Building the Sustainable Cities of the Future
Topic Background for the General Assembly on Sustainable Cities

*"Cities are the spaces where all SDGs can be integrated to provide **holistic** solutions to the challenges of poverty, exclusion, climate change and risks."*
*- **Maimunah Mohd Sharif, Executive Director of UN-Habitat***

What are Sustainable Cities?

Cities are hubs for ideas, **commerce**, culture, science, productivity, and social, human, and economic development. According to the **United Nations Environment Programme**, "cities are the heartbeat of most societies. They are complex systems that bring together diverse communities to work, live, and play." In 2008, the global **urban** population surpassed the **rural** population, and now 55% of the world's population lives in urban areas. Currently, cities house 1.2 billion people in East Asia and the Pacific region alone. Considering the fact that cities account for 70% of the world's **GDP**, it's fair to say that cities are the lifeblood of the world today.

But the cities of today also face a wide variety of challenges, such as rising **slum dweller populations,** worsening air pollution, a lack of open public spaces and green spaces, limited access to **public**

A modern sustainable neighborhood with solar panels in the Netherlands (Photo: Shutterstock/Pavlo Glazkov)

transport, and a multitude of challenges related to **climate change**. Cities themselves also largely contribute to climate change, with cities accounting for 75% of **greenhouse gas emissions** and over 70% of worldwide resource use. In addition, the COVID-19 pandemic has brought to light, and in some cases worsened, challenges related to rising levels of **inequality**, adequate housing, and access to clean water, healthcare, education, and jobs.

Although the major challenges facing cities and urban spaces are complex and difficult to tackle, the global push for **sustainable development** poses a number of potential solutions. The **United Nations**

focuses heavily on improving the world's cities through the **Sustainable Development Goals (SDGs)**, which were adopted in 2015 as a set of goals and guidelines to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. More specifically, **SDG #11,** "Sustainable Cities and Communities," was created to "make cities and human settlements inclusive, safe, resilient, and sustainable." Promoting sustainability is good for both people and the environment. Working to make cities more sustainable places to live not only helps to fight climate change and its effects, it also has incredible economic and social benefits, helping to create jobs, make people healthier and safer, and improve everyone's quality of life.

Why are Sustainable Cities Important?

Despite the fact that many cities and urban areas have seen a recent boom in population growth, many of these urban places were planned, designed, and occupied for a long time, well before sustainability was even a term people used. Most of the world's cities were not planned or designed with sustainability in mind; some were not even formally planned or designed at all, they simply came to be because a large amount of people came to occupy a certain area. This means that often, a cities' **infrastructure** and layout is not equipped to deal with growing populations and the needs of modern life. The infrastructure is often outdated and inefficient when it comes to waste management, energy **consumption** and regulation, sources of energy cities use, pollution, lack of green spaces and open spaces, traffic and travel, and more.

Flooded roads in the city of Houston, United States (Photo: Shutterstock/IrinaK)

In addition, climate change has caused more extreme weather, natural disasters, **droughts**, and flooding all around the world. The majority of the world's urban areas are located on coastlines or by major bodies of water. As climate change continues and global temperatures increase and glaciers melt, sea levels will continue to rise and pose major risks for those living in coastal cities. As stated above, most cities' infrastructure is outdated and not built to adapt to these rising sea levels. Furthermore, without an adequate amount of green spaces, cities are more prone to flooding during cases of extreme weather, like storms. With more and more people living in cities around the world, cities are using increasingly

more energy and creating more waste. Cities therefore are not only suffering from the effects of climate change, but also contributing to climate change.

The UN projects that by 2050, over two-thirds of the world's population will be living in urban areas, with the majority of this urban **population growth** occurring in Africa and Asia. At the current rate of urban expansion, over 700 cities worldwide will have populations of more than one million people by 2030. In addition, 75% of the world's infrastructure that will exist in 2050 has not been built yet. This means that as the cities expand to fit the needs of the growing urban population, they have the unique opportunity to "future-proof" infrastructure, meaning that city planners can ensure that the new infrastructure being built is **low-emission**, resource-efficient, and **resilient.** Therefore, as cities grow, especially in **developing countries**, it is important to create infrastructure and policies that ensure sustainable urban development, which includes urban planning, transport systems, water, sanitation, waste management, **disaster risk reduction**, access to information, education and **capacity-building**.

International Efforts on Sustainable Cities

The United Nations and its funds, programs, and specialized agencies in the **UN system,** have continued to prioritize cities and urban areas as part of worldwide sustainable development efforts. Since the topic of sustainable cities is so broad and so interconnected with many of the other SDGs, different UN funds, programs, and agencies tackle different aspects of the sustainable cities goal. One example can be found with the United Nations Environment Programme (UNEP), which works with global partners, such as individual countries, cities or international businesses, to promote sustainability in cities around the world in a way that utilizes **innovation** and resource efficiency, as well as **mitigating** climate change. One initiative led by the UNEP is a **data** collection system that helps to monitor and report on statistics and data related to sustainable development at local and national levels. The UNEP is also working directly with 33 cities across 12 different countries to promote economic policies and clean energy projects.

Another example of a UN agency that works directly in the development of sustainable cities is the **World Bank**. The World Bank provides **developing countries** with funding for sustainable development projects and works to end global poverty. Oftentimes, the World Bank will provide funding for projects and policies that governments are unable to fund themselves, and focus on making cities more livable, reducing extreme poverty, increasing shared prosperity, and ensuring urban areas are resilient to climate change and disasters.

Community members design a public space at the Kalobeyei Integrated Settlement in Turkana, Kenya. (Photo: UN-Habitat)

Often, progress toward shared solutions to global issues comes about during international meetings and conferences. The United Nations Conference on Housing and Sustainable Urban Development (also known as Habitat III) brought together the UN **member states** in October 2016 to reinvigorate the global commitment to sustainable **urbanization**. At this conference, the UN member states adopted the **New**

Urban Agenda. This agenda serves as a guide and a handbook for UN member countries, in addition to nonprofits, **NGOs,** businesses, and local governments, in promoting sustainable development in cities and urban areas. The New Urban Agenda highlights the connection between sustainable development in cities with job creation, livelihood opportunities (such as education), and improved quality of life. It outlines the variety of challenges in promoting sustainable development in cities and urban areas, and provides solutions to the various actors who can be involved in the sustainable development process.

The Challenge of Building and Promoting Sustainable Cities

Building sustainable cities also presents a number of challenges to civic leaders, diplomats, and ordinary citizens in both developing and **developed countries.** While there are challenges that both developed and developing countries share in making cities more sustainable, there are also some stark differences in the problems they face. In developed countries most cities have **established infrastructure** that would be incredibly difficult or impossible to move. This established infrastructure includes roads, bridges and train lines needed for transportation, water and sewage lines needed for a healthy society, and the electrical grid necessary to power homes and businesses. Modernizing this infrastructure and making it more sustainable and climate change resistant represents an incredibly difficult and expensive task. In addition, these changes would likely disrupt the lives of nearly all citizens within the city, further complicating the task of creating a more sustainable city.

Many cities in developing countries have less established infrastructure than cities in more developed countries, giving them an advantage as they look to become more sustainable. These less developed cities often lack some of the basic infrastructure that is present in developed countries' cities, which means that they have the opportunity to invest in sustainable urban planning without having to transition most of their current infrastructure and city life. In short, less developed cities are more of a 'blank slate' for city and urban planners to design a sustainable city. For example, if car ownership is not widespread among the population, then the country can focus on creating an

Rush hour traffic in Mexico City, Mexico. The city has some of the worst traffic in the world and therefore, some of the worst air pollution as well. (Photo: Adriana Zehbrauskas for The New York Times)

energy-efficient, accessible public transport system, rather than having to build thousands of miles of roads or convincing people to make the switch from using an individual vehicle to taking public transportation. As 95% of future global urban growth will take place in developing countries, they have the opportunity to invest in sustainable infrastructure, clean energy use, accessible public transport systems, open and green spaces, and clean energy usage today, in order to best improve the quality of life for future generations and eliminate future contributions to climate change.

An added challenge that some developing countries face is the growth of slum dweller populations and **informal settlements**. Informal settlements, sometimes referred to as slums, are areas in urban spaces that have not been officially planned or built by city governments or developers. This means that these areas do not have basic infrastructure or receive basic city services such as waste management, water, electricity, or public safety, such as police. They are also often very far away from schools and healthcare institutions. These settlements are also typically very crowded or **high-density**, making them vulnerable to the spread of **infectious diseases** like COVID-19. Within the global urban population, there are currently 279 million people lacking electricity, 780 million lacking safe drinking water, 2.5 billion lacking basic sanitation, and millions dying prematurely from air pollution.

Some developed countries have already taken global leadership in transitioning their cities to be more sustainable. Norway is an example of a developed country that has made great progress in promoting and creating sustainability, as 97% of the country's energy comes from **renewable sources** and one third of all new vehicles purchased are hybrid or fully electric. Another example is from the city of Southampton, in the United Kingdom, where officials are trying to make the city more sustainable by encouraging the use of sustainable transportation, establishing clean air zones, protecting and improving the natural environment of the city by planting new trees, and reducing waste and litter by installing more trash and recycling receptacles in public areas. These are just two examples, but as the United Nations Environment Programme states, "the most sustainable, resilient societies will be those that have resource-efficient systems in place to provide essential services to their residents and that are prepared to withstand and adapt to climate-induced disasters." One of the greatest challenges in transitioning cities to be more sustainable or building sustainable cities is promoting cooperation among all of the actors involved. Local governments, businesses, civic leaders, nonprofits, NGOs, individuals, and national governments will all have to find common ground and work together to implement the right solutions.

Conclusion

As climate change becomes an increasingly important issue for all of humanity, and as more and more people live in urban spaces and cities, the people of the world have an obligation to find ways to make these urban spaces and cities more sustainable places. Sustainable cities can help lessen, stop, or even prevent some of the world's largest issues related to climate change, while also improving living conditions and quality of life for those who reside in those cities. People working to improve cities and make them more sustainable not only need to think about the problems facing cities and urban spaces today, but also need to consider future problems that will continue to be created by climate change and growing urban populations. Utilizing science, modern technologies, and innovation, while keeping in mind the various cultural considerations and different needs of each city, people in every country can begin to improve these urban spaces and make them better for the people who live in them and for the earth.

Students participating in the 2021-2022 Jr. Model United Nations - Student Diplomat program will be tasked with crafting solutions to some of the challenges surrounding sustainable cities discussed in this briefing paper. Student delegates will come together to diplomatically debate and discuss these issues and propose actions that UN member countries can take to ultimately find global solutions and promote sustainable cities worldwide.

Quick Facts
Find at least three "quick facts" from this briefing paper that provide useful information on the topic of Sustainable Cities. Hint: Look for information that includes facts and figures (ex. "Cities account for 70% of the world's GDP").

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Questions to Consider
Utilizing the information provided in this briefing paper and any research you have already conducted on your assigned country, answer the questions below to the best of your ability.

1. Why is it important for the world to work towards creating more sustainable cities and urban environments?
2. What are some of the ways that sustainable cities are related to the issue of climate change?
3. Does your assigned country have a large urban population? What do cities look like in your country? What are some of the biggest issues regarding the cities and urban environments in your country?
4. How has the COVID-19 pandemic affected life in your assigned country's cities? Has it made any of the issues you listed above worse? Has it brought to light any new issues? Has it helped promote any sustainability measures/solutions?
5. Based on your answers to the question above and on some examples of solutions mentioned in this briefing paper, how could your country promote sustainable cities and sustainable development overall?
6. After reading this briefing paper, what would you like to learn more about in regards to sustainable cities? This briefing paper is just the start of your research! Here are some tips for how to continue your research:
   a. Learn more about SDG 11 and the SDG 11 targets, which can help outline some of the more detailed aspects of the topic of sustainable cities.
   b. Explore the Additional Recommended Resources listed on this committee's resource page on the Council's website, linked **here**.

Glossary

Term	Description
Capacity-building	The process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world.
Climate change	A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the human use of fossil fuels.
Commerce	The exchange of something of value (such as goods or services) between businesses or groups.
Consumption	The use of goods or services.
Data	Facts or statistics gathered to use for analysis or reference.

Developed countries	Often referred to as an industrialized country, a developed country is one with a complex economy and advanced technological infrastructure.
Developing countries	Countries that do not have complex economic systems, often relying on agricultural, mining, or other natural resources for economic activity. Often these countries are poorer and seek to grow their country by advancing their economic systems and infrastructure.
Disaster risk reduction	Work that aims to prevent or reduce the damage caused by natural disasters (e.g. earthquakes, floods, droughts, and storms).
Drought	An extended period of time with a lack of precipitation (usually rainfall) that results in a water shortage.
Greenhouse gas emissions	Greenhouse gasses trap heat in the Earth's atmosphere, which is what causes global warming. Greenhouse gas emissions, mainly from carbon dioxide, are a result of burning fossil fuels (coal, oil, and natural gas).
Gross Domestic Product (GDP)	The total value of all completed goods and services within a country's borders within a particular time period.
High-density populations	Population density is a measure of population per area. A high-population density means that the population of an area is high relative to the size of the area. For example, Singapore has the largest high-density population of 8,219 inhabitants per square kilometer.
Holistic	Dealing with or treating the whole of something or someone, not just one part.
Inequality	A situation in which certain individuals or groups of people have more opportunities, money, or rights than others.
Infectious diseases	Diseases caused by living organisms like viruses or bacteria. They are highly contagious, meaning they can easily be spread from one person to another. Examples include the common cold, flu, and COVID-19.
Informal settlements	Settlements that were not officially planned by any government and/or regulated by any government. These settlements often lack access to basic city services and have poor living conditions for residents. Sometimes referred to as slums.
Infrastructure	The basic physical systems of an entity (e.g. nation, region, or city) that allow it to function, such as transportation systems like roads and bridges, communication networks, and sewage, water, and electric systems.
Innovation	Putting ideas into practice that either bring about new goods or services or improve existing goods or services.
Low-emission	A product or action that produces a limited amount of greenhouse gas emissions in an effort to decrease air pollution and prevent global warming.
Member states	The term used for a country that is a member of an international organization, such as the United Nations.
Mitigate	To make something less severe.
New Urban Agenda	Adopted by UN member countries at the United Nations Conference on Housing and Sustainable Urban Development (October 2016), this agenda is a tool and guidebook for countries and other actors who work to make cities and urban spaces more sustainable places.
Non-governmental organizations (NGOs)	Non-profit, citizen-based groups, or international organizations that are independent of governments.
Population growth	Increase in the number of people in a population (number of people living in a particular geographical region).
Public transport	A system of transportation available for use by the general public. Examples include buses, trains, and subways, which run on fixed routes and charge set fares.

Renewable sources	Energy sources that are naturally replenishing and in most cases not harmful to the environment. Examples include solar, wind, geothermal, and hydropower.
Resilient	Refers to cities which are able to prepare for and recover from future economic, environmental, and/or social crises.
Rural	A geographical area that is located outside cities. Rural areas are made up of open country and settlements of less than 2,500 residents.
Slum dweller populations	The proportion of the urban population living in slums. A slum household is a group of individuals living under the same roof without access to either water, sanitation, sufficient living area, durable housing, or guaranteed housing.
Urbanization	When the populations shift from rural to urban areas and the ways in which societies adapt to this change.
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Sustainable Development Goals (SDG)	Also known as Global Goals, these build on the success of the Millennium Development Goals (MDGs) and aim to go further to end all forms of poverty. The new Goals are unique in that they call for action by all countries, poor, rich and middle-income to promote prosperity while protecting the planet.
Sustainable Development Goal (SDG) 11	The goal to make cities and human settlements inclusive, safe, resilient and sustainable.
UN System	The United Nations and its different funds, programmes, and specialized agencies, each of which have their own area of work, leadership, and budget. The UN coordinates its work with these separate UN system entities, which cooperate with the UN to help achieve its goals.
United Nations (UN)	An international organization, composed of over 190 sovereign countries, dedicated to enhancing global peace and security, and promoting health and well-being.
United Nations Environment Programme (UNEP)	The organization in charge of responding to environmental issues within the UN. It is the leading global environmental authority that promotes the implementation of environmental agendas and policies.
Urban	A settlement with a high population density and infrastructure. Urban areas have a core of 1,000 people per square mile and may have neighboring territory (such as suburbs) of 500 people per square mile.
World Bank	A UN specialized agency that provides funding for developing countries and works to implement sustainable solutions that reduce poverty and build shared prosperity.

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