Cities at a Crossroads: Unlocking Industries’ Potential for Sustainable Urban Development
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Cities at a Crossroads: Unlocking Industries’ Potential for Sustainable Urban Development

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1. INTRODUCTION

Cities are at a crossroads. Possessed of both economic and political strength, they have the capacity to guide their countries forward along the path to sustainable development. Over the past decades, with advancements in technology, industry and urban infrastructure, cities have come to contribute 70% of global wealth. Due to a lack of national urban policy and integrated urban development, however, precious resources have become increasingly compromised throughout the globe.

With the world developing rapidly across different sectors, there is an urgent need for an inclusive approach to guide sustainable city development. It is estimated that the urban population will increase by 2.5 billion people and comprise 66% of the total global population by 2050 (UNDESA, 2014). Meanwhile, the economy is expected to triple, with the addition of more industries directly affecting the urban environment and its resources.

The New Urban Agenda, adopted at the HABITAT III conference in October 2016, sets a new global standard for sustainable urban development. It provides policymakers, international organizations and municipal governments with a roadmap for promoting the social wellbeing of city residents, enhancing cities’ economic competitiveness and safeguarding the environment. In the coming decades, the implementation of this Agenda will fall to national and local governments, with technical assistance provided by international organizations.

Industrial development has played a crucial role in supporting economic growth and urban development. How can we then enable industries to build up sustainable cities? In recent years, the answer has become more and more clear: Industrial development should adopt a holistic approach in order to ensure economic growth and material improvement that is socially inclusive and environmentally sustainable. Industries must unlock their potential in order to contribute more efficiently to inclusive and sustainable urban development.

On the international stage, the United Nations Industrial Development Organization (UNIDO) has consistently set the tone when it comes to promoting and advancing inclusive and sustainable industrial development globally. Despite the importance of national- or international-level projects, efforts at the city level remain of vital importance. City leaders have begun to realize that cities require a new approach in order to address issues of rapid urbanization. Industrial development stands to become a key instrument of change by adding economic value, as well as improving social and environmental factors. International development agencies such as UNIDO must therefore engage directly with city stakeholders and play a greater role in leading and coordinating initiatives for the advancement of inclusive and sustainable urban development.

This issue paper consequently highlights current issues and challenges and aims to engage readers in further discussion. Topics addressed include an analysis of the urban dimension in the 2030 Agenda for Sustainable Development, the challenges of urbanization, the role of industries in the process of sustainable urban development and possible avenues of future action and cooperation. The paper attempts to elaborate these issues in a holistic manner and aims to set the stage for UNIDO’s annual “BRIDGE for Cities - Belt and Road Initiative: Developing Green Economies for Cities” event.
2. SYSTEMATIC ANALYSIS OF THE SUSTAINABLE DEVELOPMENT GOALS

The 2030 Agenda for Sustainable Development was adopted by the Member States of the United Nations in September 2015 and represents a plan of action for joint prosperity. A total of 17 Sustainable Development Goals (SDGs) are encompassed in the Agenda, all of which include a set of targets along different dimensions that if met will signal the achievement of the global goal of sustainable development.

The SDGs provide stakeholders from all levels of civil society with a common framework in which to work together for the people, the planet and prosperity. The 17 SDGs are accompanied by 169 targets, which set out objectives to be achieved by the end of the year 2030. These targets are applicable globally, and they take into account the capacities and development levels of different nations (Communitas Coalition, 2014).

The success of the Millennium Development Goals (MDGs), which were agreed upon in the year 2000 and aimed to reduce extreme poverty-related issues by 50% in the span of 15 years, led to the foundation of SDGs. The MDGs addressed issues such as chronic hunger, low income, lack of education and proper healthcare, lack of access to water and sanitation, etc. The MDGs produced significant results. For example, the probability of a child dying before the age of five has been reduced by 50%.

Some countries did not show significant improvements, however, especially in the area of sustainability and environmental management. According to the World Bank, more than 700 million people are still living under the World Bank's poverty line. Even though there has been progress economically, an increase in inequality has occurred in many societies. On the other hand, the world is facing environmental problems due to anthropogenic activities. Corruption and poor governance are other major issues seriously affecting the world today (SDSN, 2015). It was therefore agreed that in order to achieve results globally, there was a need to broaden the scope of the MDGs.

The SDGs aim to respond to these issues and to address development challenges in a much broader manner. As the name suggests, the SDGs have adopted “Sustainable Development” as the leading principle for international cooperation. “Economic Development”, “Inclusive Development” and “Environmental Sustainability” are the three major pillars driving international cooperation. Hence, the all-encompassing name “Sustainable Development Goals” sends a clear message to the world, encouraging development stakeholders to engage with one another and to work together toward sustainable development. The SDGs encourage stakeholders to refrain from antiquated approaches and to use resources in a sustainable manner.

Figure 1: Sustainable Development Goals
(Source: UN, 2016)
2.1 Opportunities

The framework of the 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, nanotechnology and information technology, to name but a few. All of these advancements have opened up new opportunities for partnership and economic development. To ensure efficient implementation, the SDGs provide five sets of key opportunities (SDSN, 2015):

- **Inclusive Development**
  
The involvement of multiple sectors and representatives of society is integral to achieving the SDGs. The SDGs therefore aim to engage different stakeholders in collaborative partnerships. Government organizations, civil society and businesses, along with local citizens, must become involved and engaged in order to ensure better-planned, better-focused initiatives.

- **Universal Development**
  
The MDGs focused more on developing countries. The role of developed countries was to support the implementation of the MDGs by providing financial and technological assistance to developing countries. The SDGs, on the other hand, encompass countries at all levels of development, and thus the goals are considered universal. All countries should develop policies and programmes based on their national contexts, capacities and levels of development.

- **Integrated Development**
  
As mentioned earlier, the SDGs take an integrated approach to sustainable development. “Economic Development”, “Inclusive Development” and “Environmental Sustainability” are the three main pillars intended to ensure sustainable development. For example, if a country wishes to address its hunger problem, its policies must be connected directly and indirectly to its policy for rural development, agricultural programmes and policies, natural-resource management, employment opportunities and skill development, all of which further require the involvement of different stakeholders.

- **Locally Focused Development**
  
To ensure the successful implementation of the SDGs locally, urban authorities or local governments must take action. Urban, suburban and rural areas all play an important role insofar as the successful realization of the SDGs is concerned. A bottom-up approach helps connect local communities and raises awareness of local issues. Urban population is projected to reach 66% of the world’s total population by the year 2050, and with such a huge influx of people migrating to cities, urban areas will play an increasingly important role in ensuring the successful implementation of the SDGs (UNDESA, 2014). Innovation and urban investment will therefore bring the world closer the achieving the SDGs.

- **Technology-Driven Development**
  
Technology and economic development go hand in hand. With great advancements in the field of technology, come more opportunities for partnership and economic cooperation. With advanced technologies, manufacturing industries, especially in developing countries, can produce efficiently and save financial resources, thereby explicitly contributing to the achievement of the SDGs. With the transfer of technology from developed to developing countries or with the exchange of local technologies between developing countries via the development modality of South-South cooperation, countries can help one another achieve the SDGs in a more resourceful manner.
2.2 Challenges

Although the SDGs provide the international community with a solid basis through which to tackle global development issues, there remain several challenges to their implementation:

- **Strengthening Governance**
  Governance refers to the process of decision-making and taking action. Since many actors and stakeholders must be involved, the question remains how businesses, government organizations, members of civil society and city representatives can best work together. Strong governance ensures the successful implementation of programmes and policies developed to achieve the SDGs. In the context of the SDGs, unless a strong mechanism for governance is in place, it will be challenging to bring all the required actors together.

- **Managing Difficult Trade-Offs**
  When working to achieve the targets of one SDG, other SDGs and their targets may also be addressed. For example, improvements in city life may have a positive effect on energy security and infrastructure and may reduce the impact of climate change, as well as safeguard biodiversity. There will also be trade-offs, however, when addressing issues that may result in other directly or indirectly negative impacts. For example, to address the issue of food security, agricultural production has to be expanded, and in some cases, tree cover must be cleared to provide the required capacity. To expand agricultural production, the use of water resources must be intensified, and thus water security might also be threatened. Achieving the SDGs will consequently require development stakeholders, including governments, civil societies, businesses and local citizens, to opt for difficult choices and decisions. Unless there exists a strong willingness among all sectors of society, the implementation of the SDGs will always run the risk of being considered “too difficult” to even attempt.

- **Accountability**
  Delegation of accountability to different stakeholders will pose a significant challenge. A proper mechanism is necessary to ensure accountability and responsibility at different levels – internationally, nationally and locally. Inputs must be measured (for example, did the nation invest the entirety of what was promised while working toward achieving specific goals), and so must outputs (for example, did the nation succeed in achieving its desired outcomes).

  Proper tools to monitor and gather feedback at the policy level are therefore required in order to hold stakeholders accountable. Not only national governments, but also other stakeholders, such as private businesses and non-governmental organizations (NGOs), ought to be held responsible in case of any discrepancy. To ensure proper implementation of the SDGs, a proper feedback mechanism must also be instituted at different levels.

2.3 The Urban Dimension of the SDGs

Currently, more than 50% of the world’s population lives in cities. The importance of cities and urban development cannot be overstated as cities not only generate more than 70% of global wealth, but also produce 70% of global greenhouse gas emissions. Global sustainability will therefore not be possible without first ensuring the sustainability of cities.

SDG 11 champions the cause of urban development and aims to “make cities inclusive, safe, resilient and sustainable”. But as a city in and of itself comprises various components and factors, it is hard to limit urban development to a single goal. Initiatives and programmes that aim to achieve other goals may therefore also contribute directly or indirectly to city development (Cities Alliance, 2015). Indeed, a study conducted by P. Misselwitz, et. al. better illustrates how other SDGs are indirectly linked to SDG 11. In fact, 10 of the other 17 SDGs can be connected to SDG 11 (see Figure 2).
In order to reduce inequality, special attention must be paid to cities. Residents of urban areas are hit the hardest by economic inequality. Achieving the SDGs will therefore require collaboration between different sectors, local authorities and stakeholders, and the projects and programmes developed therein can be linked to different sectors.

Cities also produce a vast amount of waste every day and are among the largest consumers of energy. SDG 12 focuses on sustainable consumption and production, and the achievement or non-achievement of most of the objectives associated with SDG 12 will be determined by consumption trends and patterns in urban areas.

### 2.4 The New Urban Agenda

The latest United Nations Conference on Housing and Sustainable Urban Development (HABITAT III), held from 17 to 20 October 2016 in Quito, Ecuador, marked the adoption of the New Urban Agenda, which represents a new global consensus on sustainable urban development. The New Urban Agenda provides a spatial framework for the implementation of the SDGs but addresses several substantive issues not covered by the SDGs and offers additional means of implementation.

The New Urban Agenda seeks to address the urgent challenges associated with urbanization through sustainable planning, financing, development, governance and management. Its implementation will require the involvement of a wide range of actors, including government officials, urban and regional leaders, development finance institutions and United Nations agencies. The Agenda commits leaders to:

- Provide basic services for all citizens;
- Ensure that all citizens have access to equal opportunities and face no discrimination;
- Promote measures that support cleaner cities;

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Figure 2: Illustration depicting the urban dimension of the 2030 Agenda and its linkages with SDG 11
(Source: Misselwitz, et al., 2015)
Strengthen resilience in cities to reduce the risk and the impact of disasters;
Take action to address climate change by reducing their greenhouse gas emissions;
Fully respect the rights of refugees, migrants and internally displaced persons regardless of their migration status;
Improve connectivity and support innovative and green initiatives;
Promote safe, accessible and green public spaces.

In addition to political commitment from national leaders, a policy framework will be required at various levels of administration, including the national, regional and local levels, to properly promote the implementation of the New Urban Agenda in the coming years.

2.5 Urban Development and SDG 9: Industry, Innovation and Infrastructure

As discussed previously, together with SDG 11, there are other goals that directly or indirectly contribute to sustainable urban development. SDG 9 is one of the most relevant goals with regards to its potential influence on city development. Transport, energy, information and communication technologies are the basic threads of urban development and should be the focal point for city planners and mayors. Local governments will have to adapt technologies and good practices to meet the needs and demands of their cities (UCLG, 2015).

In parallel with UNIDO’s mandate, the targets of SDG 9 address access to energy, water and basic sanitation facilities. SDG 9 especially emphasizes sustainable industrialization and its positive impact on society. The importance of the manufacturing sector in shaping the economic structure of cities cannot be ignored. Sustainable industries lead to job creation, which helps cities and societies develop and grow while ensuring an equitable use of resources. SDG 9 also highlights the importance of the agribusiness industry in sustaining employment generation and development for least-developed or developing economies. According to the Food and Agriculture Organization of the United Nations (FAO), urban agriculture or urban farming meets the basic dietary requirements of over 700 million urban residents globally.

SDG 9’s targets include several important factors related to urban development, such as infrastructure development, scientific research, efficient use of resources, technological development, and especially the development of information and communications technology (ICT). The aim is to promote inclusive and sustainable industrialization to support economic development and human wellbeing, with a focus on affordable and equitable access for all.

3. URBANIZATION: CHALLENGES, ISSUES AND THEMATIC GAPS

Urbanization brings people from rural areas and mainly agricultural communities to large, developed areas, resulting in a shift from an agricultural to industrial economy. The unplanned expansion of cities onto agricultural land is a critical problem for urban planners.

Urban living is a relatively new term but refers to an already well-engrained practice. Historically, an agrarian lifestyle follows after the hunter-gatherer phase of development. In 1800, only 3% of the global population lived in cities. A century later, the number of people living in urban areas reached 14%, but only a meagre twelve cities had a population of over 1 million. As time passed, the number of cities containing a million inhabitants grew rapidly.

In today’s world, the number of mega-cities with 10 million inhabitants has increased to twenty-eight. In the past two decades, the number of megacities has tripled, and by 2030, the world will boast a projected forty-one megacities. In the past, the world’s most densely populated cities were located in developed countries. Today, the largest urban agglomerations are found in developing nations (UNDESA, 2014).
Figure 3 illustrates the top ten largest urban agglomerations and their historical growth patterns, as well as their projected growth patterns in the future. It is clear that cities from developing countries (i.e. Delhi, Mumbai, Shanghai and Beijing) have experienced a tremendous surge in urban population growth over the past years and that this trend is expected to remain unchanged in the coming years. In the case of Tokyo and New York, however, the population growth rate is comparatively stable.

![Figure 3: Top ten largest urban agglomerations and their growth patterns](Source: UNDESA, 2014)

### 3.1 Challenges in Urbanization

Countries from Asia and Africa are some of the fastest-growing economies in the world. With economic growth, comes an increase in the migration of rural population to urban areas. With migration, the population in cities increases at a rapid rate, leaving urban planners and municipal bodies in disarray (Roy, 2009). Urbanization may be good for the overall economy of a country, but in the face of rapid urbanization, developing nations are facing several pressing problems. Current issues and challenges for rapidly urbanizing cities are detailed below.

- **Urban Sprawl**

  Dispersed development outside of compact urban and village centres along highways and into the countryside is defined as sprawl. It is the unchecked spread of cities into adjacent lands. More and more, towns and cities are spreading out and altering land-use patterns along the roads connected to other cities and towns, which has led to the establishment of businesses and industries. As oversight by local authorities is lacking in these suburban areas, this often results in highly unplanned and undeveloped areas. Sensitive ecological areas are disturbed and destroyed. High sprawl results in increased per-capita usage of land, energy and water (Saini, 2014).

- **Overcrowding**

  With rural populations migrating to cities, cities are also suffering from overcrowding. As a major part of the urban population wishes to live in close proximity to the Central Business District (CBD), cities are forced to build high-rise buildings, putting increased pressure on pre-existing infrastructural facilities.

Facilities, such as electricity, housing, water, transport and employment, are facing acute pressure to cope with an ever-growing urban population. Although municipal governments have made an effort to decongest in the core areas of their cities, the success rate is relatively very low.
Housing
Housing is another major problem that accompanies rapid urbanization. The rate of housing development and low-cost housing initiatives in developing countries are limited and slow. With an increase in population, the affordability and availability of houses in large cities has become an issue. The prices of apartments and houses closer to the city are comparatively high compared to other areas of the city, but as most major business and economic activities occur in the areas closer to the city centre, this often leads to economic inequality. The central part of a city is usually occupied by the wealthier part of the urban population and the middle- or lower-class individuals are forced to locate away from the city centre. In most large cities, infrastructural facilities decline as one moves farther out from the city centre.

Unemployment
Unemployment is another serious issue in urban settlements. People move to cities in search of employment, resulting in major influxes of population to urban areas, which often leads to high competition for job opportunities. Even though the average income in urban areas is generally higher, when compared to rural areas, they nevertheless remain appallingly low due to high costs of living. With a dearth of employment opportunities, migrants often settle for low-paying jobs.

Slums and Squatter Settlements
Slums in cities have always been a problem. Poverty-stricken inhabitants in cities are struck by health hazards. The tremendous growth of slums has been a shocking side-effect of rapid urbanization, and one which has to be minimized. In India, an alarming 54% of Mumbai's urban population resides in slums (Ray, 2011).

There is no clear distinction or difference in definition between slums and squatter settlements. Slums are generally more stable and located in older city areas, while squatter settlements involve temporary structures. Squatter settlements can be found at the outer zones of a city, where the urban area merges with the rural hinterland.

Transport
Traffic and transportation are a major issue for city administrators. A rise in population also leads to a rise in personal vehicles, which creates problems such as congestion and pollution. The complexity of cities serves only to increase transport problems. Due to a lack of planning transportation networks and roads, some areas in cities remain inaccessible by public transport.

On the other hand, many cities are not focused on public transportation systems, and thus people prefer using their private vehicles to commute. Bicycle and pedestrian friendly pathways are not available in most of the world's fastest-growing cities.

Water
In developing countries, access to clean water is limited to only a few cities. As mentioned earlier, due to the heavy pressure on urban infrastructure and services, there is always a gap between the demand and supply of water resources. In some cities, houses do not have the required water pipeline connections. Especially in summers, these conditions are worsened by a limited supply of water and accompanying high temperatures.

Sewerage Problems
Sewage facilities are invariably troubled by inadequate and ineffective solutions. In developing countries, most underground sewerage is either blocked or non-existent. Treatment of sewage waters, if not done properly, results in the dumping of sewage wastes into water bodies such as rivers and seas.
• **Trash Disposal**

Trash disposal in highly populated cities is a huge problem. Due to the huge quantities of garbage produced by cities, health problems can pose a serious threat. Barren lands are used in most cities for dumping and are filled to the brim. Innumerable poisons leak into the surroundings, wreaking havoc in neighbouring areas. As illustrated in Figure 4 below, lower middle-income countries are expected to suffer the most in the coming years.

![Figure 4: Urban population and waste generation](Source: CityLab, 2016)

• **Urban Crime**

Urban crime cannot be neglected. Competition in everyday life, increased use of consumer goods and heavy unemployment leads citizens into crime. Slums and squatter settlements also give rise to urban crime. Uncontrolled growth of a slum population not only affects security but can also negatively affect a city’s image globally. For example, numerous cases of robbery were reported and registered in Rio de Janeiro, Brazil during the 2016 Olympics.

• **Urban Pollution**

Urbanization is blowing industries and transport systems out of proportion. Plans to reduce pollution from these manufacturing firms have been neither properly formulated nor implemented. The increased use of vehicles has resulted in traffic congestion, which in turn has increased air- and sound-pollution levels. This increase in vehicle use and uncontrolled growth of industries is primarily responsible for the current situation of many cities in developing nations. Even though industries are a city’s backbone, ensuring that they are environmentally sustainable and in compliance with all norms and guidelines is extremely important.

• **Energy**

More than three quarters of the energy produced globally is consumed by cities, and cities also contribute to 80% of the world’s greenhouse gas emissions. In an era of resource scarcity, there is an urgent need to reduce cities’ energy consumption and to promote renewable alternatives. Innovative methods and approaches to energy management will therefore be vital when it comes to tackling the challenges of urban development in the future (ARUP, 2015).
3.2 Urban Development and Finance

With the world urbanizing and developing at a rapid pace, investments supporting sustainable urban-development projects are of utmost importance. Urban-development projects require a huge amount of financing, and local city governments are often unable to provide the required funds. Many cities have come up with innovative models (e.g. public-private partnerships, build-operate-transfer, tax free municipal bonds, etc.), but the requirements are huge and hard to implement (UN-Habitat, 2014).

According to McKinsey Global Institute, global infrastructure investments of over USD 57 trillion will be required between 2013 and 2030 for the development of the telecommunications, roads, water and power sectors. Countries in Africa and Latin America are suffering the most due to a lack of urban investment. Underinvestment or lack of sufficient funds further hinders the course of development in developing economies.

- **Drivers of Urban Development**

Deficiency of finance encumbers the development of cities. The key issue is that there still exists a significant gap between the demand for urban development and the capacity to finance it. Finance is the main driver of urban development and supports major sectors, such as transportation systems and infrastructure.

- **The Role of the Government**

Another central issue is the role of government, which is influential in both the public and business sectors. The city has the power to borrow and allocate public resources. It also plays a role in promoting private investment into urban development. For example, urban-development investment companies have become a key element in financing and implementing the framework for public urban development in Shanghai, China.

- **Financial Inclusion**

According to the World Bank, two billion people in the world do not use formal financial services. The primary reasons are costs, travel distances and the oftentimes burdensome requirements. In certain cases, small- and medium-sized enterprises have more difficulty reaching out to financial service providers. Financial inclusion can provide cities and economies with important benefits, including better investment and consumption patterns, increased productivity and income, and higher quality of life.

- **Multi-Stakeholder Financing**

The central and municipal governments are the primary sources of financing for cities. External organizations, like the World Bank and other multilateral development banks, can help cities develop along the proper trajectory. They have the ability and resources to pool new sources of financing for public infrastructure and services. The participation of the business sector and the capital market can also contribute to urban development. There are various ways in which these sources can cooperate with and support one other.

- **Efficient Financial Operations**

It is important to ensure that investments are made in key sectors. For example, public infrastructure is normally a priority, but public transportation may nevertheless be the first priority for one city and sewage treatment for another. In order to increase the efficiency of financial operations, cities must explore the most effective ways in which to allocate their limited financial resources.

Public financing, international organizations and market-based business-sector financing all have their special fields of business. Together, two or three of these stakeholders could offer a better financing solution. Ultimately, finance is an important aspect of urban competitiveness, and different mechanisms are required to achieve different sustainable development objectives.
3.3 Urban Competitiveness and Sustainability

Urban competitiveness and sustainability are a pair of concepts that often accompany the topic of urban development. According to the World Bank, competitive cities can successfully facilitate the creation of employment opportunities in firms and industries, raise overall productivity and increase the incomes of their citizens (World Bank, 2015). By improving their competitiveness, cities are consequently better able to address and eradicate poverty and to foster shared prosperity for all residents.

Since the last decades of the twentieth century, urban competitiveness has been attracting increased interest from local authorities, enterprises and investors. In its early days, the concept of urban competitiveness centred largely on economic gain. Nowadays, however, the concept has come to distinguish between various dimensions of urban performance. A broad definition, offered by Lever and Turok, describes urban competitiveness as (Lever and Turok, 1999):

“...the degree to which cities can produce goods and services which meet the test of wider regional, national and international markets, while simultaneously increasing real incomes, improving the quality of life for citizens and promoting development in a manner which is sustainable.”

This takes into account not only economic and financial benefit, but also social development and wellbeing. The concept of urban competitiveness is therefore inextricably linked with sustainability. Emphasis is placed on a city’s ability to produce high-quality goods in an efficient and sustainable manner with the overarching aim of improving the quality of life for citizens in the long term. In other words, urban competitiveness represents one of several ways in which to promote and achieve inclusive and sustainable urban development.

According to Webster and Muller, urban competitiveness is comprised of four factors (Webster and Muller, 2000):

- **Economic Structure**
  As previously mentioned, economic structures have traditionally been the focus of urban-competitiveness assessments. Key elements usually include economic composition, productivity, output and value added, as well as foreign and domestic investment (Webster and Muller, 2000).

- **Territorial Endowment**
  Territorial endowment refers to the non-tradeable aspects associated with any given place, including location, infrastructure, natural resources, amenity, cost of living and doing business, as well as city image and branding (Webster and Muller, 2000).

- **Human Resources**
  Human resources refer to “the skill levels, availability and costs of labour in any given urban region” (Webster & Muller, 2000). It is worth noting however that “the value of human resources is highly related to the environment in which they are deployed” (Webster and Muller, 2000). The effectiveness of human resources is therefore heavily impacted by the institutional, economic and territorial milieu of any given urban area.

- **Institutional Milieu**
  A city’s institutional and cultural milieu encompasses business culture, governance and policy frameworks, and network behaviour (Webster and Muller, 2000). In this regard, institutional capacity-building plays a crucial role in promoting and ensuring urban competitiveness and sustainability.
### Table 1: Criteria for urban and regional competitiveness
(Source: Fertner, 2006)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>economic diversity</strong></td>
<td>preferably in the high value added branches and in the exporting or import substitution sectors</td>
</tr>
<tr>
<td><strong>supply of skilled human capital</strong></td>
<td>persons/labour forces who can operate in the knowledge and information based industries;</td>
</tr>
<tr>
<td><strong>right institutional networks</strong></td>
<td>private industry should be embedded and interlinked with institutions of education, research and politics</td>
</tr>
<tr>
<td><strong>right physical environment</strong></td>
<td>high standards for living and working are likely to attract higher qualified mobile labour forces and residents</td>
</tr>
<tr>
<td><strong>right social and cultural environment</strong></td>
<td>These soft factors become increasingly important for sustainable development. In particular, economic prosperity cannot be sustained under conditions of inequality and injustice. Social cohesion and economic competitiveness are mutually sustaining but not mutually exclusive;</td>
</tr>
</tbody>
</table>
| **good communication networks**               | A precondition is an adequate physical infrastructure  
  o on the regional level (different potentials of the city-region)  
  o on the international level (for network activities).  
  Besides infrastructure it is the need for a strategy for the city’s positioning in global networks and markets. |
| **institutional capacity**                    | Facing rapid changes in economic and social structures the city should be able to mobilise effectively public, private and community resources in a middle and long term process |

It can also be argued that competitiveness is not a zero-sum game, which means an increase of competitiveness in one city does not necessarily imply a decrease of competitiveness in another. In other words, it is possible for two competing cities to develop and improve without any negative repercussions.

As elaborated above, both competitiveness and sustainability are important for urban development. Sustainability is a prerequisite for long-lasting urban competitiveness. To improve its competitiveness, a city should therefore not focus on any single factor or aspect of urban development, but should rather take an integrated approach, which will lead to a more sustainable development path overall.

### 3.4 Integrated Urban Development: The Need for Innovative Solutions

It can be clearly seen that the different challenges facing urban areas environmentally, socially and demographically are all interwoven and interlinked. As discussed earlier in regards to the SDGs, all 17 goals either directly or indirectly contribute to sustainable urban development and imply that the city should act as the focal point for the implementation of the 2030 Agenda. Hence, different stakeholders must work closely together to affect greater change. Urban physical planning should work in parallel with educational institutions, industrial leaders and business-sector organizations, along with local citizens and civil society. Strong partnerships between local stakeholders will ensure integrated urban development. By combining local expertise and capacities and by developing innovative solutions, the path to achieving the SDGs will become more clear and effective.
Some such innovative solutions are listed below:

**Integrated Housing Development Programme in Addis Ababa, Ethiopia**

Addis Ababa, “flower” in Amharic, is the capital of Ethiopia and home to four million inhabitants. After a phase of low urban development and growth, over the last two decades, the city has undergone rapid development. With GDP growth averaging 10.7 percent, Addis is expected to be one of the fastest growing cities in Africa between 2010 and 2020. With the population almost doubling every decade to date, the city has successfully embarked on an ambitious and innovative integrated housing development programme.

**Figure 5:** Integrated Housing Development Programme in Addis Ababa, Ethiopia  
(Source: Euricur and PwC, 2014)

- **Project Brief**

This initiative is one of the most ambitious projects in the field of urban development undertaken in Africa. The project was implemented in the year 2005 and aimed to create affordable housing units in Ethiopia's capital city of Addis Ababa. Redeveloping public housing, using barren and unused pockets of land, and implementing low-cost, sustainable and green construction techniques were a few of the main features. Payments for the houses were made via simple and affordable partial payments. Along with the housing facilities, small enterprises were also intended to provide employment (Euricur; PwC, 2014).

- **Results and Replicability**

Though the project was not able to meet all of its initial targets, it has solved a major problem by providing affordable housing for low-income residents. It has also become the hub of the manufacturing sector, generating a large amount of income and employment opportunities.

This solution is a smart one and has been proven effective in Ethiopia. Cities from other developing nations are already facing problems with ever-increasing slum populations. This project could therefore be tested and replicated to good effect in other cities.

**Integrating the Central Business District with Transport in Melbourne, Australia**

In 1986, Melbourne was a city, roughly the size of Mexico City, with a population of 3 million people. Nevertheless, fewer than 300 people lived within the Central Business District’s (CBD) 3 square kilometers. Today, over 36,000 residents live in Melbourne’s three CBD neighborhoods. Often referred to as the world’s most livable city, Melbourne provides valuable lessons for any city seeking to reinvigorate its downtown core.

**Figure 6:** Integrating the CBD with transport in Melbourne, Australia  
(Source: Euricur and PwC, 2014)
• Project Brief
The CBD in Melbourne, Australia was suffering from decentralisation. People had begun to move to the outskirts of the city, and the daytime population in the CBD was falling. To fight this issue, the government took up different initiatives. With around three hundred streets located in the CBD of Melbourne, the government proposed using the streets in a more attractive way. Landowners were given permission to use the streets creatively, to attract more tourists and to bring back the identity of the CBD. Now, there is at least one café, restaurant and/or shop on each street. With a limit placed on automobile traffic within the CBD, the streets have also become a pedestrian friendly zone. The municipal body has also constructed a pedestrian shopping centre and a park (Euricur and PwC, 2014).

• Results and Replicability
The project was able to reverse the adverse effects of decentralisation. It is a successful example of integrating transport, culture and business to preserve the identity of a city's CBD. The number of cafés alone has increased from two to six hundred in the past twenty years. Tourists have also begun staying longer to explore the CBD. In many cities, CBDs are troubled by old streets and congestion. This initiative also aided small shop owners, who had been in the CBD for many years but whose business had been adversely affected by the advent of large-scale shopping malls. This project has had other unexpected benefits such as a pedestrian friendly city centre, new economic opportunities and tourism (PwC, 2013).

PlaNYC: New York, USA

New York City is the most populous city in the US, and is estimated to exceed 9 million people in population by the year 2030. The City of New York consists of five boroughs totalling just over 300 square miles of land, and has a significant impact on the financial, fashion, commerce, media, art, technology and education industries. It is also the world headquarters for the United Nations and has a strong international relations presence. The city has predominantly relied on inherited infrastructure and delayed much needed improvements for most of the second half of the 20th century.

Figure 7: PlaNYC: New York, USA
(Source: Euricur and PwC, 2014)

• Project Brief
Aimed at “greening” New York City, twenty-five agencies came together to launch PlaNYC. The goals of PlaNYC include affordable housing, green spaces and pockets in the city, better air quality, solid waste management, a reliable transportation system, energy efficiency and sustainable urban development. Green building laws were enacted to make the city environmentally sustainable. This included energy-saving fittings in buildings, green and sustainable construction techniques, and the installation of rooftop solar panels or gardens. New York City aims to reduce its greenhouse gas emissions by 80% in the next thirty years (Euricur and PwC, 2014).
• Results and Replicability

Over a hundred initiatives were approved in 2007, 90% of which have been launched. More than 60,000 affordable housing units were constructed in New York City. Transit-oriented development led to the development of more than twenty zones. 30% of the taxis in New York City have now been replaced with environmentally friendly vehicles. Around one million trees have been planted alongside streets and in parks (PwC, 2014). Cities can incorporate such initiatives to achieve their goal of sustainability and energy conservation. Green building laws will certainly make the city more liveable and provide a better environment for citizens.

4. ACHIEVING SUSTAINABLE URBAN DEVELOPMENT THROUGH INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT

UNIDO’s mandate in inclusive and sustainable industrial development (ISID) is an important part of a longer-term global sustainable development agenda. ISID reinforces economic growth and diversification, supports rapid and sustained increases in living standards for all people, and necessitates the adoption of environmentally sound technological solutions. From the perspective of UNIDO, ISID implies that:

• Every country achieves a higher level of industrialization in their economies and benefits from the globalization of markets for industrial goods and services;
• No one is left behind in benefiting from industrial growth, and prosperity is shared equally among women and men in all countries;
• Broader economic and social growth is supported by an environmentally sustainable development framework;
• The unique knowledge and resources of all relevant development actors are combined to maximize the development impact of ISID (UNIDO, 2015).

It is impossible not to raise the issue of sustainable urban development when discussing industrial development. Urban areas are integral to the development and operation of industries. Thriving industries support urban development and can increase the competitiveness of urban areas. The overlap between ISID and urban development therefore stands to play an important role in the advancement of sustainable urban development.

4.1 Inclusive and Sustainable Industrial Development in Urban Areas

UNIDO’s strategy for sustainable cities is in line with its ISID mandate. ISID can contribute to urban development in several areas, including the development of enabling policies and institutional mechanisms, which can drive green technology, innovation and industry at the city level, promote investment and partnership with diverse actors, develop city networks, and support urban planning and management (UNIDO, 2015). To illustrate the applicability of ISID to city development, several crucial issues are listed below:

• Enabling Policies and Institutional Mechanisms

The underlying tenets of ISID can guide municipal leaders and stakeholders in the construction of policies and institutional mechanisms to ensure the design of a cohesive strategy for urban and industrial development. Incentivization schemes and mechanisms, as well as institutional frameworks, can be developed in support of inclusive social development. As alluded to above, industrial policies, strategies and frameworks can all help to push forward sustainable development in a variety of areas, which can create positive knock-on effects as a result.
Driving Green Technology, Innovation and Industry in Urban Areas

Green industry is defined as industrial production and development that does not come at the expense of the health of natural systems or adversely affect human health (UNIDO, 2011). Green industry aims to mainstream environmental, climate and social considerations into the operations of enterprises (UNIDO, 2011). Here, the word “green” refers to green manufacturing processes, green technologies and socially inclusive economic patterns. As cities are drivers of economic growth and are struggling to address mounting environmental concerns, they can play a key role in advancing green industry.

From an industrial perspective, two basic approaches must be considered. One is related to the refurbishment of existing industries, the other deals with the development of emerging innovative industries (Figure 8). In the case of pre-existing industries in need of “greening”, resource productivity, pollution prevention and safe chemical management are key. For instance, in traditional industries, such as cement factories or steel plants, the reduction of energy consumption, carbon emissions and overall pollution is crucial. For emerging innovative industries, on the other hand, environment-related technologies and services should be considered. These include, recycling facilities and renewable-energy technologies, as well as energy consulting.

![Figure 8: Green industry – A two-pronged strategy](Source: UNIDO, 2011)

As energy plays a key role in the emission of greenhouse gasses and the encouragement of industrial development, cities must always balance their increasing energy needs with required reductions in carbon emissions. An eco-efficient approach can therefore ensure the creation of “more goods and services while using fewer resources and creating less waste and pollution” (Calkins, 2009).

Promoting Investment and Partnerships with Diverse Actors and Developing City Networks

Naturally, UNIDO’s ISID mandate focuses on specific areas of intervention intended to promote industrial development in urban areas by leveraging financing and business-sector investments, as well as employing innovative partnership models and alternative development modalities, such as South-South and triangular industrial cooperation. Consequently, establishing municipal exchange networks and other partnership platforms designed to facilitate information exchange and the diffusion of financially and environmentally friendly technologies can go a long way toward ensuring the sustainable development of a city’s primary and/or secondary industrial sectors.
Two issues in industrial development are closely related to urban planning and management: eco-industrial parks and brownfield redevelopment:

**Eco-Industrial Parks:** Industrial parks are crucial to urban development. They provide a large number of jobs and production value for cities. Traditional industrial parks are often not environmentally friendly. Eco-industrial zones or parks focus on ecological improvements in terms of reducing waste and improving the environmental performance of firms (Kechichian and Jeong, 2016). They adopt the “circular economy” approach in order to reduce the environmental footprint of a city's industrial sector. Designing industrial parks in an ecologically friendly way is therefore fundamental to promoting urban sustainability.

**Brownfield Redevelopment:** “Brownfield” refers to an area that was previously used for industrial purposes or commercial use. In both developed and developing countries, there is a need for urban regeneration. Proper brownfield redevelopment is a sustainable way of using the land. It saves on resources and can help preserve urban culture. Industries themselves can provide technical support for the regeneration of urban land.

4.2 Addressing Urban Challenges via Inclusive and Sustainable Industrial Development

As elaborated in Section 2.2, cities today are faced with a whole host of challenges — from managing large influxes of population from rural areas seeking new employment opportunities to adopting and implementing climate friendly manufacturing methods and techniques — all of which stem from the myriad difficulties associated with achieving sustainable city development. Under UNIDO’s three-pronged approach to ISID, these challenges can be tackled using a variety of development methodologies, from policymaking and institutional capacity-building, to the cultivation of partnerships and the promotion of innovative financing mechanisms.

Industrialization and urbanization have a long history of mutual development. Urbanization began when humanity started to assemble, at first in places along rivers and transportation routes. These cities traditionally became hubs for trading products and services. Prior to the industrial age, the farming sector could only accommodate a small population in urban areas. There are some great examples of well-planned historical cities, such as Rome, Paris or Chang’an. But for decades, the share of the urban population was consistently below 10%.

Since the industrial revolution began in the nineteenth century, there has been a rapid increase in the world’s population and in the rate of urbanization. Industrialization has catalyzed urbanization by stimulating economic growth and creating job opportunities, which in turn draws people to cities. Economic activities in the agricultural sector have been reduced but have become more concentrated in secondary industries, including the manufacturing, construction and service sectors. There, the benefits of industrial development are twofold. On the one hand, this creates a high demand for workers with the possibility of a better quality of life, which in turn produces demand for housing and even more jobs. On the other hand, the technological innovation resulting from industrialization improves the productivity of the farming community, enabling a small rural population to support a huge urban population.

One of the most important problems in initiating urban development is that quite often cities, as the epicentres of industry, become trapped as pure production sites if they function solely as links in production chains and are unable to serve their own market area by creating an economic surplus. Multiplying effects and strong interdependent links within their respective networks are important to creating a milieu of growth and development.

Industrialization not only creates jobs in the industrial sector but also promotes economic growth by improving public-sector development in urban administration, infrastructure, public health and education. Throughout the course of human civilization, these changes have always accompanied the development of industry, and they have together improved the living conditions of the urban environment. This occurs because the industrial sector itself demands educated and skilled workers, new technology to increase productivity and attractive living conditions.
Although recent financial and economic crises have hit the manufacturing sectors hard, the importance of the industry is still high. Strong industries promise continued economic recovery and growth.

4.3 Cities and Sustainability: Concepts and Models

There are a number of concepts that can be used to describe sustainable urban development (i.e. eco-city, green city, inclusive city, innovative city, liveable city, smart city and sustainable city). These concepts focus on different aspects of sustainable city development and address different urban challenges and issues from their respective perspectives.

The eco-city and green city concepts are mainly focused on the environment, while the inclusive city and liveable city concepts are more concerned with the social aspects of urban life. Innovative cities emphasize the importance of innovation for economic growth and urban development. Smart city is a relatively new concept introduced, along with the sustainable city, in the last decade. These two concepts cover the social, environmental and economic aspects of urban development. The difference between them is that smart cities emphasize the process of sustainability, considering ICT a key tool in transforming urban development. By comparison, a sustainable city is a target-oriented concept, which believes that the city should meet the needs of the present without sacrificing the ability of future generations to meet their own needs.

Table 2: Different concepts of urban sustainability

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>FEATURES</th>
<th>FOCUSED ASPECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco-City</td>
<td>A city built on the principles of living in harmony with the environment, using renewable energy and other resources.</td>
<td>Environment, economy</td>
</tr>
<tr>
<td>Green City</td>
<td>Green urban biodiversity;</td>
<td>Environment, economy</td>
</tr>
<tr>
<td></td>
<td>Green economy that is low carbon, resource efficient and socially inclusive.</td>
<td></td>
</tr>
<tr>
<td>Inclusive City</td>
<td>A city that has spatial inclusion, social inclusion and economic inclusion (World Bank, 2015).</td>
<td>Social inclusion</td>
</tr>
<tr>
<td>Innovative City</td>
<td>A city that is innovative and a major driver of economic growth.</td>
<td>Social organization,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic growth</td>
</tr>
<tr>
<td>Liveable City</td>
<td>A city with good ecological sustainability and livability, which provides high quality of life.</td>
<td>Environment, social inclusion</td>
</tr>
<tr>
<td>Smart City</td>
<td>Using modern communication technology to support sustainable urban development and a high quality of life.</td>
<td>Holistic perspective, infrastructure</td>
</tr>
<tr>
<td>Sustainable City</td>
<td>A city “where achievements in social, economic and physical development are made to last”, and a city that is inclusive, safe, resilient and sustainable (UNDP, 2015).</td>
<td>Holistic perspective</td>
</tr>
</tbody>
</table>

These concepts each have a different focus, but they nevertheless overlap with each other in the areas of environment, society and economy. There are more concepts related to sustainable urban development, such as the learning city or low-carbon city. All of these concepts are focused on one or more aspects of the three dimensions of urban sustainability, namely social equity, economic growth and environmental protection. In urban development today, there is significant interest in taking a more integrated approach to achieving...
sustainability rather than focusing only on singular aspects. The term sustainable city is therefore a concept that encompasses all aspects of city development.

4.4 The Interplay between Urban and Industrial Development

As elaborated in Section 3.3, when cities are properly positioned to leverage their comparative advantage, they can vastly increase their competitiveness in relation to other neighbouring cities. When the proper enabling policies and related conditions are in place to support industrial and infrastructural development, industries can play a key role in supporting:

- **Economic Growth**: Industrial development is a necessary prerequisite for raising the GDP of cities substantially. Cities with strong production centre average GDP per capita growth rates of 6.3% (World Bank, 2015).
- **Job Creation**: Cities with highly productive industrial centres enjoy average increases in job growth of between 3.5% and 3.3% annually (World Bank, 2015).
- **Poverty Reduction**: Cities with strong production centres see the highest annual increase in incomes at 4.6% annually (World Bank, 2015).
- **Foreign Direct Investment (FDI)**: Large, high-tech production centres, such as Guangzhou in China and Bucharest in Romania, can attract high influxes of FDI (World Bank, 2015). It should be noted however that it can be difficult to distinguish between FDI inflows generating industrial development or fast-growing industries attracting significant inflows of FDI.

Cities offer industries innumerable amenities and benefits over rural areas, including primarily:

- **Enabling Policy**: It behooves governments in developing nations to avoid restrictive policies that would otherwise hinder industrial development. Governments should therefore set policy frameworks and develop tax incentives that encourage industrial and technological innovation, address potential market failures and create a financially attractive enabling environment for industrial growth.
- **Infrastructure**: In developing countries, access to sufficient infrastructure is one of the most significant drivers of industrial success. Without access to the proper infrastructural services, such as electricity, the costs of industrial development rise considerably and the potential for the successful adoption of sustainable production methods decreases, as does the firm’s efficiency overall.
- **Expertise and Human Resources**: In ideal cases, cities can offer seemingly unlimited access to an experienced and highly trained workforce and when properly positioned, may additionally attract highly skilled workers from the rural hinterlands or smaller neighbouring cities. Large-scale migration of this nature comes, of course, with many drawbacks. Nevertheless, without access to a highly skilled labour force, the smooth and efficient functioning of industries will be significantly hampered.
- **Transportation and Logistics**: Ease of transport and connectivity with primary shipping hubs goes hand-in-hand with infrastructural development. In cities with limited connectivity, transport costs can rise astronomically, thereby inhibiting the smooth functioning of industries within the city. In addition, in cities with high levels of congestion, long shipping delays may be expected. For this reason, innovative measures to ameliorate these issues, such as transport-only lanes for trucks and other large vehicles, will be required.
- **Municipal and Regional Ordinances**: Local laws and by-laws enacted on a regional or municipal level, which often impact zoning for land use and waste management, among other things, can support the sustainability of industries.
5. THE SDGS AS AN OPPORTUNITY TO STRENGTHEN SUSTAINABLE URBAN-INDUSTRIAL DEVELOPMENT: THE WAY FORWARD

To improve economic cooperation and to upgrade industrial and infrastructural development in a sustainable manner, the Belt and Road Initiative (BRI) was proposed by China in 2013. The BRI aims to create shared growth around the world by addressing five major priority areas: (i) policy coordination; (ii) enhanced connectivity; (iii) unimpeded trade; (iv) financial integration; and (v) interregional and intercultural exchange. By 2016, it had attracted the endorsement of sixty-four Eurasian and African countries, with a combined GDP of USD 12 trillion (16% of global GDP) and a total international trade volume of USD 7.2 trillion (21.7% of global trade).

In many respects, the 2030 Agenda for Sustainable Development and the BRI share a similar vision. The BRI has identified five priority areas for cooperation, all of which contribute directly or indirectly to the achievement of the SDGs (Hong, 2016). Although launched independently of the 2030 Agenda, the BRI will act as a strong instrument for the promotion of integrated sustainable development and stands to contribute directly to the achievement of many of the targets laid out under the 17 SDGs.

UNIDO’s annual “BRIDGE for Cities – Belt and Road Initiative: Developing Green Economies for Cities” is therefore a large-scale event aimed at advancing the implementation of the SDGs within the framework of the BRI. The city-level setting has been selected as the primary focus of this event for a myriad of reasons. First and foremost, cities represent the central hub and heart of every nation’s industrial development and likewise have the greatest and most lasting impact on the lives of their citizens. In particular, industrial development is a key engine of job creation and income generation, and therefore plays an extremely vital role in sustainable city development.

The major issues that need to be addressed globally to achieve inclusive and sustainable urban-industrial development are outlined below.

5.1 Energy

Economic growth is built on enormous energy consumption. With the support of new technologies, cities need to reduce their carbon emissions. From the supply side, renewable-energy production with clean and low-carbon features would be an effective way forward. From the consumption side, energy efficiency should be improved, which means cities need to adopt energy-efficient policies and technologies to change the way in which they use energy.

Guiding Questions:

- How can cities address the rapid rise in the amount of energy required for powering urban infrastructure and services?
- What role will renewable energy play in the future of sustainable urban-industrial development?
- How can cities become more energy efficient, and what innovative measures can be adopted by municipal governments to conserve energy and reduce emissions?

5.2 Environment

As cities change and develop over time, they can drastically alter the natural environment around them. Cities and industries should therefore aim to lessen their impact on the environment, which requires minimizing their ecological footprint. First, resource consumption must be controlled. Second, discharge and disposal should be reduced and sanitation should be managed in a sustainable manner.

Guiding Questions:

- How can we promote the development of a “circular economy”, particularly in cities in developing countries located along the Belt and Road?
• How will knowledge exchange and technology transfer across the Belt and Road help cities deal with environmental issues and changes in urban micro-climates?
• How can sustainable urban-industrial development be achieved, while simultaneously reducing resource consumption and ensuring environmental protection?

5.3 Industries and Innovation

As pointed out, industries can act as drivers of sustainable economic growth and urban development. On the one hand, industries should strive to maintain a more sustainable trajectory, which implies improving energy efficiency and resource consumption by adopting clean technologies and production methods. On the other hand, industries could and should support urban development in sectors that are vital to ensuring sustainable development.

Innovation is one of the driving forces of industrial and city development. The aim of innovation is to ensure a better use of assets and resources while simultaneously enhancing urban competitiveness and capital. For example, technical innovations can contribute to the upgrading of industries and their competitiveness.

Guiding Questions:

• Which industrial sectors, regions and cities along the Belt and Road will benefit the most from inter-regional development and technology transfer?
• How can industries contribute sustainably to economic growth and inclusive urban development?
• How will technological advancements, such as the “Internet of Things” and “Industry 4.0”, shape the future of urban development?

5.4 Partnerships

A partnership-based approach can offer cities a competitive advantage and an opportunity to access a broader range of resources and expertise. National and international development partners can facilitate inter-city collaboration or cooperation with higher-level governments and organizations. Partnerships can be forged between industry experts, academia and civil society, in which every actor offers expertise in their disparate but interrelated areas. Cities cooperate with partners to communicate and exchange information, to build up their capacities, to expand their resources and to implement improvements. International development agencies, such as UNIDO, can aid cities in their effort to locate appropriate partners in different target sectors.

Guiding Questions:

• What role can capacity-building and multi-stakeholder collaboration play in regards to the development of cities in the future?
• How can we improve citizens’ engagement and involvement in the urban-planning and development process?
• What are the key innovative public-private partnership models for urban infrastructure development? How can we monitor and coordinate cooperation between urban stakeholders (i.e. the business sector, academia, industry leaders, NGOs and other organizations)?

5.5 Investment and Finance

Increasing the scale and efficiency of financing for urban development should be a priority in urban-development strategies. Urban infrastructure and services are key areas of investment and financing because they can unlock huge potential for future growth. Nevertheless, there is still a significant gap between the cities’ demands and available supply. New partnerships in investment and finance should therefore be introduced, and new effective cooperation mechanisms should be taken up to support sustainable urban financing.
Guiding Questions:

- How can cities create bankable projects and become investment ready in order to attract financing for sustainable urban-development projects?
- What role can municipal governments, national governments, the business sector and multilateral development banks play in addressing the bottlenecks to urban financing?
- How can the financing gap for urban infrastructure development be overcome, particularly in developing countries facing a lack of technical and financial expertise and assistance?

5.6 Social inclusion

Social inclusion implies that everyone can share equally in the achievements of urban development. It is also an important goal of sustainable development. More efforts should be made to eliminate poverty and gender inequality and to involve the younger generation in the process of development, for instance, utilizing ICTs to close the digital divide and to ensure equal opportunities for all.

Guiding Questions:

- What role will the BRI play in tackling socioeconomic imbalances at the urban and regional levels?
- How will urban-industrial development help countries reach the pinnacle of sustainable development: human development and prosperity for all?
- How can SDG 9 and the BRI together foster innovation and contribute to the advancement of inclusive and sustainable urban-industrial development?

During UNIDO’s annual “BRIDGE for Cities – Belt and Road Initiative: Developing Green Economies for Cities” event, as well as on other related occasions, these guiding questions will serve to springboard discussion, in order to promote a better understanding of the key issues surrounding inclusive and sustainable urban-industrial development. The outcome of these discussions will offer support for cities and local stakeholders seeking to develop and implement sustainable city initiatives, thereby contributing directly to the implementation of the SDGs.

The “BRIDGE for Cities – Belt and Road Initiative: Developing Green Economies for Cities”, along with the New Urban Agenda from the HABITAT III conference, will prove instrumental in shaping and guiding sustainable urban development. As a way forward, possible avenues for future action and cooperation include:

- As a specialized agency, UNIDO has been involved in projects related to green technology, capacity-building and knowledge transfer. With immense technical expertise, agencies like UNIDO should start engaging directly with the municipalities and should assist cities at the policy level, as well as support cities in locating suitable partners.
- The SDGs have provided cities with an opportunity to strengthen the activities and initiatives they have already been working on. As international and national policies will be supporting city-level development, the local stakeholders (i.e. mayors, civil society, local citizens and local businesses) should already be engaging in the discussions.
- Bringing urban actors together to a single platform to discuss the latest innovations and projects in the field of sustainable urban development, both locally and internationally, will help cities implement their policies and development goals. As a follow up to the HABITAT III conference, regular discussions with city stakeholders will play an influential role in speeding up this process.
- The SDGs are already having a positive impact on different national and local urban-development initiatives, but cities should continue to align their urban-development goals with the SDGs and the New Urban Agenda.

The relationship and dynamics between industries and cities are strong and persistent. As discussed, there are numerous examples available to illustrate the way in which industries have transformed cities and contributed to the urban and national economy. Industries will continue to have a sizeable impact on sustainable urban development in the coming decade as SDG 9 creates co-benefits in support of the 2030 Agenda.


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