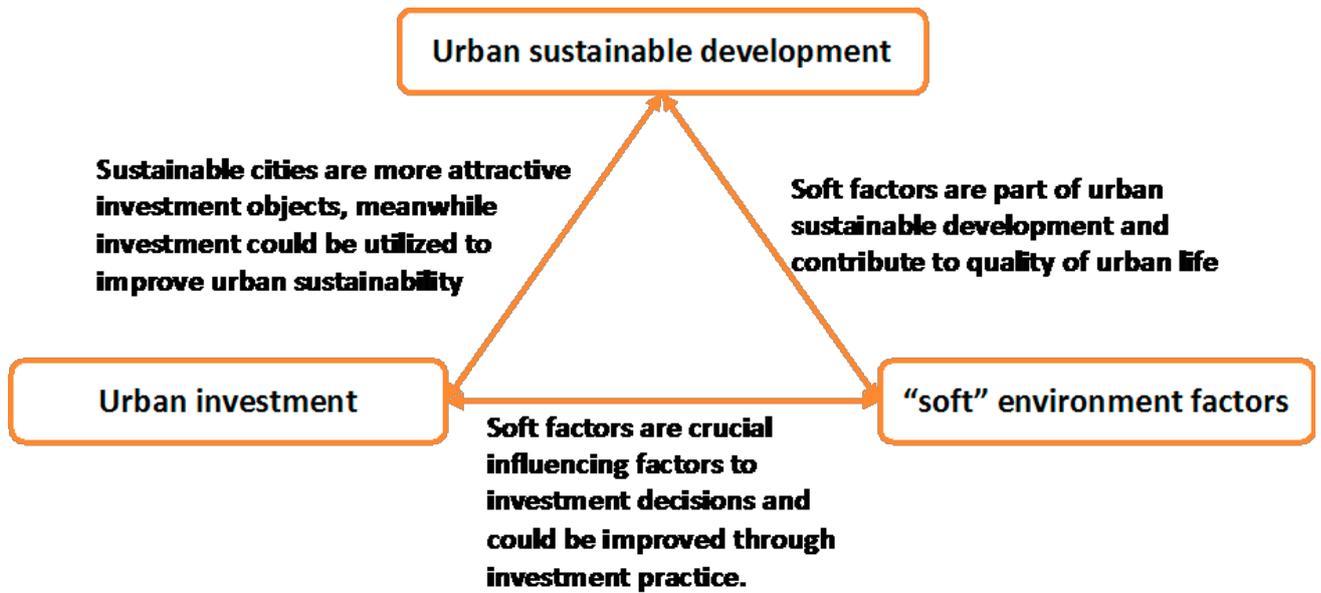


Figure 4: The Triangle of 3 Key Concepts: Urban Sustainable Development, Urban Investment, and Soft Environment (Source: UNIDO, 2018)

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).

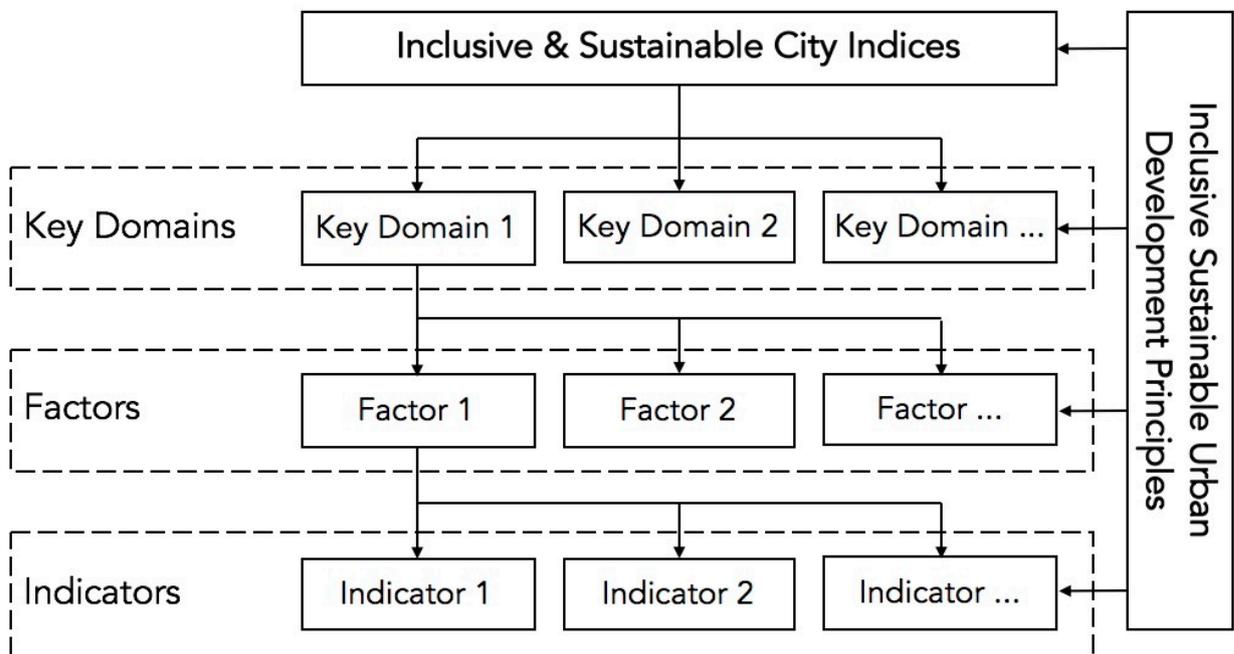


Figure 5: A Three-Layer Structure: Key Domains, Factors and Indicators (Source: UNIDO, 2018)

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, 2018)

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, 2018)

Based on this framework, a number of indicators are selected to illustrate respective factors. Totally, there are 12 factors and 36 indicators (Table 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
	Inclusion	Amount of celebrations, festivals, fairs and parades per thousand population	
		Gender employment rate gap	Gap between female employment rate and male employment rate
		Gini index	
	Internationalization	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, 2018)

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 (RICI)—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 51st to the 35th 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 3: Expert Group Meeting on Soft Environment for Urban Investments at UNIDO (Source: UNIDO, 2018)

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	10
			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	6.8m2		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, 2018)

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 4: 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 4: 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: 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, 2018)

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. CONCLUSIONS 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.

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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 6 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 6: 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?

1 2 3 4 5 6 7 8 9 10

Q10. On a scale of 1 - 10 with 1 being the worst and 10 being the best, how do you think the international degree of your city?

1 2 3 4 5 6 7 8 9 10

Q11. On a scale of 1 - 10 with 1 being the poorest and 10 being the highest, how do you think the attractiveness of the city to international tourists?

1 2 3 4 5 6 7 8 9 10

Q12(optional): If you have any other opinions on urban soft environment of the city, please list below:

A large rectangular area defined by a dotted border, intended for providing additional opinions on the urban soft environment of the city.

BIOGRAPHIES

Mr. Weixi Gong, 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.





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