



## Gender into Urban Climate Change Initiative

### Status Quo of Pilot City: City of Ekurhuleni

#### OVERVIEW

##### Gender into Urban Climate Change Initiative (GUCCI) & Planned Gender Assessment

According to the UN IPCC 1.5C degree report, human activities have been responsible for approximately 1C degree increase in temperature globally since before the industrial revolution. If we continue to increase greenhouse gas emissions at the same levels, we are likely to reach a 1.5C degree increase within the next 20 years or sooner. Research has shown that extreme climate and weather conditions were observed around the 0.5C degree increase mark. The report states that “trends in intensity and frequency of some climate and weather extremes have been detected...” (IPCC 2018), and this increase in frequency and intensity will only continue to worsen as temperatures continue to rise.

Climate change is extremely serious in the African context, with high levels of inequality, poverty, limited resources, and industrial led environmental destruction. Africa is going to experience some of the worst extremes of climate change and increasing temperatures. The IPCC 1.5-degree Report tells us that Sub-Saharan Africa, has already been experiencing more frequent and intense climate extremes, and an overshoot of 1.5C degree increase will mean devastating consequences for the region. The temperature increases that the region will face are projected to be at least twice higher than the global average.

Gender CC – Women for Climate Justice commissioned this desktop study to explore the nexus between gender issues and the impacts of climate change in cities, under the scope of the Gender into Urban Climate Change Initiative (GUCCI) project. The project attempts to analyse options for integrating gender and social issues into urban climate policies in several pilot cities. This study forms a basis to explore the specific climate change challenges that women are exposed to in cities and urban areas. While there is an increased recognition of the impacts of climate change on women, gender issues are rarely considered in urban climate policy. There is thus a need to review and intervene on climate change policy at a local government level. This report is a status quo of the pilot city, Ekurhuleni, South Africa.

#### 1. PILOT CITY OF EKURHULENI

Ekurhuleni is an XITsonga word that can loosely be translated as the place of peace. The City is the fourth largest municipality in South Africa. It is one of the five main districts in the Gauteng province and one of the eight metropolitan municipalities of South Africa. It can also be described as a manufacturing and industrial hub in the province. It accounts for nearly a

quarter of Gauteng's economy, which in turn contributes over a third of the national Gross Domestic Product. It is home to the largest airport in South Africa. With regards to climate change, given the type of industries in the area, the city of Ekurhuleni is a large emitter of GHGs. The city of Ekurhuleni has a pro-poor strategic focus with an overall strategy to improve the living conditions of the poor by promoting the social and economic development of communities. <sup>i,ii</sup>



**Figure 1 Map of the City of Ekurhuleni [Source: [www.municipalities.co.za](http://www.municipalities.co.za)]**

**1.1. General information**

Location, size, population, density etc.

The City of Ekurhuleni covers an area of 1 975 square kilometres in the Gauteng Province of South Africa. The City has a population of approximately 3.4 million people and makes up about one third (28%) of Gauteng's population, with a population density of approximately 1,400 people per square kilometre. It is one of the most densely populated

areas in the province, and the country.<sup>iii</sup> Population densities are high especially in the former “township” and informal residential areas. Approximately 22% of the population resides in informal and inadequate housing.

Males make up 51% of the population within the city and females account for 49%.<sup>iv</sup> At least 71% of the population is between the age of 15 and 64. Only 6.1% of the population are over 65. There is a high level of unemployment and is estimated to be 40% of the population. Almost a third of the households in the city are female headed households (32.8%).<sup>v vi</sup>

One of the key challenges for the city is service delivery, with only 56.5% having taps in their homes, 85% have flush toilets, and 85% have electricity.<sup>vii</sup> This only accounts for the population in formal housing areas, while people living in informal settlements have very little to no services provided by the municipality.

### 1.2. Socioeconomic factors

The structure of the City of Ekurhuleni’s economy is dominated by the following sectors: manufacturing, finance; and business services; community services and general government and to a lesser extent the trade and hospitality sector.<sup>viii</sup> Ekurhuleni’s contribution to the national economy was at least 8.8% in 2016 and is thus regarded as the fourth largest city in terms of the size of its economy.<sup>ix</sup> However, the city continues to experience high levels of inequality and poverty. Approximately 1.21 million people or 35% of the population live in poverty. Unemployment amongst young people is high, levels of serious and violent crimes creates an environment of fear and vulnerability. Health and social development in the city are overstretched.<sup>x</sup>

Almost 20% of the households are living in 119 informal settlements spread across the City. 32.8% of households within the City are female headed and 3,737 households are headed by children below the age of 18. The average annual household income within the City is R 29,400 which is about the same in Gauteng province and South Africa.

Another major concern for the City is that of food insecurity as a result of the high levels of poverty. The city’s focus is therefore on investing in food networks that can support cash-strapped individuals and creating “urban spaces that are not only meant for houses but also food production networks”. Food security is also included in the city’s Macro Strategic Framework, which identifies sustainable agriculture as a programme within the re-industrialise strategic goal.<sup>xi</sup> This, however, is constrained by the legacy of mining and poor past land use planning that was and still is driven by mining. Mining has severely impacted upon the productivity of land and has rendered large areas unusable. Mining contributes only 2% to Ekurhuleni economy. Many of the mines within Ekurhuleni are no longer operational.<sup>xii</sup>

Given the socio-economic challenges mentioned above, the City's focus is described in the Integrated Development Plan 2016-2021 as a 'Pro Poor' agenda which emphasises "short and medium term priorities meant to support improved and impactful service delivery; and accelerating and broadening access to quality municipal services to the poor while maintaining quality service levels in affluent areas".<sup>xiii</sup>

## 2. CLIMATE CHANGE IN THE CITY OF EKURHULENI

### 2.1. Climate hazards affecting city

The City of Ekurhuleni is facing a few serious environmental challenges. These challenges include a lack of space for landfills, high levels of pollution from industries and mines, polluted rivers, streams and wetlands and biodiversity loss due to urbanisation and agriculture. The increase in urbanization has resulted in an increase in the surface water runoff of almost 300%. The socio-economic challenges and the degraded environment of the city landscape is being compounded by the onslaught of climate change.

The impacts of climate change in the City of Ekurhuleni will manifest in an increase in rainfall, an expected three degrees rise in temperatures, more heatwaves, and an increase in intensity of both droughts and floods, bush fires and waterborne diseases, (to mention the key ones). The results will be felt through water and food shortages, damage to livelihoods and infrastructure, destruction of homes, degradation of land and biodiversity.<sup>xiv xv</sup>

The city has identified transport, road infrastructure and food security as the key areas that will affect the basic operations of the municipality and its ability to respond to pro-poor and service delivery programmes.<sup>xvi</sup>

#### Greenhouse gas emissions of the City of Ekurhuleni

Greenhouse gases are being monitored and industries emitting such gases are licensed. The City of Ekurhuleni has a greenhouse gas inventory, prepared for the 2014-2015 financial year. The sectors covered are as follows:

- **Stationary energy** - 9, 084, 522 tCO<sub>2</sub>e

This includes emissions from Manufacturing industries and construction - Emissions from fuel combustion within the city boundary - Furnace Oil; Residential Buildings - Emissions from fuel combustion – LPG; Residential Buildings - Emissions from fuel combustion – Paraffin; Commercial and Institutional Buildings and Facilities - Emissions from grid-supplied energy - Business buildings; Commercial and Institutional Buildings and Facilities - Emissions from grid-supplied energy - Government buildings; Residential Buildings - Emissions from grid-supplied energy; Residential Buildings - Emissions from grid-supplied energy – Coal; Manufacturing industries and construction - Emissions from fuel combustion within the city boundary – Coal; Manufacturing industries and construction - Emissions from fuel combustion within the city boundary - Sasol Gas (Hydrogen Rich); Combustion in Commercial and Institutional Buildings and Facilities - Fuel Combustion;

- **Waste** - 2, 451, 015 tCO<sub>2</sub>e  
These are from Wastewater Treatment CH<sub>4</sub> Emissions; Biological Treatment of Waste; Incineration and Open Burning; Solid Waste - Methane Commitment - In Boundary.
- **Transportation** – 7, 852, 107 tCO<sub>2</sub>e  
Emissions from Aviation - Emissions from fuel combustion for aviation; On-road transportation - Emissions from fuel combustion on-road transportation occurring within the city boundary - Diesel Fuels; On-road transportation - Emissions from fuel combustion on-road transportation occurring within the city boundary - Petrol Fuels; Waterborne navigation - Emissions from fuel combustion for waterborne navigation occurring within the city boundary; Off-road transportation - Emissions from fuel combustion for off-road transportation occurring within the city boundary; Railways - Emissions from fuel combustion for railway transportation occurring within the city boundary; Off-road transportation - Emissions from grid-supplied energy consumed within the city boundary for off-road transportation.<sup>xvii</sup>

A key commitment of the Ekurhuleni Metropolitan Municipality is improvement of ambient air quality and the reduction of GHG emissions within the region. The two largest contributing sectors to poor air quality are the industry and manufacturing sectors and the transportation sectors. The Air Quality legislation has strict controlling mechanism to ensure that these sectors adhere to an acceptable standard of emissions. The City of Ekurhuleni will therefore be pursuing the following actions as a response to cut the Green House Gas Emissions<sup>xviii</sup>:

- Update the GHG inventory for Ekurhuleni to identify all key emissions
- Identify alternate sources of heating and cooking mechanism in informal settlements to ensure improvement in ambient air quality
- To promote cleaner production and continuous improvement in best practice as it pertains to air pollution prevention and minimization.
- Impose stricter controls on industry and manufacturing to ensure that they comply to National legislation

### 3. THE CITY'S RESPONSE TO CLIMATE CHANGE

#### 3.1. Governance and services (No Organogram approved by the council was available for the City of Ekurhuleni)

The basic structure of the local government in Ekurhuleni is made up of 112 wards. The municipality comprises 224 councillors, consisting of the 112 directly elected ward councillors and 112 proportional representatives elected through political party lists. The key department engaging in climate change issues is the Environmental and Resource

Management and the Climate Change Response Strategy is the overarching framework for climate change actions for the Ekurhuleni city region.<sup>xix</sup>

The municipality is responsible for electricity, water, sanitation, waste and infrastructural services.

In addition, the Integrated Development Plan (IDP) of the City of Ekurhuleni as informed by the Municipal Systems Act of 2000 is part of the municipality's critical governance framework. The reviewed Integrated Development Plan states that it highlights the municipality's contribution towards international, continental and regional commitments towards sustainable livelihoods, economic development and social cohesion as espoused by Sustainable Development Goals and the African Agenda 2063. It also re-enforces the City's commitment towards national and provincial planning frameworks and directives such as the National Development Plan 2030 as well as the Provincial ten-pillar programme of radical Transformation, Modernization and Reindustrialization which has been identified as a strategic roadmap to move the Gauteng City Region forward over the next five to ten years.

**Departmental Focus Areas for the City of Ekurhuleni are as follows:**

- Reduce pollution
- Catchment management
- Climate proofing and energy
- Environmental Governance
- Protect natural Resources
- Environmental Education
- Sustainable Infrastructure

### **3.2. Climate policies/action plans**

#### **3.2.1. National framework**

The National Climate Bill is in the process of being adopted. Once this is done, this document will serve as the overarching document for all levels of government. An interesting policy - Gender Mainstreaming in the Environment Sector and Action Plan 2016-2021- should be explored for the project.<sup>xx</sup>

On aspects of gender equality, South Africa's commitment is evident in it being party to the following international treaties:

- Beijing Declaration and Platform for Action (1995);
- United Nations Women Strategic Plan (2014 – 2017);
- The Convention for Biological Diversity Gender Action Plan (2008);
- The Convention on Biological Diversity (CBD);
- The United Nations Convention to Combat Desertification (UNCCD);
- The United Nations Framework Convention on Climate Change (UNFCCC)

The Constitution of South Africa which was promulgated in 1996 and has a strong bill of rights that commits the country to establishing a foundation for a democratic and free society based on basic human rights (Constitution, 1996:1). South Africa's Constitution is the supreme law for the country upon which all legislation and policy is based. The Bill of Rights within the Constitution is the cornerstone of democracy in the country as it promotes the values of human dignity, human rights, equality and condemns discrimination against anyone on any grounds including sex and gender. Following on the Constitution, there are key national legislations that reinforce gender equality for example, the Employment Equity Act (No. 55 of 1998); The National Environmental Management Act (NEMA 107, 1998); and Gender Action Plan under the Convention on Biological Diversity (2008).

### **3.2.2. City-level commitments, strategies, e.g. mitigation and adaptation in various sectors**

The Climate Change Response Strategy is the overarching framework for climate change actions for the Ekurhuleni city region. The Environmental Resource Management (ERM) Department has the responsibility to engage with key departments and develop individual Climate Change Response Plans, which will start to highlight the effects and impacts that climate change will have on the particular department's sphere of work.

In addition, at a local level the key documents are as follows:

- The Integrated Development Plan (IDP) re-enforces the City's commitment towards national and provincial planning frameworks and directives such as the National Development Plan 2030, as well as the Provincial ten-pillar programme of radical Transformation, Modernization and Reindustrialization which has been identified as a strategic roadmap to move the Gauteng City Region forward over the next five to ten years. The IDP is updated every two years and involves a public participation element.
- The reviewed Integrated Development Plan is to facilitate the implementation of the City's long-term planning framework – the Growth and Development Strategy (GDS 2055). The objectives of GDS 2055 are about establishing a high performing metropolitan government towards building a social inclusive, locally integrated and competitive global player as reflected in the model of Gauteng City Region. The GDS sets out three-stages of transition to 2055 and identifies a range of imperatives that serve as a guide towards each transitional period. The transition to a 'Delivering City' is targeted for the period 2016 – 2021 which coincide with the 5-year term for the current Council.

Community and stakeholder engagement play a central role in the development and implementation of the 5-year plan; this therefore means that the 5-year IDP together with its subsequent annual revisions must and will ensure that the needs and aspiration of communities particularly at ward level are considered and followed through.



**List of the urban policies (e.g. strategies/programmes/regulations) at place (sector-overarching programmes may be listed on top)**

Sector	Mitigation	Adaptation
<b>Overarching</b>	Growth and Development Strategy 2050	Growth and Development Strategy 2050
<b>Overarching</b>	Integrated Development Plan	Integrated Development Plan
<b>Environment</b>	Ekurhuleni Complete Climate Change Response Strategy Guidelines for Departments 2018  <a href="https://www.ekurhuleni.gov.za/3656-13-2015-climate-change-response-strategy-final/file">https://www.ekurhuleni.gov.za/3656-13-2015-climate-change-response-strategy-final/file</a>	Ekurhuleni Complete Climate Change Response Strategy Guidelines for Departments 2018
<b>Energy</b>	EKURHULENI METROPOLITAN MUNICIPALITY'S ENERGY AND CLIMATE CHANGE STRATEGY. <a href="https://www.ekurhuleni.gov.za/163-pol-083/file">https://www.ekurhuleni.gov.za/163-pol-083/file</a>	
<b>Urban Planning</b>		<b>The Urban Design Policy Framework.</b> The draft Urban Design Policy is the basis for broader urban design thinking in spatial planning and is intended to provide the policy foundation around which several related activities will revolve, specifically the precinct planning process, as well as the activities of the Urban Design Review Committee. <a href="https://www.ekurhuleni.gov.za/2990-emm-draft-urban-design-policy-16-march-2017/file">https://www.ekurhuleni.gov.za/2990-emm-draft-urban-design-policy-16-march-2017/file</a>
<b>Human settlements</b>	DEVELOPMENT OF INTEGRATED SUSTAINABLE HUMAN SETTLEMENTS IN EKURHULENI Item B-HD (18c-2004) MC 22/04/2004 THE DEVELOPMENT	DEVELOPMENT OF INTEGRATED SUSTAINABLE HUMAN SETTLEMENTS IN EKURHULENI Item B-HD (18c-2004) MC 22/04/2004 THE DEVELOPMENT OF INTEGRATED SUSTAINABLE



	OF INTEGRATED SUSTAINABLE HUMAN SETTLEMENTS IN EKURHULENI. <a href="https://www.ekurhuleni.gov.za/209-pol-129/file">https://www.ekurhuleni.gov.za/209-pol-129/file</a>	HUMAN SETTLEMENTS IN EKURHULENI. <a href="https://www.ekurhuleni.gov.za/209-pol-129/file">https://www.ekurhuleni.gov.za/209-pol-129/file</a>
<b>Water and sanitation</b>		WATER AND SANITATION DEPARTMENT CONTRACT NUMBER: A-WS 03-2017 BID DOCUMENT (IN COMPLIANCE WITH THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011 PUBLISHED IN GOVERNMENT GAZETTE NO. 34350 OF 8 JUNE 2011). <a href="https://www.ekurhuleni.gov.za/attachments/article/7223/A-WS%2003-2017%20.pdf">https://www.ekurhuleni.gov.za/attachments/article/7223/A-WS%2003-2017%20.pdf</a>
<b>Transport</b>	<a href="https://www.ekurhuleni.gov.za/3227-final-idp-2018-2019-council-19-may-2018-final/file">https://www.ekurhuleni.gov.za/3227-final-idp-2018-2019-council-19-may-2018-final/file</a>	<b>Climate Change and Roads and Storm water</b> <a href="https://www.ekurhuleni.gov.za/3227-final-idp-2018-2019-council-19-may-2018-final/file">https://www.ekurhuleni.gov.za/3227-final-idp-2018-2019-council-19-may-2018-final/file</a>  ROAD RELATED SERVICE PROVISIONS In terms of section 75A of the Local Government: Municipal Systems Act, Act 32 of 2000 the City of Ekurhuleni at a meeting. <a href="https://www.ekurhuleni.gov.za/2018-2019-1/3186-a-f-23-2018-annexure-c/file">https://www.ekurhuleni.gov.za/2018-2019-1/3186-a-f-23-2018-annexure-c/file</a>
<b>Disaster Risk reduction</b>		DISASTER MANAGEMENT <a href="https://www.ekurhuleni.gov.za/2018-2019-1/3186-a-f-23-2018-annexure-c/file">https://www.ekurhuleni.gov.za/2018-2019-1/3186-a-f-23-2018-annexure-c/file</a>

### 3.3. Gender considerations

#### 3.3.1. Relevant policy frameworks

The National Policies mentioned above are the over-arching documents for gender considerations. In addition, the City of Ekurhuleni has a gender Policy since 2003 (<https://www.ekurhuleni.gov.za/182-pol-102/file>). There is a gender and development department, but it is not well capacitated which results in gender and climate change issues not being clearly articulated and addressed and being managed in silos.

### **Possible gender dimensions of climate change in city of Ekurhuleni**

The empowerment of women in South Africa is a national transformation agenda which is driven by largely seeking to reverse the inequalities of apartheid particularly on marginalisation of women in playing a central role in the economy. Gender transformation also addresses power relations to equalise opportunities, as South Africa had evidently displayed increasing number of a gendered nature of poverty.

With regards to climate change, the linkages are less clear and there is a tendency for policies to be gender blind. The key areas that affect women are linked to food insecurity, water access and availability, disaster risk management with regards to floods and drought, lack of transport and adequate housing.

The poor and working class continue to be largely marginalised in South Africa's cities especially women and women headed households. For instance, most low-income housing is located on the periphery of cities, and residents of these areas suffer poor access to centres of employment and social amenities. Consequences include higher transport costs for the poor, difficulty in accessing good schooling, and long travel times between places of work and home – time that could otherwise be spent on much more productive uses. (COGTA, 2016).

#### **4. KNOWLEDGE GAPS/CHALLENGES**

The key challenge is the 'silos' of environmental issues, climate change and gender. If these issues remain as separate challenges within local sphere of government, it will be difficult to make any policy inputs. In addition, there is a need for the collection of gender disaggregated data that is not treated as an-add on function and unstructured in the manner of implementation of gender mainstreaming programmes.<sup>xxi</sup>

#### **5. PRELIMINARY CONCLUSIONS**

The realisation that climate change is not purely an environmental issue and cannot be addressed in isolation has not filtered through the policy and management in all spheres of South Africa's government. South Africa is a signatory to several global environmental treaties, but these commitments are not realised at local government level. Therefore, stronger intergovernmental relations are required when developing and implementing climate change mitigation and adaptation policies.<sup>xxii</sup>

Despite these international conventions on Gender and Climate Change, the integration of gender and climate change at the municipal level seems to be erratic and at best not included as basis for city planning and governance issues as the implementation of these plans and convention at the local level is insignificantly applied in their day to day operations. For successful implementation of the gender strategy therefore requires that local government is adequately trained and capacitated on their role in ensuring gender mainstreaming in the sector.

Whilst, South Africa has developed numerous laws and policies, their implementation and actioning at the local level seems to be rather erratic or non-existent, more so the integration of gender into climate change policies at the municipal level. Climate policy interventions which incorporate mitigation, low carbon development and adaptation cover a broad spectrum and thus should cover all sectors. It is hence of utmost importance to integrate a multidimensional approach which includes social and gender dimensions of climate change in the city of Ekurhuleni's development planning processes and actions in order to achieve sustainable development.

In particular, the conclusions for the City of Ekurhuleni is as follows:

- Mention is made of climate change in the IDP and GDS 2055, but these plans do not detail plans to formally address climate change. It is also observed that the awareness level of climate change "mitigation" is higher than the awareness level of climate change "adaptation".
- Using the IDP process to review policies is much better as it is updated every two years. In order to ensure climate change resilience in the form of proactive plans and strategies, which are practical, strategic planning for these impacts are vital. In this regard, the IDP and the GDS the City of Ekurhuleni municipality must speak to climate change more directly.
- There was a lot of good policies, plans and strategies, however the gender lens was conspicuously absent from most of the policies, which showed that a lot of capacity building on gender and climate change needs to be carried out for the officials as well as the communities.
- Although there is an emerging awareness of the direct impacts of climate change, there is still a need for effective capacity-building of the city as a 'system' to integrate Gender and Climate Change. The formation of networks, both informal and formal, to assist in these efforts would be a useful next step.
- The City of Ekurhuleni has plenty of climate change and environmental policies and strategies and action plans which range from the Ekurhuleni climate Change strategy; and response plans on energy, agriculture and food security, transport and disaster management and climate change and green economy.
- There are numerous policies but weak implementation.
- The city is now talking about resilience rather than climate change and how to build resilience.
- A resilient committee has been set up which is constituted by all departments.
- There is a gender and development department, but it is not well capacitated which results in gender and climate change issues not being clearly articulated and addressed.

In conclusion, Climate policy can yield a multitude of co-benefits, these side effects are for instance improved air quality and health, job creation and enhanced resilience for the City of Ekurhuleni not only to the impacts of climate change but also to other constraints and

hazards. Most of these co-benefits can only be achieved if social and gender dimensions are properly taken into consideration.

Planning and implementing comprehensive mitigation and adaptation policies and actions often pose a challenge to policymakers. Gender considerations may seem to make these processes even more daunting and complex. However, once gender actions have been well established and are part of procedures and routines and municipal departments are working together rather than in silos and gender considerations in climatic policy making are no longer an added on activity, then and only then, will cities such as Ekurhuleni will become more climate resilient so they can achieve the pro poor development strategies and action plans.

## 6. REFERENCES/END NOTES

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- <sup>v</sup> EMM Climate Change Response Strategy Guidance for Departments, 2017
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- <sup>xiv</sup> The Climate Response Strategy: A Guideline for Departments (2017), p26
- <sup>xv</sup> <http://sacitiesnetwork.co.za/wp-content/uploads/2014/07/Cities-Resilience-to-climate-change-Synthesis-Report.pdf>
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- <sup>xvii</sup> Green House Gas Inventory City of Ekurhuleni 2014-2015
- <sup>xviii</sup> Green House Gas Inventory City of Ekurhuleni 2014-2015
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- <sup>xx</sup> The Department of Environmental Affairs Strategy Towards Gender Mainstreaming in the Environmental Sector) [https://www.environment.gov.za/sites/default/files/docs/publications/strategytowardgendermainstreamingintheenvironmentsector2016\\_2021.pdf](https://www.environment.gov.za/sites/default/files/docs/publications/strategytowardgendermainstreamingintheenvironmentsector2016_2021.pdf)
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