Global Urbanisation

Around the world today more people live in urban than rural areas, with 55% of the global population currently residing in cities - a figure that is projected to grow to 68% by 2050 (United Nations, 2018). According to UN estimates, 2007 was the milestone year in which urban dwellings overtook rural dwellings as the most prolific form of housing. Indeed, for most of the history of humanity small community dwellings have been the dominant form of housing with the shift to urbanisation a relatively recent phenomenon taking place over the last few centuries - having increased dramatically over recent decades. There is however a significant difference in the share of national populations which are urbanised around the world. In most high-income countries in Western Europe, the Americas, Australia, Japan and the Middle East, 80% of the respective populations live in urban areas. In upper-middle income countries in Eastern Europe, East Asia, North and Southern Africa and South America the percentage of people living in urban areas is generally between 50% and 80%; and in many lower-income countries most people still live in rural areas (Ritchie & Roser, 2020). It is also important to note that urbanisation growth rates vary significantly across the globe, with disparate growth rates projected to continue throughout coming decades. Asia and Africa for instance are the two regions urbanising fastest, with their respective urban populations increasing proportionally by 1.1% and 1.3% annually between 2015 and 2020 (to 49.9% and 42.5% respectively). This is in contrast to Oceania, the region with the lowest projected urban growth rate, which is expected to maintain a relatively stable rate of urbanisation of approximately 70% in the coming decades (United Nations, 2019).

Sustainable Development Goal 11

Sustainable Development Goal (SDG) 11: *Make cities inclusive, safe, resilient and sustainable*, is a broad-ranging and ambitious part of the SDG agenda announced by the UN as part of its 2030 Agenda for Sustainable Development. By 2030 SDG 11 aims to support the development of sustainable, resilient and safe cities and urban areas around the world by ensuring secure and affordable housing for all urban residents, ameliorating cities’ core functionalities, improving urban air quality, reducing cities’ environmental impacts, strengthening cultural and natural heritage, increasing urban residents’ access to green and public spaces, securing cities against...
natural disasters and health crises, increasing urban resource efficiency, and future-proofing urban areas against the impacts of climate change. SDG 11 is also intrinsically linked to several other SDGs such as SDG 6 Clean water and sanitation, SDG 7 Affordable and clean energy, SDG 10 Reduced inequalities, and SDG 12 Responsible consumption and production.

Habitat III: The New Urban Agenda
Habitat III, a United Nations Conference on Housing and Sustainable Urban Development took place in Quito in 2016 - following on from Habitat II in Istanbul in 1996 and Habitat I in Vancouver in 1976. The conference brought together more than 30,000 participants from 167 countries and included the participation of UN Member States, 40 UN agencies, thousands of subnational and local governments, and over 1,100 organisations to discuss and contribute to the creation of the New Urban Agenda (NUA). The NUA, which builds on the 2030 Agenda for Sustainable Development, specifically relates to SDG 11; it is a non-binding agreement which sets out a roadmap to achieving smarter, more sustainable, and more inclusive urbanisation across the world.

Economic and Environmental Impacts of Cities
One the one hand, increased global urbanisation signifies increased opportunities which benefit societies by facilitating job creation, enabling social mobility, empowering women and boosting economic growth (United Nations, 2018). Urban areas also generate up to 55% of Gross Domestic Product (GDP) in low-income countries, 73% of GDP in middle-income countries, and 85% of GDP in high-income countries and are projected to account for more than 80% of future economic growth globally (United Nations Human Settlements Program, 2016). However, there are also significant challenges posed by our increasingly urbanised world, especially in light of the threats associated with climate change. For instance, while cities take up 3% of the planet's landmass, they account for 60-80% of energy consumption, and up to 70% of total greenhouse gas emissions. Further, the increasing rate and intensity of climate-related disasters and extreme weather events pose serious threats to people living in cities - particularly in low-lying coastal areas (United Nations Human Settlements Program, 2016).

Challenges Facing Our Cities
A critical challenge facing cities across the globe is figuring out how to address increasing inequality - as the gap between the rich and poor in most countries has reached the highest levels in over thirty years (OECD, 2015). Inequality manifests itself in myriad ways in cities around the world and has a profound impact on urban citizens' abilities to participate in society. A stark symbol of such inequality across many cities around the world is the proliferation of gated communities designed to separate residents from their wider urban setting, often situated in close proximity to slums and informal settlements - where barbed wire fences distinguish between who has safe and reliable access to basic services such as running water, waste management and electricity, and ultimately who can go to bed at night safe in the knowledge they are protected by 24 hour private security guards (United Nations Human Settlements Program, 2016).

Originally part of the Millennium Development Goals (MDGs) and included in the Sustainable Development Agenda is addressing living conditions for the increasing number of people living in slums and informal developments. The UN estimates that 881 million, or one in eight people in the Global South, live in slums, accounting for approximately 30% of urban populations (United Nations Human Settlements Program, 2015). Of particular concern, especially to vulnerable people living in slums but also those in more secure forms of urban housing, are threats to public health and security. Critical examples of these threats to urban public health and security, as indicated by The Economist's Safe Cities Index (2019), include traffic fatalities, air pollution, and communicable, vector and waterborne diseases. The Safe Cities Index
further contends that these threats are closely linked to neglected, inefficient and deficient urban infrastructure.

The increase and intensification of global mobility, including between cities, has heightened the risk of global viruses and other communicable diseases spreading rapidly between cities. This was evident during the spread of SARs in 2003, which affected 30 countries around the world, infecting 8,422 people, and resulting in 916 deaths within a six-month period. More recently, the rapid spread and impact of Coronavirus (COVID-19) - first detected in December 2019 in Wuhan, China, and declared a global pandemic by the World Health Organization (WHO) by 11 March 2020 - has caused governments and citizens around the world to radically alter their lives in a matter of months, and in some cases just days or weeks (WHO, 2020). From its initial detection, to the time of writing, there have been over 1.4 million confirmed cases and over 82,000 confirmed deaths as a result of the virus, with no end in sight and no clear indications of the ultimate health, social and economic impacts to be faced (John Hopkins University Centre for Systems Science and Engineering, 2020). With governments and health authorities still desperately trying to mitigate the impacts of COVID-19, it remains to be seen what the true impact will be for the way we manage our cities and urban areas into the future.

Another pressing issue facing our growing cities is how to maintain efficient and functional cities and transport systems while transitioning to sustainable alternatives to our current fossil fuel-dependent energy models. As highlighted earlier, cities emit a higher percentage (up to 70%) of the world's greenhouse gases than rural areas despite accounting for only 55% of the world's population. This is explained by Dodson (2016) as resulting from the fact that:

Modern cities are concentrated sites of petroleum consumption. This consumption occurs primarily through transport, although in some regions, particularly in the US, oil for heating is also an important component of urban petroleum demand.

Cities' reliance on fossil fuels is highly problematic for a number of reasons such as the detrimental effect they have on the planet's biosphere, the dangerous health effects of reduced air quality and the economic and social risks relating to oil price hikes and eventual shortages due to the finite nature of oil reserves. For these reasons, many cities are currently grappling with very complex decisions about how best to redesign, resource and fuel their cities' transport and utility networks using sustainable principles to ensure they are able to adequately meet the needs of their growing populations.

Opportunities and Ways Forward

Due to the complex and interconnected challenges facing cities and governments on their paths towards achieving SDG 11, it will be necessary to engage and work with a range of different stakeholders and policy experts in order to develop innovative and creative solutions to the problems that will inevitably arise along the way. Neary and Osborne (2018) argue that universities are ideally situated to provide the incubation spaces to develop research and policies for our cities alongside industry, government, and civil society in what has been referred to as "the quadruple helix of innovation" (see also Caryannis & Campbell, 2018). One of the key proposed benefits of the quadruple helix model is its ability to incorporate bottom-up approaches - due to the inclusion of civil society actors - thereby integrating social demands into innovations (Borkowska & Osborne, 2018). Neary and Osborne (2018) further argue that the quadruple helix should strengthen universities' abilities to deliver on their third mission which calls on them to provide a societal contribution beyond their researching and teaching responsibilities.

A clear takeaway from the Habitat III conference in 2016 was the important role of city, metropolitan, and regional governments in decision making, agenda setting, and policy development processes required to achieve the targets set by both the NUA and SDG 11 (Colau, 2016; Ford Foundation Centre for Social Justice, 2016; Robin, 2016). In order to facilitate the
exchange of knowledge, ideas, and experiences in dealing with the challenges involved in the process of implementing sustainable urban development, a number of city-focused forums and initiatives have also emerged. Two key fora formed to facilitate intra-city collaboration include World Cities (headed by the European Commission's Directorate-General for Regional and Urban Policy) and EUROCITIES (a network of over 140 European cities with over 45 partner cities from around the world).

European Union Initiatives on SDG 11
In the EU, approximately 75% of residents live in urban areas, a figure that is projected to grow to 83% by 2050 (United Nations, 2018). SDG 11 is therefore particularly pertinent for the EU in terms of its sustainable development agenda. The European Commission recognises this and is implementing a number of initiatives that both directly and indirectly contribute to achieving SDG 11 (European Commission, n.d.). According to the Commission's most recent reports notable progress has been made in areas such as increasing quality of life in cities and communities, improving quality of housing, and improving sustainable waste management practices. However, other areas such as implementing safe and sustainable transport systems and improving air quality require further attention (Eurostat, 2020).

The European Commission has been proactive in recognising the important role of local and regional authorities in achieving improved environmental outcomes for their towns and cities. This was seen in its launching in 2008 of the EU Covenant of Mayors for Climate and Energy which voluntarily brought together thousands of local governments committed to implementing and achieving the EU’s climate and energy targets. This was a groundbreaking initiative in terms of its bottom-up city-focused approach to climate and energy action. The initiative quickly gathered momentum and in 2016 merged with the Compact of Mayors to become the Global Covenant of Mayors for Climate and Energy (GCoM) (European Covenant of Mayors for Climate & Energy, n.d.). An important initiative to come out of the GCoM has been Innovate4Cities which is an example of cities working not only with other cities around the world but also engaging with industry, academia and governments to identify how different cities, regions and geographic contexts are likely to experience the detrimental effects of climate change and how best to prioritise research and funding in order to develop city-specific climate action plans (Global Covenant of Mayors for Climate & Energy, 2018).

Another initiative launched by the European Commission to empower local government authorities and stimulate city-based climate action and sustainable policymaking has been the European Green Capital Award (EGCA). The EGCA is awarded to a new European city each year for efforts made towards improving the urban environment and building healthier and sustainable living areas. The theory is that by highlighting progress made by individual cities it will encourage other cities to invest in further efforts while providing role model cities a platform to share best practices and aid collaboration (European Commission, 2020).

Conclusion
It is clear that cities and urban areas, as the primary places of human habitation and most significant emitters of greenhouse gases have a huge role to play in achieving the aims of the SDG agenda. The targets set by SDG 11 provide a roadmap to ensuring the long term health and sustainability of human societies around the world and alongside Habitat III have spurred a diverse range of actors into forming new collaborative action plans and policies. The input and cooperation of and between academia, NGOs, the private sector, and governments of all levels will be necessary in order to achieve the ambitious targets articulated by SDG 11, and the SDG agenda more broadly. Positive signals of a growing intent towards taking action have been seen in the formation of a growing number of forums and initiatives such as the GCoM, EUROCITIES, and Innovate4Cities. The acknowledgment by many local government authorities around the world of the important role they must play in creating change is also positive and it is to be hoped that the engagement they have shown with the aforementioned forums and organisations will assist in achieving the targets of SDG 11.
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