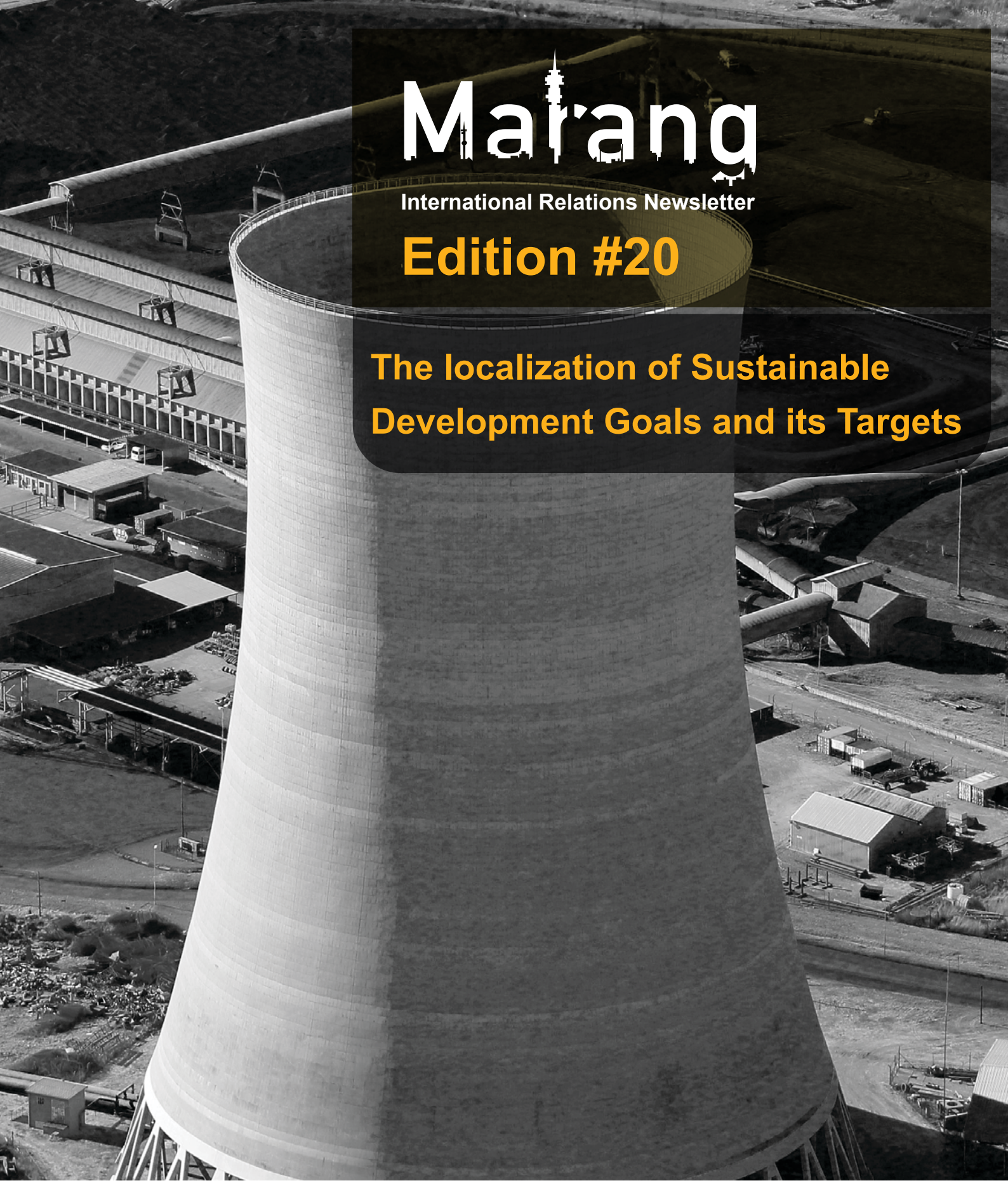

Matang

International Relations Newsletter

Edition #20

The localization of Sustainable Development Goals and its Targets

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Dear Reader

It gives us great pleasure to bring you the Marang 20th Edition, themed: ***"The localization of Sustainable Development Goals and its Targets."***

Urbanization has been one of the most significant driving forces of recent global development. The United Nations (UN) department of Economic and Social affairs states that 55% of the world's population lives in urban areas, and the estimated percentage is forecasted toincrease to 68% by the year 2050. More than half of the world's population now lives in cities, and this proportion will continue to increase rapidly to reach 70% by 2050.

To ensure that tomorrow's cities provide opportunities and better living conditions for all, it is essential to understand that the concept of inclusive cities involves a complex web of multiple spatial, social, environmentaland economic factors :

- Spatial inclusion: urban inclusion requires providing affordable necessities such as housing, water and sanitation.
- Social inclusion: an inclusive city needs to guarantee equal rights and participation of all, including the most marginalized.
- Environmental sustainability: an inclusive city needs to ensure that it uses its environmental ecosystem services sparingly to ensure that future generations can enjoy them.
- Economic inclusion: creating jobs and giving urban residents the opportunity to enjoy the benefits of economic growth is a critical component of overall urban inclusion.

The spatial, social, environmental sustainability and economic dimensions of urban inclusion are tightly intertwinedand tend to reinforce each otherwith the aim to foster Sustainable Development.

The Sustainable Development Goals and the New Urban Agenda recognize the role of cities in achieving sustainable development. However, these agendas were agreed and signed by national governments and thus implementing them at the local level requires a process of adaptation or localization. Local government associations such as UCLG, which were central to the inclusion of urban SDG 11, promote collaborative multi-level governance mechanisms and the creation of a local enabling environment to allow cities to implement the SDGs effectively.

This Issue unpacks the SDGs, and then takes a focused look at what two of the City of Johannesburg's Departments and Entities are doing to incorporate SDGs into their corporate mandates. The edition also showcases a brief narrative of the Executive Mayor's trip to Cairo and France in July 2022 and concludes with the Dialogue by the Executive Mayor with Members of the Diplomatic Corps in June 2022.

Enjoy the read!
Thusani Mulaudzi and Zamokuhle Tshezi– Editorial board

Introduction

The United Nations Conference on Sustainable Development (Rio+20), held in June 2012 in Rio de Janeiro, Brazil, was a major landmark in the pursuit of sustainable development and its translation into tangible results at global, regional and national levels (United Nations, 2018). The conference adopted an outcome document entitled “The future we want”, which was endorsed by the United Nations General Assembly, and this gave greater impetus to the follow-up to and implementation of the commitments agreed at Rio+20, among which was the elaboration of sustainable development goals (United Nations, 2018).

At the start of the UN Decade of Action we find ourselves at a crossroads. The adoption of Agenda 2030 and its 17 Sustainable Development Goals (SDGs) in 2015 represented a universal commitment to achieve sustainable development by the year 2030 in ways that would leave no one behind. However, progress on the realization of the SDGs has been slow and uneven, with structural issues such as climate change and funding gaps representing major barriers to successful implementation.

This issue will look at the realization and localising of the SDGs in order to highlight how the Metropolitan City of Johannesburg is doing to realise the implementation of the SDGs.

THE HISTORY AND EVOLUTION OF SUSTAINABLE DEVELOPMENT GOALS:

There is no doubt that we need to reset the direction of the world economy, from one of widening inequalities, social exclusion, and massive environmental threats to the course of sustainable development. These are some important events that took place and will help us to have a better understanding of how the SDGs are raised;

1962, The Silent Spring: Rachel Carson, an American biologist, with her book “Silent Spring” alerted the world to the environmental impact of chemical pesticides and inspired the global environmental movement. Silent Spring is widely considered as the most important environmental book of the 20th century.

1972, The Limits to growth: The event brought the environmental issues missing from media and policy– on the table and environmentalists started to establish “Green” political movements in the form of activist non-governmental organizations and environmentalist political parties. Consequently, in **1972, the “Conference on the Human Environment”** took place in Stockholm. It was the first conference of the UN member states that recognized that the economy on one side and the environment, on the other side,were on a collision course. The increasing weight of human activity on nature was leading to environmental risks on an unprecedented magnitude scale.

In the same year, the Club of Rome with the collaboration of the Massachusetts Institute of Technology (MIT), published “The Limits to Growth” that shocked the world. It was the first study to question the

viability of continued growth in the human ecological footprint and has predicted our civilization would probably collapse before 2100.

1983, The Brundtland Commission: Due to the attention to the unsustainable economic growth, UN established the “Brundtland Commission” in 1983, under the leadership of Dr. Gro Harlem Brundtland. “Our Common Future” the report of this commission, published in 1987, defined the term “Sustainable development”.

1992, The Earth Summit: In 1992, the concept of Sustainable Development was adopted as a shared global concept during the **“Earth Summit”**. However, in 2012, on the 20th anniversary of the Earth Summit, when the UN member states came together in the “Rio +20 conference”, there was a grim realization that the concept of sustainable development has not been taken hold nor implemented.

Warned by scientists and researchers, the other urgent reality was that the world can’t move forward continuing to have unsustainable growth.So, they have decided to choose the idea of goal-based development to help orient the behavior of governments, businesses, and civil society in a shared direction.

2015, The Sustainable Development Goals (SDGs) came to life: At the time of the “Rio+20 conference”, the UN states were operating in the context of another set of goals, known as the Millennium Development Goals (MDGs).Therefore, the idea caught on that the MDG era would be followed by a Sustainable Development Goal or SDGs era starting from 2015 to 2030. The negotiation has started about what these SDGs should be.

The SDGs were created through the largest ever participatory process undertaken by the UN. 10 million people from different parts of the globe expressed their views in the consultation process to help shape the 2030 Agenda.Few months before the UN Sustainable Development Summit in 2015, Pope Francis in his second encyclical, “Laudatosi” declared that climate change is one of the principal challenges facing humanity.The Pope called for a “new dialogue” and invited all people of the world to take “swift and unified global action.”

Finally, on September 25th, 2015 the member states, at the UN Sustainable Development Summit, have adopted those 17 goals, embedded in the overall commitment to 2030 Agenda.The SDGs became the blueprint to achieve a better and more sustainable future for all. They are often called a radical plan for humanity and a new way of ‘doing’ development.

2015, The “Paris Climate Agreement”: Few weeks after UN Summit in Paris, another international agreement was reached to stop global warming and human-induced climate change. The “Paris Climate Agreement” has an indivisible bound with the 2030 Agenda.
These two key agreements as a whole unit are an overarching framework of global cooperation for sustainable development.We have the technology and the necessary resources to achieve both the SDGs and the Paris Climate Agreement. What we need most to reach them is active collaboration.

Our task is to recognize the urgent, share the direction, and do our best to achieve these goals.
We are at the beginning of the “Decade of Action” (2020-2030), to reach the goals everyone needs to do their part: governments, private sector, civil society.

Written by :Shervin Ghorbani, Sustainability Consultant at Climate Partner

Zooming in on sustainable development goals and their targets

They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice. The respective Goals are outlined below:

Sustainable development goals applicable to city development

Cities are key players in the efforts to achieve all 17 SDGs and C40's member cities, including the City of Johannesburg, have committed to playing their part. Achieving the 2030 UN Sustainable Development Goals (SDGs) will improve the lives of billions of people, with SDG 11: Sustainable Cities and Communities at the heart of this agenda. Cities are complex systems, and their planning requires a systems-thinking approach that looks at the interconnected impacts of all the parts.

In the development of sustainable cities, we need to ensure we consider the full spectrum of the United Nations Sustainable Development Goals (SDGs): The efficient use of natural resources (SDG15); together with urban planning, efficient transport systems, clean water and sanitation (SDG: 6); the provision of healthcare (SDG3); the responsible management of waste (SDG: 12); disaster risk reduction, economic opportunity (SDG8); connectivity and access to information (SDG:9); affordable housing and student accommodation (SDG4); and capacity-building. These are all relevant issues when developing a sustainable roadmap for cities and urban developments.

Sustainable Development Goal 11 (SDG 11 or Global Goal 11), titled "sustainable cities and

communities", is one of 17 Sustainable Development Goals established by the United Nations General Assembly in 2015. The official mission of SDG 11 is to "Make cities inclusive, safe, resilient and sustainable".The 17 SDGs take into account that action in one area will affect outcomes in other areas as well, and that development must balance social, economic and environmental sustainability.

Sustainable Development Goal 11 is divided into 10 targets and 14 indicators at the global level. The seven "outcome targets" are:

- **11.1 -** "Adequate, safe, and affordable housing and basic services and upgrade slums"
- **11.2 -** "Safe, affordable, accessible, and sustainable transport systems"
- **11.3 -** "Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries"
- **11.4 -** "Strengthen efforts to protect and safeguard the world's cultural and natural heritage"
- **11.5 -** "Reduce the number of deaths and the number of people affected by disasters and decrease the direct economic losses relative to global gross domestic product caused by disasters"
- **11.6 -** "Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management"
- **11.7 -** "Provide universal access to safe, inclusive and accessible, green and public spaces"
- The three "means of achieving" targets are:
- **11.a -** "Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning"
- **11.b -** "Increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk managements at all levels"
- **11.c -** "Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials"

IMPLEMENTATION OF SUSTAINABLE DEVEVELOPMENT GOALSIN INTERNATIONAL RELATIONS:

The Sustainable Development Goals (SDGs) are unprecedented in their scope and ambition for human progress. By removing or mitigating many grievances that fuel conflict, progress on the SDGs can be a critical lever to build and sustain peace and stability worldwide. The transformative change they aim to bring about can also affect geopolitical dynamics, balances of power and interdependencies.
Thus, progress on the SDGs has significant implications for foreign policy. Core foreign policy priorities depend on SDG progress, and foreign policy makers also have a critical role to play in supporting implementation and managing the challenges associated with transformational change. Despite these critical stakes, the foreign policy dimensions of the 2030 Sustainable Development Agenda have not been sufficiently broached by foreign ministries.

Agenda 2030 and its 17 SDGs are the first comprehensive, global, and "silo-breaking" agenda for achieving the foundations of resilience and sustainable peace. At a time of increasing nationalism and populism, the SDGs are important symbols of the value of the transformational capabilities of multilateralism. It is a transformative agenda, beyond incremental change, and importantly, it is a global agenda – beyond development policy. This agenda resonates with fundamental foreign policy objectives such as improving international security, stability, and prosperity. In other words, because not achieving the SDGs implies severe risks for these priorities, foreign policy makers have high stakes in the SDGs' outcomes. The SDGs also have a significant impact on geopolitics.

City diplomacy, exercised by city representatives and networks, represented an important contribution to putting cities on the global map of the SDGs and related global development agendas 2 with the aim of

“leaving no city behind”. Such efforts were largely driven by a recognition that in an increasingly urban world, cities represent key pathways to development. With over half of the world’s global population already living in urban areas, cities are the world’s largest contributors to energy consumption, waste and CO2 emissions, as well as the main sites of socio-economic and spatial inequality and of vulnerability to the effects of climate change. However, they also represent increasingly interconnected economic and political powerhouses and hubs of innovation.

LOCALISING THE SUSTAINABLE DEVELOPMENT GOALS

Localization of the SDGs refers to the process of defining, implementing, and monitoring strategies at the local level to achieve global, national, and subnational sustainable development goals and targets. SDG localisation is an opportunity for transformative global action on one of our most pressing challenges: urban inequality. The urgency to do so is recognised in goals to “reduce inequality” (SDG10) and achieve “sustainable cities and communities” (SDG11).

While cities in many developed countries enjoy high levels of political, administrative and fiscal autonomy, levels of decentralisation in Africa remain uneven, even if African cities face some of the highest rates of urbanization in the world, and therefore require adequate power to address associated challenges such as poverty and informality.

African local authorities face many challenges. These range from an uneven administrative reach over urban territories, central governments reluctant to devolve mandates and power (especially when opposition parties govern cities) and weak fiscal capability, which limits their ability to respond to, engage with, and plan for development in a sustainable and integrated way (UCLG, 2019a).

This uneven landscape of decentralisation has roughly translated into two approaches to SDG localisation. On the one hand, central governments in Africa, have adopted top-down approaches whereby regional and local governments are actively guided towards localisation.

On the other hand, local governments in countries such as South Africa have adopted their own approaches to SDG localisation from the bottom up, in the absence of concrete national government guidelines (Croese et al., 2021).

These divergent approaches do not just illustrate the challenges of multi-level governance for global policy implementation, but also the resources and conditions required to enable SDG localisation at the city level. Those cities that have been successful in taking a bottom-up approach are often either larger cities that have more political and fiscal autonomy and/or cities that are plugged into global networks and alliances that provide important access to financial and technical support, resources and networking.

These networking opportunities often have an accumulated effect, with a particular group of cities and actors within them building up important skills, knowledge and expertise that allow them to become SDG champions.

An example of this is eThekwini municipality, which has a longstanding track record of engagement, participation and partnerships with global sustainability networks and agendas through an active leadership that has fostered the emergence of local sustainability champions within the city. This combination of global commitment and connectedness has enabled the city to carve out its own path to SDG localisation in a way that is grounded in local planning processes (Akkiah, forthcoming). There is a need for this kind of experience and expertise to be shared with other cities who have not 3 had similar opportunities and support.

THE IMPACT OF THE COVID 19 PANDEMIC ON SDG LOCALISATION

The impact of the pandemic has been especially felt in cities, which have been bearing the brunt of most Covid-19 cases as well as the effects of the measures put in place to control them (UN, 2020). Cities in many countries have suffered disproportionately more from the crisis, due to rising unemployment levels as a result of the global economic slowdown and local lockdowns (Alcázar et al., 2021).

This has slowed, and in some cases reversed, progress made on goals such as SDG 1 (no poverty), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 5 (gender equality), SDG 6 (clean water and sanitation) and SDG 8 (decent work and economic growth). The pandemic has showed our weaknesses and fragility, but it has also demonstrated our strength and ability to adapt and innovate in unexpected and unprecedented ways.

This has been displayed by strong local leadership, with city authorities in some cases having to make up for national government indecisiveness at best or denial of the severity of the pandemic at worst. Community and grassroot initiatives and partnerships have also played an instrumental role in managing and mitigating the impact of the pandemic, from contact tracing to the organisation of a host of actions to reach those most in need of support (Mejía-Dugand et al., 2020).

In the context of growing reflection on the ways to “build back better” and get back on track to achieving the SDGs in a post-pandemic world, numerous calls have been made in support of interventions to build local institutional and fiscal state capacity (Parnell, 2020) or to upscale existing community initiatives in order to achieve “transformative urban recovery” (Sverdlik and Walnycki, 2021). Both types of interventions are important, but in this piece we build on our engagements as a researcher and practitioner in various international projects, networks and initiatives, such as ICLEI Africa’s webinar series “Building sustainable African cities during and after a pandemic:

Lessons from past and present crises”, to argue in favour of a lateral approach to post-pandemic development. Such an approach recognises the significance of peer-to-peer exchange and learning between cities and urban communities at large as an important accelerator of progress on the localisation of global policy agendas (Oloko et al. 2021).

HOW THE CITY OF JOHANNESBURG IS IMPLEMENTENG THE SDG’s

The scope of development has begun to transcend the traditional delivery mandate of cities. Thus, there is a need to ensure strategic and collective action among key urban actors. Perhaps the opportunity for cities in the future will be further heightened by SDG 11 which, for the first time focuses on cities and created a global urban agenda.

The Environmental and Infrastructure Services Department (EISD) mandate is to regulate, monitor and influence sustainable use of natural resources and protection of the environment; whilst facilitating infrastructure planning to support engineering services in the Cityof Johannesburg. The mandate is executed through policy development, regulatory and monitoring rather than being an implementation agent or a service delivery agent. Having a policy-driven & regulatory focus, the Department has limited project implementation as far as “testing” policy application.

EISD has developed an Environmental Sustainability Strategy [ESS] which seeks to define and prioritize the key environmental sustainability issues facing the City, while developing an understanding of the drivers of the current situation and unpack the implications of the status quo for the well-being of citizens and the economy, with the intention to lay the foreground towards a sustainable city.
Environmental sustainability is a collective responsibility across the City’s Municipal Departments and

Municipal Entities (MEs), the private sector, individual citizens, civil society, and other levels of government. The ESS therefore also serves as an important governance tool by directing and galvanizing responses through partnerships between these role-players to address not only the symptoms, but importantly also the cause of the environmental sustainability challenges.

- The EISD also focuses on the SDGs outlined below with an environmental lens:
- Goal:3- Good Health and Well-being
- Goal:6- Clean Water and Sanitation
- Goal:7- Affordable and Clean Energy
- Goal12- Responsible Consumption and Production
- Goal:13- Climate Action
- Goal:15- Life on Land
- Goal:17-Partnerships to achieve the Goal

(City of Johannesburg (2021). Climate Action Plan. EISD, City of Johannesburg. March 2021.

SDG 3: ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

Air Quality in the City of Johannesburg is influenced by emission of gaseous and particulate pollutants from anthropogenic activities and natural sources. Transportation, mining, and domestic fuel burning are some of the key largest sources of air pollutants in the CoJ. In order to achieve acceptable air quality, the City will have to implement a variety of emission reduction strategies geared towards the improvement of air quality within the City.

In South Africa, exposure to ambient fine particulate matter (PM2.5) air pollution causes more than 24,000 early deaths each year. The risk of ill-health and premature death associated with air pollution is determined by air pollutant concentrations and length of exposure. Several segments of the population are particularly vulnerable to air pollution: elders, people with underlying health conditions, and children. The elderly and people with pre-existing lung and cardiovascular diseases are particularly sensitive to polluted air. Children are also susceptible because their respiratory systems are still developing.

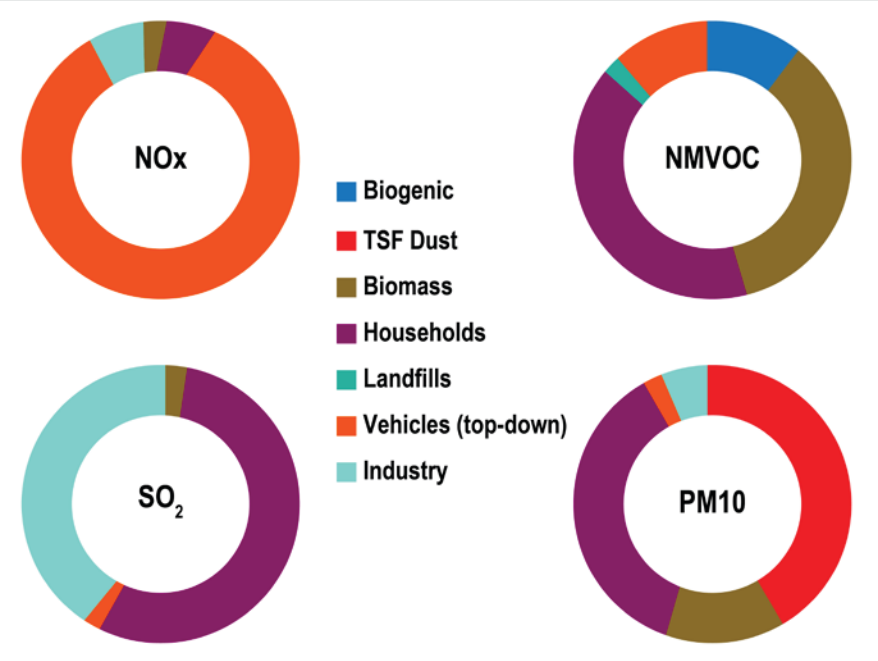

Figure 1: Sector contribution to total annual criteria pollutant emissions within CoJ

Interventions/Projects

The department is currently implementing the following interventions in line with SDG3:

- Implementation of the Air Quality Management Plan (AQMP) - The City of Johannesburg's first AQMP was developed in 2003. The revised 2020 AQMP puts at the center, the protection of the health and wellbeing of cities residents, driven by the vision that seeks to achieve acceptable air quality levels within the city. In this context, acceptable air quality level is defined as air quality that fulfills the following criteria:
- Complies with National Ambient Air Quality Standards (NAAQS),
- Supports liveable, sustainable, and resilient communities,
- Is odorless, tasteless and looks clear.

- Community Dust monitoring project- The project was initiated to determine dust fall compliance levels in the City, in line with the National Dust Regulations. The project focused on the undertaking of a comprehensive dust sampling and monitoring programme aimed at assessing the levels of dust and heavy metals content in the communities around dust generating activities and mine dumps. The project was geared at generating data that will indicate the dust exposure levels in communities, in terms of public health exposure levels. The data generated will be used to make recommendations for specific actions deemed necessary to help mitigate the exposure to dust generating activities.
- Air Quality Monitoring Network- The City established its first air quality monitoring station in Alexandra, a township to the north of the Johannesburg CBD, in 2002, followed by several additional air quality monitoring stations in strategic locations across the city (Newtown, Delta Park, Buccleuch, Jabavu,Orange farm, Ivory Park, Diepsloot and Davidsonville.

SDG 6: ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

According to United Nations SDG report 2021, billions of people around the globe live without safely managed drinking water, sanitation, and hygiene services. Water is required across all sectors of society to produce food, energy, goods, and services. Over the last century, global water use has increased at more than twice the rate of population growth. Many water sources are drying up, becoming more polluted or both. In addition to water stress and water pollution, countries are facing growing challenges linked to degraded water-related ecosystems, water scarcity caused by climate change, underinvestment in water and sanitation, and insufficient cooperation on transboundary waters.

Water security is a major challenge facing the City and the country as a whole. The city is the largest consumer of water from the Integrated Vaal River System (IVRS). The current abstraction of raw water in the IVRS by Rand Water exceeds the allocated abstraction volume of 1300 Mm^3/annum. This excessive demand by Rand Water and its customers creates an even larger than expected water shortage.

Improving water security satisfies the public and environmental health needs together with social and economic development needs, while coping with the water-related risks through activities that support and enhance water availability, access, and safe use. The risks impact on the City's ability to support the livelihood of people and productive economies, and hence the need to be identified, prioritised, and mitigated against. The city would also need to improve its resilience against these risks by putting in place adaptation measures.

Interventions/Projects

EISD is currently implementing the following interventions in line with SDG 6:

- Groundwater drilling, exploration, and equipping- The City is currently implementing the Water

Conservation and Demand Management Strategy to ensure that the water demand is optimized. Some of the interventions to ensure that demand does not outstrip supply include establishing alternative water supply sources, of which groundwater is one of them. Twenty-six (26) boreholes were drilled and commissioned to date

SDG 7: ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Over the last decade, access to electricity has expanded, use of renewable energy in the electricity sector has increased, and energy efficiency has improved. Still, millions of people are without electricity, and one third of the global population lack clean cooking fuels and technologies. Progress in ensuring energy access has been uneven across regions, leaving the most vulnerable even further behind. (UN, SDG report 2021).

Interventions/Projects

EISD is currently implementing the following interventions in line with SDG:

- Energy Efficiency and Demand Side Measures (EEDSM) programme
- Feasibility Study for Renewables- The City has undertaken various studies on renewable energy, to enable the fulfilment of the aspirations of the Energy Plan of the City. The broader intentions of these efforts are to ensure that there is reduction of city's carbon footprint, energy security and reduction of energy poverty levels in communities.The Department in collaboration with City Power, has undertaken a feasibility to assess the following
  * Potential for the use of gas as generation source at overloaded substations of City Power, where the Notified Demand has been exceeded.
  * Potential alternative energy generation using PV of rooftops of most warehouses in the City;
  * Potential for the installation of electric car charging in parking lots within the City;
  * Types and forms of storage systems the City can use to store energy generated during the day for use later during peak.

- Electric vehicle studies- The department through the partnership with Sustainable Energy Africa (SEA)conducted feasibility study for Electric Vehicle (EV) readiness. The aim of the study was to assessthe impact of EV uptake on the City Power grid and to also look at the following factors:
  * Managing EV uptake
  * Infrastructure and tariffs
  * Exploring role of public in EV charging
  * EV success factors.

SDG 12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

A growing global population combined with the unsustainable use of natural resources is having a devastating impact on our planet – propelling climate change, destroying nature and raising pollution levels. About 14% of the world's food is lost along the supply chain prior to the retail level. Around the world, 1 million plastic drinking bottles are purchased every minute, and 5 trillion single-use plastic bags are thrown away each year. The global material footprint increased by 70% between 2000 and 2017. (UN, SDG report 2021).

One of the biggest challenges facing the City is growing volumes of waste generated in the City and the diminishing landfill space for waste disposal. The City disposes over 1.4 million tons of waste annually and all the waste generated is disposed at the City's four (4) operational landfill sites which are left with less than 5 years of disposal air space. Illegal dumping of waste at the City's open spaces is one

problem that calls for serious intervention to be put in place to address the problematic waste streams like builders' rubble and green waste.

Development, consumerism, and population growth are the key contributory factors to ever increasing waste generation in the City. At the current rate of waste generation and disposal, it is eminent that the City will have no space for waste disposal in the next 5 years.

Interventions/Projects

EISD is currently implementing the following interventions in line with SDG:

- Separation at source- The implementation of separation at source program will assist in the recovery of valuable resources from waste and therefore diverting recyclable waste from landfill, therefore extending the lifespan of the city's landfills. The department initiated the separation at source at Council facilities and registered private companies that undertake waste management activities within the City to monitor the recycling.

  * Development of Waste treatment technologies- The department is developing waste treatment technologies aiming at treating residual non-recyclable waste and bio-degradable waste.
  * Waste to Energy plant, will treat residual 500 000 tons of waste and generate bout 25MW of electricity and create over 400 jobs. The electricity generated will be fed to grid substituting coal generated electricity with a greener electricity option in line with the city's energy diversification strategy.
  * Biodigester pilot project, will treat 50tons a day of biodegradable waste from the Joburg Market and dailies. The waste will be processed through a bio-digestion process and the gas generated will be used for to fuel the busses therefore replacing diesel and reducing GHG emissions form the buses. A full feasibility will be developed and will inform the upscaling of the project.
  * Landfill Gas to Energy (LFG) Project -The main aim of the project is to mitigate the harmful Greenhouse Gases (GHG) emitted from CoJ landfills. The project is also in support of the City's desire to"Shifting to low carbon economy". Approximately 19MW of electricity will be generated from the project, which is equivalent to electricity usage of approximately 12 500 middle income households.nThe projects will divert massive volumes of waste from landfills, while offering the city an alternative to waste disposal by landfill.

- Development Waste Treatment and Disposal Strategy- The aim of this project was to develop a strategy which will assist the City in the planning and managing waste and further advise on the available infrastructure, which included costing, legal implications, SWOT and Matrix analysis on the treatment/ disposal options.

SDG 13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Despite a pandemic-related economic slowdown, the climate crisis continues largely unabated. A temporary reduction in human activities resulted in a dip in emissions. However, concentrations of greenhouse gases continued to increase in 2020, reaching new record highs. It was one of the three warmest years on record, with the global average temperature about 1.2°C above the 1850–1900 baseline. The world remains woefully off track in meeting the Paris Agreement target of limiting global warming to 1.5°C above pre-industrial levels and reaching net-zero carbon dioxide (CO2) emissions globally by 2050. As of December 2020, over two thirds of the world's GDP was being generated in places with actual or intended "net zero by 2050" targets, covering over half of the world's population and emissions. (UN, SDG report 2021)

The City has completed its Climate Action Plan (CAP) whose objective is to achieve carbon neutrality and climate resilience by 2050. The CAP is also responding to the City's six climate change commitments, signed in 2018. The following are the se commitments are as follows:

- Paris-compliant climate action plan;
- Net zero carbon buildings;
- Advancing towards zero waste;
- Achieving an equitable low carbon transformation;
- A just transition; and

The City has been developing the greenhouse gas emissions inventories since the year 2013. From an adaption point of view, average mid-day temperatures have increased by nearly 1.50C, with average nighttime temperature risen by 10C over the last 40 years. Also, rainfall patterns have become less predictable.

(City of Johannesburg (2021). Climate Action Plan. EISD, City of Johannesburg. March 2021.)

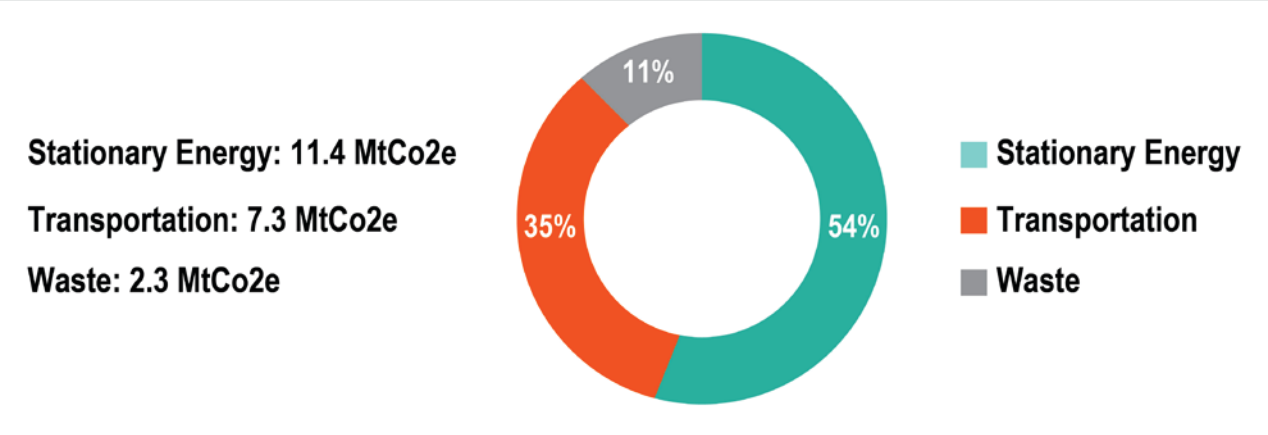

Figure 2: City of Johannesburg's GHG emissions

The largest emissions are coming from the built environment (manufacturing, residential and commercial), predominantly from electricity. This sector also contains emissions from other fuels including:

- Industrial sector: coal, with some natural gas, fuel oil and paraffin.
- Commercial: natural gas.
- Residential: paraffin, coal and natural gas, some wood.
- Emissions from transport are largely from on-road vehicles mainly from petrol and diesel use. Emissions from waste makes up the remainder, largely methane from decomposition of solid waste (in landfill) and treatment of wastewater.

Interventions/Projects

The department is currently implementing the following interventions in line with SDG:

- Implementation of the Climate Action Plan (CAP) –The CAP implementation Plan focuses on the followinginterventions:
  * **Development of the Greenhouse Gas Inventory -**The City is currently developing the 2018 Greenhouse Gas Inventory. This is done in order to update the 2016 Inventory that was done as part of the CAP development process.
  * **Implementation of the Climate Change Adaptation Plan -** The latest adaptation plan of the City highlighted flooding and extreme heat associated with heatwaves, as some of the key climate risk to be given priority. In this regard, the City has formed a Flooding Working Group tasked with the responsibility of coordination of flooding work in the City. The department is also finalizing the flooding hotspots regional work. This work is intended to update the city's flooding hotspots and once concluded will inform a flooding hotspot map to use to guide land use decisions in the City.

SDG 15: PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

Land degradation now affects one fifth of the Earth's land area. Wildlife trafficking threatens human health, economic development, and security through the spread of zoonotic diseases (transmitted from animals to humans), which now represent the majority of emerging infectious diseases.

The City recognizes the deep interconnectivity between biodiversity conservation, poverty alleviation and sustainable development. It is therefore critical for the City to ensure long term persistence of biodiversity and ecosystem services, especially in the context of climate change. Biodiversity refers to the diversity within and among species and ecosystems or more simply, the variety of living things in a specific habitat or region.

The term 'urban biodiversity' refers to the biodiversity located within urban areas as in the City of Johannesburg. The character and quality of urban ecosystems is reflected by the plant and animal species that are present in the urban ecosystem, their interactions with one another and with their surrounding environment. Urban biodiversity is constantly influenced by human activity social, economic, and cultural dynamics.

Interventions/Project

EISD is currently implementing the following interventions in line with SDG:

- **Development and gazetting of Bioregional Plan-** A Bioregional Plan is a map of biodiversity priorities with accompanying land-use planning and decision-making guidelines. This tool informs land-use planning, environmental assessment and authorizations, and natural resource management by a range of sectors whose policies and decisions impact on biodiversity. A Bioregional Plan classifies Biodiversity Priority Areas into two main categories namely: Critical Biodiversity Areas (CBAs) and Ecological Support Areas. Critical Biodiversity Areas (CBAs) are areas that are required to meet biodiversity targets for species, ecosystems, or ecological processes. Such areas need to be kept in a natural or near-natural state, with no further loss of habitat or species. Ecological Support Areas (ESAs) are areas not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of Protected Areas or CBAs and for delivering ecosystem services.
- **Implementation of Ecological Management Plans** in nature reserves to improve and maintain their ecological integrity. Ecological Management Plans (EMP's) have been developed for fourteen (14) of the City's Nature Reserves. EMPs inform how protected areas are managed and adequate implementation of these plans is critical for the maintenance of ecological, economic, and social viability of biodiversity priority areas. Eight (8) of these (14) Nature Reserves are being taken through the proclamation process in terms of the National Environmental Management: Protected Areas Act (No 57 of 2003).
- **Implementation of Invasive Vegetation Control Outside Protected Areas (Conservation Areas)**- Invasive Species are non-native to an ecosystem and are mostly likely to cause economic or environmental harm or adversely affect human well-being. Section 8 of the Invasive Species Regulations of the National Environmental Management: Biodiversity Act 2004 (Act no. 10 of 2004) requires management authorities of protected areas and organs of state in all spheres ofgovernment to prepare and an Invasive Species Monitoring, Control and Eradication Plans. The City currently has an ongoing Invasive Vegetation Control Programme targeting Biodiversity Priority Areas outside Protected Areas.
- **Protected Area Proclamation-** The City has initiated proclamation of its Municipal Nature Reserves into Protected Areas in terms of National Environmental Management: Protected Areas Act (No 57 of 2003). In terms of this Act the Protected Areas status is the highest level of protection that can be granted to a Biodiversity Priority Area. Therefore, the proclamation more Municipal Nature Reserves

and other Biodiversity Priority Areas will ensure that more priority ecosystems and landscapes are conserved and protected, increasing the City's Ecological Estate to provide Ecological Goods and Services in perpetuity, contributing to the achievement of the desired resilient City.

SDG 17:STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

The impacts of the pandemic are leading to debt distress in many countries, and also limiting countries' fiscal and policy space for critical investments in recovery (including access to vaccines), climate action and the SDGs, threatening to prolong recovery periods. The interconnected global economy requires a global response to ensure that all countries, developing countries in particular, can address compounding and parallel health, economic and environmental crises and recover better. Strengthening multilateralism and global partnerships is more important than ever.(UN, SDG report 2021).

Interventions/Projects

EISD has the following partnerships for various interventions in line with SDG:

- **Department of Energy (DoE) –** benefits from grant funding for energy demand side technologies e.g., retrofitting of streetlights through the installation of LED technologies, retrofitting Council owned buildings.
- **C40 Climate Leadership Group -** assist with the CAP implementation for the City - sponsored 2 paid Staff members for 24 months and for capacitation of employees.
- British High Commissioner sponsoring capacity to support CAP implementation.
- **World Bank –** Co-funded the development of the City's regional - Air Quality Management Plan (AQMP).
- **C40 African Cities for Clean Air Initiative –** requested funding for a feasibility study for Implementation of Low Emission Zone in CoJ.
- **Department of Environment, Forestry and Fisheries (DEFF) -** providing security for Buccleuch air quality station for monitoring ambient air quality management.
- **UK-PACT via the British Commission –** benefitting from a study towards the development of the Electric Vehicle Readiness Programme for the City.
- **Infrastructure Investment Programme for South Africa IIPSA –** co-funding towards feasibility study of a Waste to Energy PPP project.
- **Global Environment Facility-** co-funding towards feasibility study for pilot bio-digester project.
- **ICLEI –** advisory services in all matters of environmental sustainability.
- **Sustainable Energy Africa (SEF)** for programme support on energy sustainability.
- **World Research Institute -** The City has a strategic partnership with the World Research Institute (WRI) to build capacity and knowledge towards a water resilient Joburg.

As the rate of urbanization continues to intensify, the scope of development also begins to transcend beyond the traditional delivery mandate of cities. Hence, the need to mobilize for strategic and collective action among key urban actors. The emergence of a new urban agenda includes the establishment of strategic partnerships by these key urban actorsand is intended to serve as a roadmap to drive the implementation of the SDGlocalization and overall implementation.
(City of Johannesburg (2021). Climate Action Plan. EISD, City of Johannesburg. March 2021.)

INTERNATIONAL RELATIONS CURRENT AFFAIRS:

This international relation affairs section shines the spotlight on some of the international relations related trips, meeting, partnerships and collaboration that city officials are engaging in. Our first covered story is the Executive Mayors' trip to Egypt and France, followed by the hybrid diplomatic corps engagements.

THE EXECUTIVE MAYOR'S INTERNATIONALTRIP TO EGYPT AND FRANCE

The Executive Mayor undertook a visit to selected projects in Egypt and France to familiarise herself with partnership practices, to meet with potential investors, as well as to engage her C40 counterparts. The visit also served as a served as an opportune milestone for Johannesburg to evaluate global market research through exploration of possible waste solutions, alternative service delivery alternatives through exploring available international strategic partnerships. The visit also presented an opportunity to explore the possibility of pursuing of a Memorandum of Understanding with Cairo (in terms of City-to-City relations).

Some high-level meetings honoured by Executive Mayor Phalatse were as follows:

- Bilateral Meeting between Executive Mayor Phalatse and General Khaled Abdel Aal, Governor of Cairo
- Bilateral Meeting between EM Phalatse ad Professor Azza Sirry, Professor of Urban Planning at Housing and Building National Research Center (HBRC)
- Courtesy meeting with Hassan El Far - Chairman of Construction Authority for Potable Water & Wastewater

The international visit by the Executive Mayor aimed to:

- Change the perceptions of the City of Johannesburg;
- Attracting interest in infrastructure development opportunities and partnerships; as well as
- To meet selected C40 Mayors.

HYBRID DIPLOMATIC CORPS ENGAGEMENT, 15 JUNE 2021

The Hybrid Diplomatic Corps Engagement between Executive Mayor Phalatse with Members of the Diplomatic Corps Based in South Africa was much welcomed as the last engagement had last been held virtually in 2020. This engagement served as a welcome opportunity of an introduction of the Mayoral Committee members and highlighting their various portfolios. The Executive Mayor addressed the diplomats by illustrating the vision, mission and core objectives of the Multi-Party Government, as well as highlighting potential areas of engagement and investment that are available in the City of Johannesburg. Members of the Diplomatic Corps were grateful for engagement. And most indicated their countries' keenness to collaborate with the City to eventually ensureA prosperous Africa and the world. The sentiment expressed was that,"A prosperous Africa needs engaged and engaged Cities".

Great sentiments were expressed on the diplomats' gratefulness to hear the Priorities of the Multi Party Government highlighted in a transparent manner.

The Diplomatic Corps Engagement are a pivotal platform for engagement by the Executive Mayor. This is an opportune platform for the City leadership to articulate their vision for the city, as well as to highlight challenges facing the city, and key projects and opportunities available in the City of Johannesburg that can be leveraged on by global stakeholders.

The City of Johannesburg endeavors to hold Diplomatic Corps Engagements more frequently in the future.

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International Relations Newsletter

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