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Research title: An analysis of the amendments to the regulations issued in terms of the Electricity Regulation Act 4 of 2006 that empower municipalities to generate their own (renewable) electricity and purchase from Independent Power Producers.

Keywords: Local Government, Service Delivery, Independent Power Producers, Local Government Autonomy, Constitution, Sustainable Development.

DECLARATION

I, MNOTHO THAMSANQA NGCOBO, do hereby declare that *An analysis of the amendments to the regulations issued in terms of the Electricity Regulation Act 4 of 2006 that empower municipalities to generate their own (renewable) electricity and purchase from Independent Power Producers* is my original work and has not been submitted for any degree or examination in any other university or institution of higher learning. While I have relied on numerous sources and materials to develop the main argument presented in this mini-thesis, all the materials and sources used have been duly and properly acknowledged.

Signed: MT Ngcobo

Date: 07 November 2023

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La educación es, tal vez, la forma más alta de buscar a Dios. La educación es el pilar en el que se basa una vida productiva, es la herramienta principal que más utilizaremos.

ABBREVIATIONS AND/OR ACRONYMS

NEMA	National Environmental Management Act
PPP	Public-private Partnerships
LG	Local Government
MSA	Municipal Systems Act
AJP	African Journal of Public Affairs
CJLG	Commonwealth Journal on Local Governance
EER	Energy and Environment Research
IPP	Independent Power Producers
LDD	Law, Democracy & Development
D-MOSS	Durban Metropolitan Open Space System
AU	African Union
SDG	Sustainable Development Goals
MFMA	Municipal Finance Management Act

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CHAPTER 1: INTRODUCTION

1.1 PROBLEM STATEMENT

South Africa, just like many other countries in the world, has an energy system that is based primarily on fossil fuels such as coal and oil. South Africa remains largely dependent on coal. Fossil fuel-based energy poses many challenges to the environment, the people, and the economy. Particularly, extractions and the processing thereof cause environmental effects and damage, including air and water pollution. The greenhouse gases emitted contribute to climate change. There have been reports of high respiratory infections among the people residing close to the plants and the workers thereof. Coal ash, the by-product of burning coal made up of small particles, including heavy metals and radioactive elements, is discarded in open-air landfills where it can be emitted into the air, contributing to air pollution in the surrounding community.¹ Thus, leaving the residents from the nearby mines susceptible to illnesses caused by the air-pollution. The Mpumalanga province has been declared as an air quality priority area because currently, this province has amongst the worst air quality in the world, largely due to coal mining activities, uncontrollable underground fires, and power-stations burning coal.²

Fossil fuel-based energy is no longer the cheapest form of energy. The costs of fossil fuels-based energy depend largely on two factors, the price of the fuel that they burn and the power plant's operating costs.³ Renewable energy plants are different: their operating costs are comparatively low, and they do not have to pay for any fuel; their fuel does not have to be dug out of the ground, their fuel – the wind and sunlight – comes to them. What is determining the cost of renewable power is the cost of the power plant, the cost of the technology itself.⁴

¹ Hagemeyer AN, Sears CG, Zierold KM 'Respiratory Health in Adults Residing Near a Coal-Burning Power Plant with Coal Ash Storage Facilities: A Cross-Sectional Epidemiological Study' 2019 *International Journal of Environmental Research and Public Health* 3642.

² Munnik V "The Social and Environmental Consequences of Coal Mining in South Africa A CASE STUDY" (2010) Environmental Monitoring Group Report 11.

³ Roser M, 'Why did renewables become so cheap so fast? And what can we do to use this global opportunity for green growth?' (2020) available at <https://ourworldindata.org/cheap-renewables-growth> (accessed on 07 July 2021).

⁴ Roser M (2020).

There is currently a need for a transition from fossil-fuel-based energy to a mixed-energy that is cleaner and is not harmful to the people, the environment, and the economy. There are still households in South Africa that rely heavily on candles, and just over 5% of South Africa's 16,6 million households use candles as a main source of lighting.⁵ Seven municipalities provide candles as an off-grid source to almost 13 700 indigent households, comprising 0,4% of indigent households nation-wide.⁶

In 2020, the Minister responsible for Mineral Resources and Energy, Mr. Gwede Mantashe, gazetted amendments to the Electricity Regulations on New Generation Capacity, issued in terms of the Electricity Regulation Act, 2006.⁷ Regulation 5 of the amendment provides municipalities with the ability to apply to the Minister to procure or buy new generation capacity in accordance with the Integrated Resource Plan. The Integrated Resource Plan is the coordinated schedule for generation expansion and demand-side intervention programs, taking into consideration multiple criteria to meet electricity demand.⁸ The transition from coal to clean energy by municipalities has inherent conditions which are problematic, more especially the issue of good financial standing.

The municipalities applying to the Minister will have to comply with the provisions of the Municipal Systems Act 32 of 2000, the provisions of the Municipal Finance Management Act, 2003, and the regulations governing municipal-private partnerships.⁹ The Amendments to the regulations issued in terms of the Electricity Regulations provide as follows:

A municipality as an organ of state, may apply to the Minister to procure or buy new generation capacity in accordance with the Integrated Resource Plan, and such municipality must-

(a) conduct and submit a feasibility study as contemplated in sub-regulation (2), where it intends to deliver the new generation capacity project through an

⁵ StatsSA, 'Energy and the poor: a municipal breakdown' (2018) available at <http://www.statssa.gov.za/?p=11181> (accessed on 08 July 2021).

⁶ StatsSA (2018).

⁷ Government Notice No. 1093 Published in Government Gazette 43810 of 16 October 2020.

⁸ Integrated Resource Plan (2019) available at <http://www.energy.gov.za/IRP/2019/IRP-2019.pdf> (accessed on 08 July 2021).

⁹ Regulation 5 of the Amendments to the Electricity Regulations on New Generation Capacity issued in terms of the Electricity Regulation Act, 2006.

internal mechanism as contemplated in section 76(a) of the Municipal Systems Act;

(b) submit proof that it has complied with the provisions of section 120 of the Municipal Finance Management Act and the Municipal Public-Private Partnership Regulations published by Government Notice No R. 309 in Government Gazette No. 27431 of 1 April 2005, where it intends to deliver the new generation capacity project through an external mechanism as contemplated in section 76 (b) of the Municipal Systems Act; and

(c) submit proof that the application is aligned with its Integrated Development Plan.

From reading the above regulations, it can be noted that no provisions have been made for supporting municipalities, in terms of capacity, finance, resources and skills. Even if some municipalities were to meet the regulation 5 requirements and make the application in terms of the said amended regulations, many of the municipalities including the smaller local municipalities would still not be able to carry out the task of generating their own renewable energy and/or procure same from independent power producers.

The continued use of the coal-based energy system in South Africa has many effects which includes, environmental, health and economic degradation. The state-owned entity, Eskom, which is responsible for the generation and distribution of electricity in South Africa has on many occasions failed to fulfil its mandate. This can be evidenced by the load shedding which is regularly implemented by Eskom. Households are left without any electricity; small businesses have also been forced to shut down. This has led to an increasing number of people and businesses that are considering the installation of solar panels on the roofs of their homes and buildings in order to produce electricity with the aim of being less dependent on Eskom and municipalities.¹⁰ Which is worrisome for the municipalities as they raise most of their revenue from user-charges for services like the provision of electricity.

¹⁰ Carel Snyman 'Making The Jump To Off-Grid: A Growing Trend For South Africans' BusinessMedia Mags (2021), available at <https://businessmediamags.co.za/built-environment/infrastructure/making-the-jump-to-off-grid-a-growing-trend-for-south-africans/> (date accessed 30 July 2021).

Section 152 of the Constitution provides that the object of local government is to ensure the provision of services to communities in a sustainable manner, to promote social and economic development, and to promote a safe and healthy environment. Section 153 provides that municipalities must structure and manage their administration, and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community. Providing sustainable energy to the community contributes to these goals.

1.2 RESEARCH QUESTION

The question the thesis will answer is ‘what role can municipalities play in the shift from coal-based ‘dirty’ energy to clean, renewable ‘clean’ energy?’ in answering this question, the following sub-questions will also be answered:

1. What is the role of LG in the provision of electricity? Is it its duty?
2. What role, if any, has LG in generating electricity? If so, is it in its own right, as assigned power, or as delegated power?
3. Is there a duty on municipalities to provide clean energy, taking into consideration section 24 of the Constitution.
4. Do the amendments to Electricity Regulations on New Generation Capacity enable municipalities to perform their duty better to provide basic municipal services and a healthy environment?

More specifically, this paper will examine, whether the amendments to the Regulations provide an effective legal and regulatory framework that enables municipalities to transition from coal-based energy to achieve their developmental mandate? To answer this question a further question is asked: how have other countries developed their legal and regulatory frameworks allowing municipalities to transition from coal-based energy to clean energy? Are there any lessons to be learned?

1.3 ARGUMENT

Local authorities have a constitutional duty to provide electricity to their respective communities. While the Constitution does not explicitly provide for the generation of electricity –local government may undertake such duties through the regulations issued in terms of the Electricity Regulations Act. The author argues that should local government undertake such duties – they should generate renewable electricity in order to fulfil their developmental duties. The amendments to the regulations issued in terms of Regulation 5 issued in terms of the Electricity Regulation Act are a significant form of decentralization of powers to local government. The powers and functions given by regulation 5 are of importance as they have the potential of allowing municipalities to meet the service delivery and development expectations in the energy sector. The amendment is in line with objectives of the constitution and the White Paper on Local Government in so far as decentralising the power in the energy sector to the municipalities is concerned, as it would most effectively be administered locally. However, if such amendments to the regulations issued in terms of the Electricity Regulation Act do not provide municipalities with an effective legal and regulatory framework, they then would serve no purpose and would completely be ineffective to most of the municipalities. Thus, communities would continue to suffer the effects of relying on the single use of coal-based energy. Some of which are the regular load shedding implemented by Eskom, and environmental effects associated with the use of coal-based energy. The communities and businesses would continue to solely rely on Eskom for power. Some businesses might also start generating their own clean energy, being less dependent on Eskom and the municipalities for power, which would then mean a loss in revenue for municipalities.

Municipalities have a developmental role that is mandated by the Constitution.¹¹ The White Paper on Local Government defines developmental local government as local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic, and material needs, and eventually improve their quality of life.¹² A typical family requires energy for three main tasks: cooking, heating, and lighting, thus electricity is an ideal source as it can be used to perform all these three tasks.¹³ Businesses require a sustainable source of

¹¹ Section 153 of the Constitution of the Republic of South Africa, 1996 (the Constitution).

¹² *White Paper on Local Government* (GN in 423 in GG of 13 March 1998) 23.

¹³ StatsSA (2018).

energy. Thus, a transition to clean renewable energy is one of the sustainable developments municipalities could make. The municipalities have a big role to play in the transition from a coal-based energy system to cleaner energy using Regulation 5 of the Electricity Regulations on New Generation Capacity. It is appropriate to assert that the local sphere of government remains an important player in ensuring sound and solid economic growth, effective poverty alleviation, and job creation within the context of developmental local government agenda.¹⁴ This research paper argues that the Amendments to the regulations issued in terms of the Electricity Regulation Act provide the municipalities with clear and important powers that the municipalities could utilize to transition from coal-based energy in South Africa to cleaner sustainable energy source. However, such powers are restrictive in nature and are not adequate. Even if the municipalities qualify for applying in terms of Regulation 5, there are still overlapping challenges that the municipalities are facing, such as capacity and political interference. In keeping with their developmental role, it is imperative for local governments to progressively realise an enabling environment that facilitates the general wellbeing of their community. The local government has a significant role to play in the transition considering its developmental role and its proximity to the issue of 'energy poverty' in South Africa.

The paper further argues that Regulation 5 of the Amendments to the regulations issued in terms of the Electricity Regulation Act, would necessarily need to be developed. The latter is needed to equip municipalities with the necessary capacity to carry out the energy transition.

There are countries in which local government has played a significant role in the transition from coal-based energy and are currently enjoying the benefits of cleaner and sustainable energy. This paper would borrow lessons from those countries, such as the United States of America which has developed laws that are favourable to local governments in the energy sector and provide necessary capacity interventions to local governments. Another example is Germany.

1.4 LITERATURE REVIEW

¹⁴ Koma SB Developmental local government Issues, trends and options in South Africa (Unpublished LLD thesis, University of Pretoria, 2002) 114.

The amendments to the regulations issued in terms of the Electricity Regulations Act only came into effect in October 2020. The allocation of powers to the municipalities to generate and/or procure electricity can be seen as one of the decentralization mechanisms. De Visser argues that the assignment of powers and functions to local government under a decentralized system of government varies from country to country nonetheless, international literature on decentralization suggests that local governments should be given exclusive and relevant powers and functions to enhance their role in improving the livelihoods of the people in their respective communities.¹⁵

Thornhill posits that powers should be exercised by municipalities in a manner that maximises their impact on social development and economic growth and to democratise development.¹⁶ In addition, Thornhill argues that as per the White Paper on Local Government, municipalities should utilise the full spectrum of service delivery options including contracting out, public-private partnerships and related mechanisms.¹⁷

Coal-based energy has been proven by many scholars to be unsustainable. Thus, there is a need for a transition to a cleaner renewable energy. Elsasser *et al* argues that South African cities are facing significant legal, financial, and institutional barriers, with the biggest obstacle being the monopoly of the state-owned utility Eskom on the generation and transmission, and the majority of the distribution of electricity.¹⁸ They further argues that without a supporting national policy framework, a significant increase in funding for the development and usage of alternative energy resources, and state action to allow for substantial private investment into the energy industry, cities will continue to rely on the revenues gained from the on-selling of Eskom's energy, which derives from rather unsustainable resources.¹⁹

Notwithstanding the support that South African municipalities are receiving from international networks promoting sustainable development in the energy sector such as ICLEI Local Governments for Sustainability, Elsässer *et al* argues that this external

¹⁵ De Visser J *Developmental Local Government: A Case Study of South Africa* (2005) 33.

¹⁶ Thornhill C 'The transformed local government system: some lessons' (2008) 43 *Journal of Public Administration* 497.

¹⁷ Thornhill C (2008) 497.

¹⁸ Elsässer J, Hickmann T, Stehle F "The Role of Cities in South Africa's Energy Gridlock" (2018) *Case Studies in the Environment* 5.

¹⁹ Elsässer J, Hickmann T, Stehle F (2018) 5.

support to South African municipalities will presumably not fully resolve South Africa's gridlock situation, a situation when there is difficulty in passing laws that satisfy the needs of the people in the energy policy domain but can contribute to the country's transition to sustainable development.²⁰ For municipalities to move forward with their sustainability and clean energy agenda, a profound reform of South Africa's energy system seems to be necessary in the long run.²¹ Winkles argues that the attempts of some municipalities to gain influence on electricity generation and to introduce measures in support of renewable energies are slowed down by the reluctance and lack of support from the central government.²²

By contrast to the limited literature in South Africa the topic has been covered extensively in other foreign countries. Much has been written about the role that municipalities could play in the advancement of the transition from coal-based energy to renewable energy, Lee is of the opinion that in the United States of America there is a significant potential for improved energy efficiency and usage of clean energy. Exploiting the opportunities presented by this potential is in the interest of both federal and local governments.²³

While there has been a plethora of scholarly literature on the developmental mandate of the municipalities and literature dealing with the need for a decentralised system in the energy sector, there is no literature that provides an analysis of the amendments to the regulations issued in terms of the Electricity Regulation Act which came into effect in October 2020, allowing municipalities to generate their own (renewable) energy and procure same from the Independent Power Producers. This research paper will contribute to the better understanding and implementation of the Amendments to the regulations issued in terms of the Electricity Regulations Act.

1.5 CHAPTER OUTLINE

²⁰ Elsässer J, Hickmann T, Stehle F (2018) 5.

²¹ Elsässer J, Hickmann T, Stehle F (2018) 5.

²² Baker L, Newell P, Phillips J 'The Political Economy of Energy Transitions: The Case of South Africa' (2014) 19(6) *New Political Economy Journal*, 791.

²³ Lee H 'The Role of Local Governments in Promoting Energy Efficiency' (1981) 6 *Annual Review of Energy Journal* 335.

The thesis comprises five chapters, beginning with this introductory chapter that includes the problem statement, research question, significance of the problem, argument, literature review, and methodology. In Chapter Two, a theoretical discussion of local government, its history, powers, and sustainable electricity framework will be presented. Chapter Three explores local government's role in electricity generation, transmission, and distribution, as well as an analysis of the recent amendments to the regulations issued under the Electricity Regulations Act and their impact on the transition. Chapter Four compares and contrasts the experiences of Germany and the United States of America to draw lessons. Finally, Chapter Five will present the research findings and provide recommendations.

1.6 RESEARCH METHODOLOGY

This study is a desktop study that uses primary and secondary sources. The primary sources include the Constitution of the Republic of South Africa, the White Paper on Local Government of 1998, and various other pieces of legislation. Secondary sources include books, chapters in books, journal articles, discussion documents, and policy documents, as well as other sources like newspaper articles and press statements. This paper will also employ a comparative research methodology with regard to countries with similar decentralized energy systems.

CHAPTER 2: SOUTH AFRICAN LOCAL GOVERNMENT HISTORY AND SUSTAINABLE ELECTRICITY FRAMEWORK

2.1 Introduction

Local government has become an important part of the government in South Africa. As the sphere of government that is closest to the people, it is better equipped to deliver services to the respective communities. This paper examines the role of local government in the energy sector, and various questions were posed in chapter one, which will be answered throughout the paper. To answer those questions, it is important to first look at the history of the South African local government. For one to fully grasp the true purpose of local government and the reason municipalities play an integral role in communities across the country, one must understand the history behind the local government institutions.

This chapter provides a normative framework of the local government in South Africa. In doing so, the history of the local government is first examined, and from there, the constitutional provisions are examined. Since municipalities derive their original powers from the Constitution, it would be remiss not to examine the constitutional provisions granting powers to the local government. Once the powers have been evaluated, an analysis of the duties placed on local government will be evaluated. Finally, the powers and the duties will be linked to the main purpose of this research, which is the shift from coal-based energy to renewable energy. In doing so, it will be examined whether the municipalities have any duty to provide electricity, and if they do have a duty, it would be examined whether there is another duty to provide clean energy. In answering these questions, the previously discussed constitutional provisions and case law will be used to make an argument.

2.2A brief history of the South African Local Government Before 1996

As earlier mentioned above, it is important when analysing the legislation governing local government to also examine what influenced such legislation, in this case, the history of local government in South Africa. Seeing that the local government of South

Africa is influenced by the imprints of the apartheid system and thereby creating a need for transformation Koma argues that transformation requires an understanding of the historical role of local government in creating and perpetuating local separation and inequity, and the impact of apartheid on municipal institutions.²⁴

2.2.1 Municipalities before 1990

Historically, the municipal boundaries were structured following the racial demographics of a particular jurisdiction. Under Apartheid, municipal boundaries were drawn to racially divide communities and facilitate the exploitation of the black majority.²⁵ Each racial group was designated its residential area and was not allowed to reside in an area designated for people of a different race.²⁶ Black advisory committees were appointed – they had no powers other than to advise the White Local Authorities which were responsible for African townships.²⁷ The level of service provided to the black communities was substandard and that is why to date there is a huge service gap between the rural communities (which includes some rural areas with no municipalities but traditional leaders) and the urban communities. It is also worth noting that, to date, such service gaps can be identified within urban areas, especially in the provision of electricity. In 1961, the Urban Bantu Council was created in terms of the Urban Bantu Councils Act.²⁸ In terms of this Act the White local authority which oversees that township could delegate some of its powers to the Urban Bantu Council. According to Tsatsire *et al.*, the local government revenue in white urban South Africa was largely self-generated through property taxes and the delivery of basic public services to residents.²⁹ Sustainable services were delivered, including electricity to most parts of the urban South African areas. Meanwhile the rural and black communities lacked such access to sustainable services. It was by design that municipalities (black authorities) in black areas were deprived of the necessary resources to attend to their community's needs. By this, electricity in black communities was distributed by a state entity, Eskom, whereas in the white areas,

²⁴ Koma SB (2014) 40.

²⁵ De Visser J "Chapter 2 Municipal Institutions", Local Government Law and Policy 01.

²⁶ Group Areas Act 77 of 1957.

²⁷ Tsatsire I, et al 'Historical overview of specific local government transformatory developments in South Africa' (2009) 57 *New Contree* 134.

²⁸ Urban Bantu Councils Act 79 of 1961.

²⁹ Tsatsire et al (2009)134.

local governments were responsible for the electricity distribution.³⁰ That deprived black authorities a say in the planning and collecting revenue from electricity, revenue which would have been used for improving the livelihood in these areas. The black authorities were characterized by poor standards of management and administration of service delivery which can be attributed to the lack of financial resources and the lack of fundamental skills.³¹ This has had an impact on them till the present day, to provide sustainable services to their respective communities. The municipalities governing the previously 'black' communities have had a bigger task at hand compared to the flourishing municipalities governing the previously 'white' areas. The rural and black communities' municipalities have had to first redress the past imbalances by bringing basic municipal services to their respective jurisdictions.

In 1961, South Africa became a Republic through the passing of the South African Constitution Act.³² This Act provided inter alia, that, the municipalities were under the administration of the provincial governments. Any by-laws that municipalities would create were subject to the provincial government's approval. The sources of income for municipalities were controlled by the provincial ordinances.³³ It is in this sense that Donges et al., defined municipalities as 'exclusively statutory creatures', with no rights or functions other than those bestowed on them by a competent legislative authority, either expressly or by necessary implication.³⁴ The implication of this was that municipalities did not enjoy autonomy. If the national government and/or provincial government were unhappy with any by-law created by the municipality, they had the power to veto such bylaw. This also limited the municipalities' functions in terms of the provision of services, like electricity to communities, including black communities. By-laws govern issues like budgeting for that municipality. Now, with the apartheid system in place and municipalities lacking autonomy – having to get their by-laws approved by the provincial and/or national government, it left little room for the municipalities to manoeuvre. This meant that the other spheres of government were in control of powers like budgeting for the municipalities which then affects service delivery. The

³⁰ Eskom was at that time known as Escom (Electricity Supply Commission).

³¹ Binza, S 'The evolution of South African local governments: the politics of memory' (2005) 30 *Journal of Contemporary History* 76.

³² South African Constitution Act 32 of 1961.

³³ See Binza S (2005) 76.

³⁴ Dönges T & Van Winsen LV *Municipal Law* (1953)2, quoted in Steytler N & De Visser J *Local Government Law of South Africa* (2007) 1-8.

above argument is made in the sense that municipalities were creatures of the provincial and national government, they took orders from them. It was the national laws that created divisions and by design led to the poor service delivery to the black communities, thus change first had to come in terms of the national legislation, and only then would the municipalities foster change. National legislation trumps any other laws or ordinances created by the provincial government or municipal by-law, the national government had the power to create laws that would have balanced power and service delivery for the whole of South Africa.

2.2.2 Municipalities post 1990, pre-1996

In 1990, when the process of democratization began with the unbanning of liberation movements, local authorities were still subordinate creatures of statute, comprising a multiplicity of fragmented institutions, racially segregated, which, as a result, provided massively unequal services to different communities.³⁵ During this period the national government was holding negotiations with different stakeholders including the political parties which were fighting for freedom in South Africa. There was no change in the structure and the way municipalities were governed and operated in this period. Chaskalson P, explained this period as follows:

[t]hose in historically 'White' areas were characterized by a developed infrastructure, thriving business districts, and valuable rateable property. Those in so-called 'Black', 'Coloured' and 'Indian' areas, by contrast, were plagued by underdevelopment, poor services, and vastly inferior rates bases.³⁶

³⁵ SALGA 'Municipalities', available at <https://www.salga.org.za/Municipalities%20AM.html> (accessed on 01 March 2022).

³⁶ *Fedsure Life Assurance Ltd and Others v Greater Johannesburg Transitional Metropolitan Council and Others* (CCT7/98) [1998] ZACC 17; 1999 (1) SA 374; 1998 (12) BCLR 1458 (14 October 1998) para 2.

Thus, transformation in the local government was and still is necessary to remove the racial inequalities and create local government institutions which serve and are equally accessible to all regardless of one's racial affiliation.

In 1993, when the interim Constitution was adopted, it signalled a change in the status of local government by referring to local government as a 'tier of government'.³⁷ In terms of the interim Constitution, local government was to the extent determined by any applicable law, responsible for the provision of inter alia, sanitation, electricity, housing and security.³⁸ Nonetheless, the local government was still under the functional area of provincial competency. Along with the 1993 Constitution the Local Government Transitional Act of 1993 was adopted that would guide the reform of local government until a final dispensation was effected by the envisaged final constitution of 1996. Due to the time and the length limitations of this study, focus will be on the period of 1996 to the present date, as that is the most important period where a lot of changes occurred in the local government sphere. The above periods were provided to create a legal roadmap for local government, which led to the changes under the 1996 Constitution.

2.3 LOCAL GOVERNMENT UNDER THE NEW CONSTITUTIONAL DISPENSATION OF 1996

The 1996 Constitution refers to national, provincial, and local government as 'spheres' of government, this is a deviation from the word 'tier' which was used in the 1993 interim Constitution. According to Steytler, the reason the 1996 Constitution uses the word 'sphere' instead of 'tier' is to move away from the notion of hierarchy.³⁹ Having examined the history of local government in South Africa, we can argue that the municipalities were previously at a lower level of power before 1996, they were

³⁷ Steytler N *The Place and Role of Local Government in Federal Systems* (2005) KAF New Publications 184.

³⁸ Section 175 Interim Constitution of South Africa, 1993.

³⁹ Steytler N (2005) 184.

controlled by other levels of government back then. Now with the change of status and being referred to as a sphere of government along with national and provincial government this exemplifies the equal footing of all spheres of government. No sphere is under any full control by another sphere. This new constitutional order conferred, in the words of Cameron JA, 'a radically enhanced status on municipalities' which is 'materially different' from the pre-constitutional era.⁴⁰ The transition process gave birth to a sphere of government that is profoundly democratic, enjoys a measure of self-government, is mandated to be developmental, and functions in cooperation with and under the supervision of the national and provincial spheres of government.⁴¹ The transition process which started with the 1993 Constitution and the subsequent negotiations with different stakeholders ushered this new status of municipalities under the final Constitution. It is important to note that this new status conferred on municipalities was negotiated by all stakeholders, which is different than in the past when laws and rules were created unilaterally by the apartheid government with no comment or negotiation with other racial groups. This new status reflects what all the parties felt is necessary for the municipalities.

With municipalities being under the direct authority of the provincial and national government they had no room to conduct their affairs the way they saw fit for their respective communities. Their new status elevated municipalities to becoming an equal partner of government. They had also been allocated powers and functional areas which are clearly defined in the Constitution.

2.3.1 Local Government Powers

The municipalities have executive authority and have the right to administer the matters listed in part B of Schedule 4 and Part B of Schedule 5.⁴² They further have executive authority and the right to administer any other matter that is assigned to them by either the provincial sphere or the national sphere of government.⁴³ Part B of

⁴⁰ *CDA Boerdery (Edms) Bpk and Others v The Nelson Mandela Metropolitan Municipality and Others* 2007 (4) SA 276 (SCA) at para 37.

⁴¹ See Steytler N (2005) 184..

⁴² Section 156(1)(a) Constitution.

⁴³ Section 156(1)(b) Constitution.

Schedule 4, lists electricity reticulation as a functional area of the local government.⁴⁴ A deep analysis of the extent of this functional area is provided in chapter 3. But what is important to note is that the functional areas listed in Schedules 4B and 5B are not definitive, they are meant to serve as a guide. Schedules 4 and 5 of the Constitution allocate certain functions concurrently or exclusively to provinces. However, the Constitution allows other spheres to take over certain functions allocated to another sphere.. An example of this is housing. Schedule 4 allocates housing as a concurrent function of the national and provincial government, but lately, there are some municipalities that are responsible for the provision of housing.⁴⁵ This argument will further be explored in Chapter Three when examining the scope and ambit of electricity reticulation by municipalities.

Municipalities are further afforded powers to 'make and administer by-laws for the effective administration of the matter afforded to them'.⁴⁶ This is different from the past when municipalities' by-laws were subject to the approval of national and/or provincial governments.⁴⁷ With municipalities being able to make their by-laws, this plays an integral role in the provision of electricity. The municipalities can make by-laws that govern the provision of electricity, by-laws that would address the past imbalances and ensure that electricity is provided sustainably to all communities under their respective jurisdictions.⁴⁸

The Constitution grants municipalities autonomous powers, in the sense that municipalities are allocated their own functional areas which they can administer on their own but within the regulatory frameworks of national and provincial legislation. As previously discussed, they have the power to make by-laws and manage those functional areas the way they see fit, as long as it is within the constitutional and legislative framework.

⁴⁴ Part B of Schedule 4 Constitution.

⁴⁵ Thornhill C 'Spheres of government: Contributions to sustainable service delivery' (2011) 4 *African Journal of Public Affairs* 47. This is because some aspects of the function have been delegated to some municipalities.

⁴⁶ Section 156(2) Constitution.

⁴⁷ S 175(4) interim Constitution.

⁴⁸ See the discussion of sustainable service delivery below in Chapter 3.2.

With municipalities having been afforded these powers and functional areas, how must they then deliver services, in this case, electricity to the communities? The 1996 constitution answered this question by requiring that municipalities be developmental.

2.3.2 Developmental Local Government and Sustainable Service Delivery

The 1996 Constitution did not just elevate the status of municipalities by making them autonomous and vesting executive and legislative authority on them. The Constitution also creates an expectation from municipalities. The Constitution makes it a duty for municipalities to be developmental.⁴⁹

The Constitution in section 152(1)(b) instructs local government to ensure that they provide sustainable service delivery. The notion of sustainable service delivery is important for the purposes of this paper. Steytler and de Visser define sustainable service delivery as the 'delivery of services in such a manner that the consumer can afford it and the supplier can provide it within its own means on an ongoing basis.'⁵⁰ In the case of electricity, the authors argue that sustainable delivery of electricity means the provision of electricity to the communities in a manner that is affordable to the consumers and ongoing while taking into consideration the environment and section 24 of the Constitution.

The Systems Act provides that the municipality must 'strive to ensure that municipal services are provided to the local community in a financially and environmentally sustainable manner'⁵¹ Both these elements, financial and environmental sustainability make up the content of sustainability. Section 24 of the Constitution further creates a right to a healthy environment for the people. Ultimately, beyond the developmental duties of the local government, other duties are placed on municipalities and their service delivery. The issue of municipal service delivery goes beyond schedules 4 and 5 of the Constitution. Municipal service delivery must comply with statutory obligations which are found in various statutes and on the other sections of the Constitution.

⁴⁹ Section 153 Constitution.

⁵⁰ Steytler and de Visser *Local Government Law of South Africa (2007)* LexisNexis 5-8.

⁵¹ Section 4 of the Local Government: Municipal Systems Act 32 of 2000.

In Section 153 the Constitution provides as follows:

‘A municipality must—

- (a) structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community; and
- (b) participate in national and provincial development programmes.⁵²

From the above, it is evident that the Constitution places a great focus on the provision of basic services to the communities – thereby prioritizing the basic needs of the community and promoting the social and economic development of the community. The first part dealing with the basic needs of the community can be understood to mean the provision of services to the community. The communities expect municipalities to address their needs as they are better equipped to do so, as the closest sphere of government to the community. Electricity is an essential need of the community, people rely on electricity for personal usage and for performing daily functions, thus such a service must be delivered sustainably to the community. Sustainable electricity delivery is in line with section 153(a) of the Constitution. Which requires municipalities to promote the social and economic development of the community. Members of the community require a sustainable supply of electricity for their businesses, which in turn contributes to the economy.

Section 153(b) provides that municipalities must participate in national and provincial development programmes – one of such programmes relevant to this study is the 1998 Energy White Paper, which set as one of the goals access to affordable electricity for all.⁵³

⁵² Section 153 of the Constitution.

⁵³ Section 3.2.2.1 of the Energy White Paper, 1998.

The system of local government in South Africa is relatively new and thus it aims at addressing the developmental dilemmas created by the former Apartheid rule.⁵⁴ Earlier on, it was argued that services like electricity were not sustainably delivered to marginalized communities during the apartheid era. The drafters of the Constitution understood that transformation at local government level will take time, thus there was a need to create a duty on all municipalities to address those past imbalances over time. Steytler and De Visser argue that the transition process resulted in the creation of a sphere of government that is democratic, has some self-governance, is required to be developmental, and works in tandem with and under the supervision of the national and provincial spheres of government.⁵⁵ This means that now, the members of the community have the right to elect their respective local government leaders. Such elected members are better equipped to address the issues faced by the communities such as sustainable electricity supply. The members of the community democratically elect their leaders, leaders whom they believe in, and can ensure that their basic needs in terms of the Constitution are well taken care of.

A reading of section 153 does not give a clear indication of what a developmental government is. To fully grasp the concept, one needs to read it in line with section 152 which are the objects of local government. They are:

- (a) to provide a democratic and accountable government for local communities;
- (b) to ensure the provision of services to communities in a sustainable manner;
- (c) to promote social and economic development;
- (d) to promote a safe and healthy environment; and
- (e) to encourage the involvement of communities and community organizations in the matters of local government⁵⁶

This is an indication as per section 152(1)(b) above that whatever service the municipality provides, must be in a sustainable manner. This also affects the provision of electricity. Another important object is that of promoting a safe and healthy

⁵⁴ Maduma OS 'Developmental local government challenges and progress in South Africa' (2015) 23(2) *Administratio Publica* 154.

⁵⁵ See Steytler N and De Visser J (2007) 5-8.

⁵⁶ Section 152(1) of the Constitution.

environment, which would be discussed later when dealing with section 24 of the Constitution. A clear indication of this is provided in the White Paper on Local Government.⁵⁷

2.3.3 The White Paper on Local Government

The White Paper sought to spell out a framework and programme which would radically transform the existing local government system.⁵⁸ The White Paper serves as a practical application of the Constitutional provisions relating to municipalities. The cornerstone of the White Paper was the notion of developmental local government.⁵⁹ The White Paper combined the provisions of sections 152 and 153 of the Constitution, which were explored above, and coined the terms 'developmental local government'. It defines developmental local government as 'local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs, and eventually improve their quality of life.'⁶⁰ The characteristics of developmental government are

- 'Maximizing social development and economic growth (stimulating local economies and job creation);
- Integrating and coordinating (mainly through Integrated Development Planning);
- Democratizing development (harnessing the input and energy of local citizens); and
- Leading and learning (building social capital at the local level to enable local solutions to development problems).⁶¹

⁵⁷ White Paper on Local Government, 1998.

⁵⁸ See Foreword by Minister Mohamed Valli Moosa, White Paper 1998: v; see also Steytler N and De Visser J (2007) 5-8.

⁵⁹ Steytler N & De Visser J (2007) 1-19.

⁶⁰ White Paper on Local Government, (1998) 9.

⁶¹ White Paper on Local Government 18; See also Mahlantsi Chapter 5 https://dspace.nwu.ac.za/bitstream/handle/10394/12825/Mahlantsi_LK_Chapter5.pdf?sequence=6 (date accessed 21 March 2022).

One of the four characteristics of a developmental local government identified by the White Paper was that the local government must exercise its powers and functions to maximally impact social development and economic growth, and that this can be achieved by meeting basic needs through the delivery of services.⁶² The White Paper further identifies three key developmental outcomes that local government must focus on, which include the provision of sustainable household infrastructure and services, the creation of liveable and integrated local areas, and the promotion of local economic development and community empowerment and redistribution.⁶³ It is clear from this that the White Paper gives effect to the Constitutional provisions, placing a strong emphasis on the provision of sustainable services. The frameworks contained in the White paper are further emphasized by the Local Government: Municipal Systems Act.⁶⁴ The Act defines 'development' as 'sustainable development, which includes integrated social, economic, environmental, spatial, infrastructural, institutional, organizational and human resources upliftment of a community aimed at improving the quality of life of its members with specific reference to the poor and other disadvantaged sections of the community and ensuring that development serves present and future generations.'⁶⁵

From the above it is clear that municipalities are required to place the needs of the communities first. Municipalities are tasked with undoing the past damage caused by the apartheid system, in doing so they must be developmental. Electricity is a basic service that is essential to people. In today's world, to better function in life, one needs access to electricity. This issue of basic municipal services was dealt with by the Constitutional Court in the Joseph case,⁶⁶ where the Court recognized the right to receive electricity as one of the basic municipal services.

⁶² See White Paper on Local Government, 1998; see also, Steytler N & De Visser J (2007) 1-19.

⁶³ White Paper on Local Government (1998) 18.

⁶⁴ Act 2 of 2000.

⁶⁵ Local Government: Municipal Systems Act (32 of 2000) chapter 1: interpretations.

⁶⁶ *Joseph and Others v City of Johannesburg and Others* 2010 (3) BCLR 212 (CC) (Joseph).

Now that it has been established that municipalities must sustainably provide services, below it will be examined whether there is a duty on the municipalities to provide electricity, and if so, is there also a duty to provide clean electricity.⁶⁷

2.4 IS THERE A DUTY ON LOCAL GOVERNMENT TO PROVIDE CLEAN ELECTRICITY?

2.4.1 Municipal Duty to Provide Electricity

The Constitution in Schedule 4B only makes provision for electricity reticulation as a functional area of municipalities. There has over time been confusion as to what is the meaning of basic services because the White paper, the Constitution, and the Systems Act are silent on the same. An important question then would be whether basic services include the provision of electricity.

The Courts have, in the past, when examining the duties and objectives of the municipalities, held that municipalities must provide basic services, which include electricity, to the community.⁶⁸ I now turn to how the Courts have dealt with the right to receive basic municipal services, particularly electricity. The most important case here is the *Joseph* case.

It has been argued above that local government does not have any duty to provide electricity, beyond reticulation, in terms of schedules 4B and 5B of the Constitution. Section 156(1) and Schedule 4B of the Constitution only gives power/competence for electricity reticulation. This case has changed that. The court here has made a functional area into a right; in this context, the provision of electricity is recognized as a fundamental municipal service that imposes a duty on the municipality to provide it, thereby granting the community a right to receive it.

⁶⁷ The concept of clean electricity will be discussed in part 4 of this chapter.

⁶⁸ See the discussion of the *Joseph* case below.

In this case, the applicants sought a declaratory order regarding receiving proper notice before the municipal agency disconnected their electricity supply. The applicants were leasing the property. The municipality gave notice to the owner of the property and not the tenants (the applicants). The applicants had been paying their electricity bill to the owner of the property who had been defaulting on the municipal payments. Importantly, there was no contractual relationship between the municipality and the applicants. The municipality had contracted with the owner of the property, and not the tenants. It was argued by the applicants that they had the right to access to housing, which included the right to electricity. They based their argument on the judgment *Government of the Republic of South Africa and Others v Grootboom and Others*⁶⁹, where the court indicated that the obligation to provide access to housing may in some instances at least include an obligation to provide access to electricity. The court held that:

The state's obligation to provide access to adequate housing depends on context, and may differ from province to province, from city to city, from rural to urban areas and from person to person. Some may need access to land and no more; some may need access to land and building materials; some may need access to finance; some may need access to services such as water, sewage, electricity, and roads.⁷⁰

The Court did not decide the issue on whether the right to access to housing incorporates the right to access of electricity. It decided that it was not needed to address the issue as the Court had found that the Constitution creates a right to receive electricity as a basic municipal service. The court found in favour of the applicants and held that the electricity disconnection was unlawful.

The Court held that when the municipality supplied the applicants with electricity, it did so in fulfilling the municipal constitutional and statutory duty to provide basic services to all people living in the city. When the applicants received the electricity from the municipality it was based on their public law right to receive municipal services. The Court used the remarks by Yacoob J in *Mkontwana* wherein he held that 'municipalities

⁶⁹ *Government of the Republic of South Africa and Others v Grootboom and Others* (CCT11/00) [2000] ZACC 19; 2001 (1) SA 46; 2000 (11) BCLR 1169 (4 October 2000) (*Grootboom*).

⁷⁰ *Grootboom* para 37.

are obliged to provide water and electricity to the residents in their area as a matter of public duty'.⁷¹

The Court emphasized the role of local government in the provision of services in a manner that meets the needs of the people. The Court stated that-

'The provision of basic municipal services is a cardinal function, if not the most important function, of every municipal government. The central mandate of local government is to develop a service delivery capacity to meet the basic needs of all inhabitants of South Africa, irrespective of whether or not they have a contractual relationship with the relevant public service provider.'⁷²

The Court thus held that the municipality was obligated to afford the applicants procedural fairness before taking a decision that affected their public law right to receive municipal services. Importantly this right and obligation was not sourced from any right in the Bill of Rights, but rather on different constitutional provisions dealing with local government, which includes section 152 of the Constitution, and in legislative provisions governing local government. The court held that:

Taken together, these provisions impose constitutional and statutory obligations on local government to provide basic municipal services, which include electricity. The applicants are entitled to receive these services. These rights and obligations have their basis in public law. Although, in contrast to water, there is no specific provision in respect of electricity in the Constitution, electricity is an important basic municipal service which local government is ordinarily obliged to provide.⁷³

The Court in this case made significant advancement of the interpretation of municipal duties to provide basic services, namely that they include electricity. With every right, there is an obligation on the state. The Court recognized the important function of the municipalities and that they must provide basic services, and to do so, the municipalities need to develop a service delivery capacity to meet the basic needs of

⁷¹ *Mkontwana v Nelson Mandela Metropolitan Municipality and Another; Bissett and Others v Buffalo City Municipality and Others; Transfer Rights Action Campaign and Others v MEC, Local Government and Housing, Gauteng, and Others (KwaZulu-Natal Law Society and Msunduzi Municipality and Amici Curiae)* [2004] ZACC 9; 2005 (1) SA 530 (CC); 2005 (2) BCLR 150 (CC) para 38.

⁷² *Joseph* at para 34

⁷³ *Joseph* para 39.

all inhabitants. It was previously argued by the author that, municipalities are better equipped to deal with issues affecting communities in their communities, electricity is one of those issues and they are better equipped to deal with them.

The significance of the *Joseph* case is that firstly, it included electricity as one of the services in which local government must provide. Secondly, in this case, there was no contract or agreement whatsoever for the provision of electricity and payment for thereof between the applicant and the municipality, but still, the Court found in favor of the applicant and held that the municipality has to provide electricity to the applicant. One can easily argue that the Court, in this case, created a precedent for citizens to demand the provision of socio-economic services from the local government, even if those services are not included in the Bill of Rights. One important thing to note is that the citizens can also hold the government responsible for the reasonableness of the services provided to them. This was held in the *Mazibuko* case:

Thus, the positive obligations imposed upon government by the social and economic rights in our Constitution will be enforced by courts in at least the following ways. If the government takes no steps to realize the rights, the courts will require the government to take steps. If [the] government's adopted measures are unreasonable, the courts will similarly require that they be reviewed to meet the constitutional standard of reasonableness.⁷⁴

More importantly, De Visser correctly points out that the court in *Joseph* has created an obligation on the local government, and a right to claim fulfilment of that obligation. Even though the right cannot be found anywhere in the Bill of Rights, as previously argued, it is sources from different constitutional provisions and legislation; local government can be sued for failing to provide basic municipal services, which includes electricity, even though the right is not explicitly listed as a right in the Constitution.⁷⁵

The cases referred to above show an interesting relationship mediated by the courts between the constitutional division of powers between the three spheres of government and the Bill of Rights. In certain instances, the courts have expanded the list of responsibilities for municipalities, and in some cases the courts have

⁷⁴ *Mazibuko and Others the v City of Johannesburg and Others* 2010 (4) SA 1 CC at para 67.

⁷⁵ De Visser, J, "The enforcement of socio-economic rights against local governments in South Africa" 2015 Dullah Omar Institute Research Papers 201.

'extrapolated new rights from provisions dealing with the division of powers and arguably expanded the bill of rights.'⁷⁶

2.4.2 Municipal Duty to Provide clean Electricity

The national government, through the state entity Eskom, is responsible for most of the electricity generation in the country. The South African electricity supply has been dominated by Eskom, as described by Lloyd:

Eskom was established in 1923 in terms of the Electricity Act (1922), following the amalgamation of several private enterprises. It grew regionally in a number of 'undertakings', each with its own generating facilities. Distribution was primarily by municipalities, who bought power from their own local undertaking. The local undertakings constructed comparatively small power stations to service these local markets. The power stations were fuelled by coal, generally delivered by rail. There was comparatively little long-distance transmission of power. As a result, many rural areas had no access to electricity.⁷⁷

The generation of electricity is now required by the international community to be clean due to climate change. This in turn is in line with the municipal duties to be developmental and protect the environment. Section 24 of the Constitution confers a right to a healthy environment for everyone in South Africa:

Everyone with a right to:

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
 - (i) prevent pollution and ecological degradation.
 - (ii) promote conservation; and

⁷⁶ De Visser (2015) 206.

⁷⁷ Lloyd P 'Restructuring South Africa's electricity supply industry' (2012) Helen Suzman Foundation working papers 5.

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

According to Du Plessis, while environmental deterioration and pollution are inescapable, section 24(a) enshrines the idea that, at the very least, everyone must be safeguarded against the government activity that would illegally interfere with their health and well-being.⁷⁸ This then reverts to the issue of how electricity is generated in South Africa. Currently, the main source of electricity generation is through coal-fired power plants, which contribute 93% of the 42 000 MW generating capacity. Eskom supplies approximately 95% of South Africa's electricity and more than 45% of Africa's. Eskom uses various technologies to generate electricity, the combination of which is called the 'plant mix'. Eskom has several, wind, solar, tidal, wave and biomass energy research projects. Coal-fired base load power stations are the biggest plants and they run 24 hours a day. Eskom's Generation Division has 13 coal-fired power stations with an installed capacity of 37 745MW.⁷⁹

Air pollution from coal-fired power stations kills more than 2,200 South Africans every year and causes thousands of cases of bronchitis and asthma in adults and children annually.⁸⁰ This violates a right under section 24(a). It is important to note that, electricity is not generated in all municipal areas, Eskom has power generation stations in a few municipalities and then distributes electricity all over the country. Thus, one might argue that this issue only affects select municipalities, but such an argument is flawed; pollution affects climate change, which, in turn, affects the whole country and the whole world.

Section 24 places a duty on the government to play an active role in making sure that the environment is not harmful to everyone. This is reinforced by section 7(2) of the Constitution which mandates the state to 'respect, protect, promote and fulfil the rights in the Bill of Rights.' Therefore, in terms of section 7(2) municipalities are constitutionally bound to:

⁷⁸ Du Plessis A *Environmental Law and Local Government in South Africa* 2 ed (2021) 6-8.

⁷⁹ Ndlovu V & Inglesi-Lotz R 'Positioning South Africa's energy supply mix internationally: Comparative and policy review analysis' (2019) 30(2) *Journal of Energy in Southern Africa* 18.

⁸⁰ Centre for Environmental Rights, 'Air pollution from coal power stations causes disease and kills thousands of South Africans every year, says UK expert', (12 September 2017) <https://cer.org.za/news/air-pollution-from-coal-power-stations-causes-disease-and-kills-thousands-of-south-africans-every-year-says-uk-expert> (accessed on 21 March 2022).

- (i) Respect: refrain from interfering with the enjoyment of the right (e.g., the state must respect the liberty of citizens to choose cleaner electricity sources);
- (ii) protect: the state must take actions to prevent the state and others from interfering with the enjoyment of the right, usually through regulation and legal guarantees (e.g., the state must ensure that third parties or the state, do not transgress citizens' right to enjoy an environment that is not harmful to their health or well-being due to emissions from coal-fired power stations);⁸¹
- (iii) promote: the rights refer to the duty of the State to take steps to create the necessary culture and social conditions in which the full enjoyment of the right is possible;⁸² and
- (iv) fulfil: creates a duty on the state to adopt appropriate measures towards the full realization of the right to an environment that is not harmful to their health or wellbeing (e.g., the state must take positive measures to ensure this right is recognized).⁸³

The significance of section 24 as earlier mentioned is that it binds all three spheres of government, and in doing so, it opens a door for the community to take legal action not only against the national and provincial government for the fulfilment of the section 24 rights but also against local government. The community can base their action on the argument that the electricity that is provided by the municipalities is generated by means that affect their health and environmental well-being.

2.4.3 National Environmental Management Act 107 of 1998 (NEMA)

Section 24(b) requires the environment to be protected for the present and future generations. It is a duty placed on all spheres of government as per section 24 read together with the *National Environmental Management Act* (NEMA).⁸⁴ NEMA is a commitment to environmental sustainability. An example of the use of NEMA was when the Department of Environment, Forestry & Fisheries referred a case to the

⁸¹ Heyns C & Brand D "Introduction to socio-economic rights in the South African Constitution" (1998) 2(2) *Law, Democracy & Development* 67.

⁸² Heyns C & Brand D (1998) 67.

⁸³ Heyns C & Brand D (1998) 67.

⁸⁴ *Act 107 of 1998*

National Prosecuting Authority for criminal prosecution against Eskom for criminal violations of air pollution laws in terms of NEMA at its Kendal coal power station.⁸⁵

One of the factors of sustainable development which binds all organs of state by NEMA is that 'negative impacts on the environment and people's environmental rights are anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.'⁸⁶ To date, studies show that the generation of coal-based energy has dire consequences for the environment and the people. The state, which includes local government, ought to take reasonable steps to avert such damage.

The above argument is supported by the Municipal Systems Act, which in section 4(2)(d) provides that municipalities in carrying out their tasks are required to 'strive to ensure that municipal services are delivered to the local community in a financially and *environmentally sustainable manner* (my emphasis) in executing their functions.'⁸⁷

2.4.4 International Commitments to Clean Energy and Electricity

South Africa has over the years been a signatory to international treaties that aim to reduce the effect of climate change and transition from coal-based energy to renewable energy. The significance of these treaties is that, various leaders around the world conceive the threat posed by coal-based energy in terms of climate change, and they are all playing a role and helping one another eliminate the imminent threat.

The most important player in the shift from coal-based energy to renewable energy is the national government. It is the national government that has signed various treaties which aim at reducing the country's carbon footprint. The national government has an important role and most of the change has to start there. With that said, there is still an opportunity for the local government to play a role in terms of the treaties signed by the national government. Recently, the South African government secured an R131

⁸⁵ Life After Coal "Another milestone as criminal charges proceed against coal polluter Eskom" (7 December 2020) <https://lifeaftercoal.org.za/media/news/another-milestone-as-criminal-charges-proceed-against-coal-polluter-eskom> (date accessed 21 March 2022).

⁸⁶ Section 2(4)(viii) NEMA.

⁸⁷ Section 4(2)(d) Municipal Systems Act; see also Du Plessis A (2021) 6-8.

billion deal to phase-out coal at the 26th session of the Conference of Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC), referred to as COP26.⁸⁸ This is a positive step towards the reduction of global warming and transitioning to an energy mix constituting mostly renewable energy. This shows the central government's commitment to reducing climate change and fulfilling the rights contained in section 24 of the Constitution.

One of the international treaties signed by the national government is the Sustainable Development Goals (SDGs) by the United Nations.⁸⁹ The SDGs are not legally binding in nature. Some of the Sustainable Goals require both the national and local government to work together in order for them to be properly implemented. SDG 7, requires South Africa to by 2030 ensure universal access to affordable, reliable, and modern energy services.⁹⁰ Further, South Africa is to increase substantially the share of renewable energy in the global energy mix by 2030.⁹¹

Sustainable Development Goal 11 is about putting cities at the heart of sustainable development in an urbanizing world. Cities, particularly coastal cities, are already facing the impact of climate change. Local government must take action to mitigate the effects of climate change and to protect the most vulnerable in communities from the effects of natural disasters. Local governments can achieve this by making sure that they play their part in the mitigation of air pollution and adopting practices and generating their electricity from renewable sources which are not harmful to the environment. In terms of Sustainable Development Goal 11.6 by 2030 signatory countries must reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management. The Sustainable Development Goals are not only directed at the central government. Local governments should not be seen as mere implementers of the agenda, but

⁸⁸ Lisa Steyn "Mantashe calls on Africa to unite against 'coercion' by global anti-fossil fuel agenda" (09 November 2021) <https://www.news24.com/fin24/economy/south-africa/mantashe-calls-on-africa-to-unite-against-coercion-by-global-anti-fossil-fuel-agenda-20211109> (date Accessed 24 November 2021)

⁸⁹ Sustainable Development Goals, United Nations 2015.

⁹⁰ Sustainable Development Goal 7

⁹¹ Sustainable Development Goal 7; This is one of the promises that the country made when signing the SDGs. This means that South Africa has to play an active role in reducing the use of fossil energy and increasing the amount of energy produced from renewable energy.

rather, policymakers, catalysts of change, and the level of government best placed to link the global goals with local communities.

In terms of African regional policies, South Africa as a member state of the African Union is a signatory of the African Union Agenda 2063 – the Africa we want.⁹² In terms of aspiration 1, which aims for a prosperous Africa based on inclusive growth and sustainable development:

“Africa will participate in global efforts for climate change mitigation that support and broaden the policy space for sustainable development on the continent. Africa shall continue to speak with one voice and unity of purpose in advancing its position and interests on climate change.”⁹³

The African Union Agenda 2063 creates a framework for African countries on the core issues which the African countries must address.

The treaties referred to above are signed by the national government, but it is important to note that it would take all the three spheres of government to execute these treaties and make them come into realization. The local government is the sphere closest to the people and it is the sphere that can play a significant role in these energy transition matters.

The implementation of renewable energy technologies in cities can be driven by local government through by-laws. This approach has been successfully adopted in other countries, where individuals are allowed to generate their own renewable electricity and sell any excess power to their local government. Chapter four will further elaborate on this argument. Nonetheless, it is important to note that local government has a significant role to play in facilitating the transition to renewable energy sources.

2.5 CONCLUSION

It is evident that local government should be developmental in nature. This is necessary because municipalities are the basic units of the local government sphere

⁹² African Union Agenda 2063 – The Africa We Want (2015).

⁹³ African Union Agenda 2063, 4.

and should propel the agenda of ensuring the general well-being of its inhabitants.⁹⁴ Developmental local government is the one that is improving the quality of life of its members sustainably, that is making sure that services are delivered to the communities sustainably. The purpose of developmental local governance is to solve common national development problems, to create new development opportunities, and to achieve common national development goals.⁹⁵ Since local government is the closest to the people and interacts daily with clients (community), specific emphasis is generally placed on its developmental service delivery role.⁹⁶ The role played by local government institutions in South Africa is significant. With a great responsibility of ensuring the constant and regular delivery of services such as electricity, access to potable water, proper sanitation, and waste removal, municipalities become government agencies that interface daily with the people.⁹⁷ The Constitution requires local government to be developmental, the White Paper and the Municipal Systems Act, both provide a framework within which the constitutional developmental mandate could be realized. Schedules 4B and 5B of the Constitution list competence areas for the local government, and such competence areas include basic community services, including electricity reticulation. The developmental mandate of local government is essential to redress past imbalances and ensure that the local government provides services to the communities sustainably. It is also clear that to meet their developmental mandate, local government not only has to focus solely on the provision of services but there are also overlapping issues, like the environmental rights that local government has to consider as it provides services. Furthermore, section 24 provides everyone with the right to a healthy environment. The local government sphere is also bound by that section, and thus whatever services they render, including electricity reticulation, must comply with it. Should municipalities fail to render services in line with section 24, they can be taken to court by the community.

⁹⁴ Maduma OS 'Developmental Local Government challenges and progress in South Africa' (2015) 23(2) *Administratio Publica* 150.

⁹⁵ Van der Waldt G "Local Governance: Leading Sustainable Communities" Unpublished draft UJ Internal Handbook (2015) University of Johannesburg 23.

⁹⁶ Van der Waldt G (2015) 23.

⁹⁷ Maduma OS (2015) 164.

CHAPTER 3: LOCAL GOVERNMENT POWERS: ELECTRICITY GENERATION, TRANSMISSION, AND DISTRIBUTION

3.1 INTRODUCTION

The Constitution grants powers and functions to local governments in their specific competence areas. Some functions and powers are shared with other spheres of government. This chapter provides an analysis of the Constitutional provisions related to the powers and function of local government in the generation and reticulation of electricity. The first part deals with the powers relating to the provision of electricity, where the emphasis will be on the Constitution and various pieces of legislation governing the provision of electricity. The second part is an analysis of intergovernmental relations. This analysis is based on the Constitutional requirement that all three spheres work together. The analysis examines the extent to which the three spheres of government are required to work together and thereafter link that to the electricity sector.

The Third part of this chapter is an analysis of the amendments issued in terms of the Electricity Regulations Act which allows the municipalities to generate or procure electricity from independent power producers.

3.2 LOCAL GOVERNMENT POWERS AND FUNCTIONS

It was argued in chapter two that local authorities are no longer implementers of national and provincial legislation. They now have the right 'to govern, on [their] own initiative, the local government affairs of [their] community, subject to national and provincial legislation, as provided for in the Constitution'.⁹⁸ It is submitted that municipalities now have greater powers and responsibilities as compared to the past, as it was argued in chapter two. One of the functions that municipalities are charged with is the provision of 'service' to the community in a sustainable manner – the

⁹⁸ Section 151 Constitution.

principle of developmental local government.⁹⁹ The Constitution contains no definition of 'services.' The Constitution does however confer on local government, executive authority over matters listed in schedules 4B and 5B of the Constitution, or any matter assigned to it by national or provincial legislation.¹⁰⁰

The powers allocated to local government by the Constitution are known as original powers. This is because they are derived directly from the Constitution which is the supreme law of the country. These original powers are significant because they are safeguarded by the Constitution, and since they are derived directly from the Constitution, they cannot be removed or amended by any statute or by any level of government. The only way to do so is by a constitutional amendment. Such an amendment requires super-majorities in both houses of parliament, which makes it hard to undertake. This significance of the local government powers was further emphasized by Moseneke J in the Constitutional Court case of *City of Cape Town v Robertson*, where he held as follows:

A municipality under the Constitution is not a mere creature of [a] statute otherwise moribund save if imbued with power by provincial or national legislation. A municipality enjoys 'original' and constitutionally entrenched powers, functions, rights, and duties that may be qualified or constrained by law and only to the extent that the Constitution permits.¹⁰¹

From the above, one can deduce that power is no longer held exclusively by the national government and the provincial government. Power is thus now devolved into all the spheres of government, which in this case, includes local government. Local government enjoys some autonomy in the exercise of its powers subject to any restrictions imposed by law. The crucial words echoed by Moseneke J in the above case is that municipal conduct performed absent authorizing legislation does not necessarily invalidate that conduct.¹⁰² Municipalities derive their powers from the

⁹⁹ Section 152(1)(b) Constitution.

¹⁰⁰ Section 156(1) (a) – (b) Constitution

¹⁰¹ *City of Cape Town and Other v Robertson and Other* (CCT 19/04) [2004] ZACC 21; 2005 (2) SA 323 (CC) (29 November 2004) (*Robertson*) at para 60.

¹⁰² *Robertson* para 60.

Constitution or the legislation of competent authority or its laws.¹⁰³ This can be done through an act of assignment. Section 44(1)(a)(iii) of the Constitution empowers the national government to assign any of its legislative powers to any legislative body of the other sphere/s of government. The exception is that national government cannot assign the powers to amend the Constitution. As it will be seen later, it is possible for the relevant authority to assign the power relating to electricity generation to the local government.

Since the municipalities are empowered with executive and legislative powers over the matters listed in schedules 4B and 5B, it is submitted that the municipalities are empowered to administer by-laws that regulate any of the matters. An example of such would be a by-law dealing with matters relating to street lighting. Street lighting is a municipal competence listed in Schedule 5B.

The Constitutional Court in *Blue Moonlight*, held that in the context of housing, section 156 and schedules 4B and 5B of the Constitution are not the only source of the local government powers.¹⁰⁴ The other source of power is the one mentioned above by Moseneke. Local government can source some of its powers from national legislation.¹⁰⁵ The Minister responsible for the relevant function may allocate the powers relating to that function to local government. The Courts have long emphasized the importance of local government and its autonomy. An example of this would be the *Robertson* case where the court dismissed the view that in the absence of empowering legislation, ‘a municipality has no power to act’.¹⁰⁶ The Court held that ‘[s]uch an approach to powers, duties, and status of local government is a relic of our pre-1994 past and no longer permissible in a setting underpinned by constitutional supremacy.’¹⁰⁷ The Court went on to say that the Constitution has moved away from the past system of parliamentary sovereignty, where ‘municipalities were creatures of statute and enjoyed only delegated or subordinate legislative powers derived exclusively from ordinances or Acts of Parliament – and any municipal regulations or

¹⁰³ *Robertson* para 60.

¹⁰⁴ *City of Johannesburg Metropolitan Municipality v Blue Moonlight Properties 39 Ltd. and Another*, (CCT 37/11) [2011] ZACC 33 para 21 -29 and 46 – 67). See also Fuo O “Role of courts in interpreting local government’s environmental powers in South Africa” (2015) CJLG 21.

¹⁰⁵ An example of this is via the Municipal Systems Act.

¹⁰⁶ *Robertson* para 53.

¹⁰⁷ *Robertson* para 53; In chapter two it was mentioned how local government was divided or different between certain racial groups, and how they had different powers and functions. Municipalities governing the white areas had better powers and functions as compared to the black local authorities.

by-laws that went beyond the powers conferred, expressly or impliedly, by the enabling superior legislation, were *ultra vires* and invalid¹⁰⁸ Since the change in the status of local government, local government is still bound by the laws of the 'superior spheres' but only to the extent that such laws are within their constitutional mandate. The important thing is that the powers are now derived directly from the Constitution.

The local government may also derive powers through an assignment. An assignment is the secondary source of power for local government.¹⁰⁹ Assignment entails the transfer of authority to local government over a function or competence that falls outside of its Schedule 4B and 5B functional areas.¹¹⁰ Of importance to note, the Constitution provides for the principle of subsidiarity, even though it does not explicitly mention it. Subsidiarity entails governance taking place as close as possible to the citizens. Section 156(4) of the Constitution provides as follows:

The national government and provincial governments must assign to a municipality,

by agreement and subject to any conditions, the administration of a matter listed in Part A of Schedule 4 or Part A of Schedule 5 which necessarily relates to local government, if—

- (a) that matter would most effectively be administered locally, and
- (b) the municipality can administer it.

It is submitted that the above provision mandates the national and provincial spheres of government to transfer functions to local government if they would mostly be effectively administered by the local government and if the local government can carry out such administration. The functional areas which can be transferred to the local government are only those found in part A of schedule 4, and part A of schedule 5.

It is submitted further that municipalities are not restricted to functional areas listed in schedules 4B and 5B. This issue was dealt with by the KwaZulu Natal High Court in

¹⁰⁸ *Robertson* para 53

¹⁰⁹ Steytler N & de Visser J (2007) 5-8.

¹¹⁰ Community Law Centre Paper Series 1 (2007) - *Developmental Local Government: Determining Appropriate Functions and Powers* (2007) 7.

2013 when it had to determine the ambit and scope of the functional areas listed in the schedules, in the matter of *Le Sueur v eThekweni Municipality*.¹¹¹

The applicant in this matter, Le Sueur, instituted proceedings against the respondent, eThekweni Municipality, challenging the amendments that were introduced by eThekweni municipality to the eThekweni Town Planning Scheme. Among the measures introduced by the municipality to its town management scheme, was the Durban Municipality Open Space System ('D-MOSS') as a type of land use zone. D-MOSS aims to preserve the city's ecological diversity and enhance the living environment. To achieve this, D-MOSS aimed at creating a system of open spaces of land and water that consist of areas of high biodiversity in eThekweni. The problem which was faced by D-MOSS is that it lacked the legislative authority of a town planning scheme, thus posing enforcement challenges. As a countermeasure, the municipality passed a resolution in 2010 which integrated D-MOSS into the town planning scheme. The significance of such an act was that it prevented residents from undertaking any development on their properties without having first obtained permission from the municipality. It is from this that the applicant, Le Sueur, a businessman, and property developer instituted proceedings in the high court challenging the amendments to the town planning scheme.

The relief sought by the applicant was that the amendments to the town planning scheme be declared unconstitutional and set aside.¹¹² Thus the court was tasked with deciding whether the Municipality had the authority in terms of the Constitution or any other law of general application, to legislate on environmental matters in the way it did when it amended its town planning scheme.¹¹³

The argument advanced by the applicant was that the municipality acted ultra vires when it amended the town planning scheme and created environmental law. The applicant contended that the municipality lacked the authority to include matters related to the protection of the environment in its town planning scheme. In terms of the Constitution, 'the environment' falls within the exclusive legislative competence of

¹¹¹ *Le Sueur and Another v EtheKweni Municipality and Others* (9714/11) [2013] ZAKZPHC 6 (30 January 2013) (*Le Sueur*).

¹¹² *Le Sueur* para 1.

¹¹³ *Le Sueur* para 3.

national and provincial governments.¹¹⁴ *Le Sueur* thus contended that legislative power regarding the ‘environment’ rested exclusively on national and provincial spheres of government. The applicant argued that the national, provincial, and local spheres of government all had different and distinct functions.¹¹⁵ The applicant thus argued that the municipality’s legislative authority only covered matters listed in schedules 4B and 5B, notwithstanding section 152 read with section 156(1) of the Constitution, which identifies the promotion of a ‘safe and healthy environment’ as one of the objects of local government, the ‘environment’ does not fall within any of these ambits.¹¹⁶

The Court referred to section 156(5), which provides that ‘a Municipality has the right to exercise any power concerning a matter reasonably necessary for or incidental to, the effective performance of its functions.’ The Court held that even though the matters relating to the environment are in terms of the Constitution under national and provincial government competence, such matters are better dealt with by local governments in the form of municipalities who are in ‘the best position to know, understand, and deal with issues involving the environment at the local level.’¹¹⁷ It was never the intention of the Constitutional drafters to allocate legislative powers ‘among the three spheres of government in a hermetically sealed, distinct and watertight compartment.’¹¹⁸ The Court agreed with the respondent and held that section 40(1) of the Constitution requires all the spheres of government to respect and uphold the principles of cooperative government.¹¹⁹ The court held that ‘environment’ is one of those matters that fall within all three spheres of government and thus has not been included in the narrow schedules 4B and 5B.¹²⁰ The court held that the listing in schedules 4B and 5B of the Constitution should not be interpreted in the narrow strictest sense.¹²¹ The Court went on to rule that municipalities are authorized to ‘regulate’ environmental matters to protect the environment at the local level of government.¹²²

¹¹⁴ *Le Sueur* para 16

¹¹⁵ *Le Sueur* para 16

¹¹⁶ *Le Sueur* para 16

¹¹⁷ *Le Sueur* para 20.

¹¹⁸ *Le Sueur* para 20.

¹¹⁹ *Le Sueur* para 20.

¹²⁰ *Le Sueur* para 20.

¹²¹ *Le Sueur* para 20.

¹²² *Le Sueur* para 40.

The Le Sueur case is of significance to this study because it reaffirms the view that the municipalities are not only limited to the matters listed in schedules 4b and 5B of the Constitution. They are however not allowed to do as they please, each sphere ought to follow the Constitutional provisions. The local government as a sphere of government in South Africa has a constitutional duty to uphold the bill of rights and to uphold section 24 of the Constitution, likewise other spheres as well have these duties. All spheres of government are constitutionally obligated to follow and uphold the provisions of the Bill of Rights and section 24. Any failure on their part would trigger liability.

It is worth noting that some matters listed in schedules 4B and 5B of the Constitution are overlapping, and for them to be properly dealt with, might require the use of other constitutional powers not necessarily contained in schedules 4B and 5B.

In the case of this study, the local government is empowered to deal with 'electricity and gas reticulation'. However, the writer argues that the issue of electricity cannot be examined on its own without exploring the constitutional rights to services such as water and sanitation and the environmental right contained in section 24 of the Constitution. It is against this that the writer argues that electricity is a matter that involves all three spheres of government and requires them to work co-operatively for the realization of the same and realizing the objects of local government and the developmental duties of local government. That said, the three spheres of government should engage one another for better ways in which they can achieve a common goal – which is making sure that the community and everyone in the country are able to enjoy their constitutional rights.

3.3 THE ROLE OF LOCAL GOVERNMENT IN THE PROVISION OF ELECTRICITY

Municipalities have the discretion to exercise the powers afforded to them by Section 156 (1) of the Constitution in respect of the functional areas listed in Schedules 4B and 5B. Undoubtedly, electricity and gas reticulation is one of the functional areas upon which the local government has the executive authority. This is because 'electricity and gas reticulation' is listed in schedule 4B, which makes it one of the local government competence areas. The Constitution does not have a definition for

reticulation, and the definition found in the Electricity Regulation Act is inconclusive. Reticulation is defined as ‘trading or distribution of electricity and includes services associated therewith’.¹²³ ‘Distribution’ is defined as ‘the conveyance of electricity through a distribution power system excluding trading’.¹²⁴ The Act then defines ‘distribution power system’ as ‘a power system that operates at or below 132kV’.¹²⁵ An easier and clear definition of reticulation is then sought from other sources. Merriam-Webster defines reticulation as ‘to divide, mark, or construct to form a network.’¹²⁶ Such a definition is still inconclusive, a further definition has been sought. The Electricity Safety Act of New South Wales defines electricity reticulation as:

The provision of all conductors and other infrastructure and metering equipment necessary to allow the delivery of electricity from the point of connection of a distribution network service provider’s asset to sources of electricity supply, to the point of connection of the provider's assets to the assets of an electricity consumer or of an electricity supply authority.¹²⁷

From the above definitions, we can deduce that reticulation refers to the distribution side of electricity and the processes involved thereof and does not include the generation of electricity.

One question that arises from this is whether there is a legal duty for municipalities to provide basic electricity services. The Municipal Systems Act places a general duty on local government to ensure that people have access to ‘at least the minimum level of basic municipal services.’¹²⁸ The definition of ‘basic municipal services’ is that it is ‘a municipal service that is necessary to ensure an acceptable and reasonable quality of life and, if not provided, would endanger public health or safety or the environment’.¹²⁹ This then leads to the next question of whether the provision of electricity falls within the ambit of ‘basic municipal services.’ In 2005, the Constitutional Court in the

¹²³ S 1 “reticulation” Electricity Regulation Act.

¹²⁴ S 1 “distribution” Electricity Regulation Act.

¹²⁵ S 1 “distribution power system” Electricity Regulation Act.

¹²⁶ Merriam Webster “Reticulation” <https://www.merriam-webster.com/dictionary/reticulate> (accessed on 15th January 2021).

¹²⁷ Section 4(1) Electricity Safety Act, 1945 of New South Wales.

¹²⁸ Section 73(1)(c) Municipal Systems Act.

¹²⁹ Section 1 Municipal Systems Act.

Mkontwana case held that ‘municipalities are obliged to provide water and electricity to the residents in their area as a matter of public duty.’¹³⁰ The court did not go into further details as to how this right to access electricity was created. The Court merely referred to public duty. In the case of the *Joseph v City of Johannesburg*, the court explicitly recognized the right to electricity and the duty of the municipalities to provide the same. The Court in *Joseph* held that ‘electricity is one of the most common and important basic municipal services and has become virtually indispensable, particularly in urban society.’¹³¹ The court held as follows:

The provision of basic municipal services is a cardinal function, if not the most important function, of every municipal government. The central mandate of local government is to develop a service delivery capacity to meet the basic needs of all inhabitants of South Africa, irrespective of whether or not they have a contractual relationship with the relevant public services provider¹³²

The Court contended that such obligations to provide basic municipal services are sourced from both the Constitution and legislation. Skweyiya J held that section 152 of the Constitution, which sets out the objects of local government, ‘creates an overarching set of constitutional obligations that are to be achieved following section 152(2)’.¹³³ These objectives of local government, according to the court, are further found in the developmental duties of local government under section 153.

It is clear from above that the municipalities must provide electricity as part of basic municipal services; such a duty has created a corresponding right on the part of the individual persons. That right, however still needs to be developed. As it stands, the right creates more questions that are yet to be answered by the Courts.

The Court in *Joseph* held that the provisions of the Constitution in sections 152 and 153, section 4(2) of the Municipal Systems Act, and Housing Act 107, 1997, when all read together, ‘impose constitutional and statutory obligations on local government to provide basic municipal services, which include electricity.’¹³⁴ The court held that the

¹³⁰ *Mkontwana v Nelson Mandela Metropolitan Municipality* 2005 (1) SA 530 (CC) (*Joseph*) at para 38.

¹³¹ *Joseph* para 34.

¹³² *Joseph* at para 33.

¹³³ *Joseph* at para 36.

¹³⁴ *Joseph* at para 39.

applicants in the case are 'entitled to receive such services.'¹³⁵ The court held as follows:

These rights and obligations have their basis in public law. Although, in contrast to water, there is no specific provision in respect of electricity in the Constitution, electricity is an important basic municipal service [that] local government is ordinarily obliged to provide. The respondents are certainly subject to the duty to provide it.¹³⁶

Most recently, the Supreme Court of Appeal has held that electricity 'is a component of basic services that municipalities are constitutionally and statutorily obliged to provide to the residents'.¹³⁷

3.4 WHAT ROLE, IF ANY, HAS LOCAL GOVERNMENT IN GENERATING ELECTRICITY?

3.4.1 Constitution

The Electricity Regulation Act defines the generation of electricity as 'the production of electricity by any means'.¹³⁸ This definition covers the generation of electricity from all sources of energy, which may include renewable sources and fossil fuels. The issue of electricity generation is widely debated and remains a grey area. This is because the Constitution only grants electricity and gas reticulation powers to the local government and is silent on the issue of electricity generation – which one must interpret as a residual power. All residual powers are under the national government's competence.

In South Africa, the Electricity Regulation Act 4 of 2006 regulates the electricity operation, generation and distribution facilities, import and export of electricity, and

¹³⁵ *Joseph* para 39.

¹³⁶ *Joseph* para 39.

¹³⁷ *Eskom Holdings SOC Ltd v Resilient Properties (Pty) Ltd and Others; Eskom Holdings SOC Ltd v Sabie Chamber of Commerce and Tourism, and Others; Thaba Chweu Local Municipality and Others v Sabie Chamber of Commerce and Tourism, and Others* [2020] ZASCA 185 (29 December 2020) at para 13.

¹³⁸ Section 1 "Generation" Electricity Regulation Act.

trading of electricity. The National Energy Regulator of South Africa (NERSA) established by section 3 of the Energy Regulator Act is the custodian and enforcer of the regulatory framework provided for in the Electricity Regulation Act.¹³⁹ Any municipality or independent power producer – that wants to operate, generate or distribute electricity will have to apply to NERSA for a license to do so. In terms of the Electricity Regulation Act, no person may without a license issued by NERSA operate any generation, transmission, or distribution facility, import or export any electricity, or be involved in trading.¹⁴⁰ The Electricity Regulations Amendments empower NERSA to grant licenses to parties/entities other than the national government to generate electricity. A detailed discussion of this is provided in the next chapter of the thesis. Du Plessis summarizes the process as follows:

A municipality or independent power producer, as an operator, generator, or distributor of electricity, will have to apply to NERSA for a license in terms of section 10 of the Electricity Regulation Act. In the application, the municipality will include, among other things, a description of the application and its horizontal and vertical relationships to others involved in the generation, transmission, and distribution of electricity. It will also have to supply documentary evidence of its administrative, financial and technical ability to generate electricity, and must include a description of the customers and tariff structure as well as its 'plans and the ability to comply with applicable labour, health, safety, and environmental legislation, subordinate legislation, and such other requirements as may be applicable and proof of compliance with any integrated resource plan (IRP).¹⁴¹

While municipalities have a protected constitutional competence in electricity reticulation, in so far as generation is concerned, the municipalities are at the mercy of the legislation by the national government. The municipalities can also apply directly to NERSA for a license to generate electricity, as explained above. The municipalities have no original power to generate electricity (the Constitution does not provide such

¹³⁹ Section 3 Electricity Regulation Act, 2006.

¹⁴⁰ Section 7 Electricity Regulation Act, 2006.

¹⁴¹ Du Plessis A (2021) 24 -7.

powers to local government), however, municipalities can have such power through an act of assignment or via section 156(5) of the Constitution.

In terms of section 156(5) of the Constitution 'a Municipality has the right to exercise any power concerning a matter reasonably necessary for or incidental to, the effective performance of its functions.' This provision gives municipalities a right to exercise this power rather than be at the mercy of the national or provincial government's assignment of power. This is normally referred to as incidental powers. Steytler and De Visser correctly argue that section 156(5) does not confer new powers on local government, it does, however, confer a municipality the power to take actions that will improve the efficient management of its current functional areas.¹⁴² In the case of electricity, municipalities generating their own electricity will improve the efficient management of electricity reticulation, and also, it will improve the efficiency of municipalities in providing basic services. The municipalities are closest to the people, they have an idea of how much power generation is needed for the entire municipality. They can better plan electricity generation mechanisms through bylaws.

And just like how the Court in *Le Sueur* held that matters related to the environment in terms of the Constitution are said to be of primary concern of the national and provincial spheres of government, the municipalities are better positioned to deal with them – in this case of electricity generation, local government is best positioned to know, understand and deal with matters involving energy generation and distribution at the local level. The reason is that local government has the municipal planning function and can introduce renewable energy sources into the grid by the use of by-laws. An example of this is the municipal by-laws which require that all commercial buildings have solar panels. Municipalities can better plan and manage energy generation; this would allow them to curtail costs and generate more revenue from electricity sales as well.

The Court in *Le Sueur* held that the 'environment is an ideal example of an area of legislative and executive authority or power which had to reside in all three levels of Government and, therefore, could not be inserted in Parts B of Schedules 4 and 5 and was instead inserted in Part A of Schedule 4'.¹⁴³ The same thing could be said about

¹⁴² Steytler N & de Visser J (2007) 5-6.

¹⁴³ *Le Sueur* para 20.

electricity generation. As the Court held in the *Blue Moonlight* case, the powers of local government in cases involving socio-economic rights (in this case the right to housing) go beyond the confines of Schedules 4B and 5B.¹⁴⁴ The right to housing works hand in hand with the right to electricity. As per the Court in *Joseph*, section 9(1)(a)(iii) of the Housing Act 'imposes a specific obligation on municipalities to provide basic municipal services, including electricity.'¹⁴⁵

As earlier mentioned, there are other ways in which municipalities may get the powers to generate electricity, and they are discussed below.

3.4.2 Legislation

In terms of section 44(1)(a)(iii) of the Constitution, municipalities can be assigned functions and powers which are currently not under their functional area under schedules 4B and 5B assigned to them. The Constitution in section 44 provides *inter alia* as follows:

1. The national legislative authority as vested in Parliament

a. confers on the National Assembly the power

.....

(iii) to assign any of its legislative powers, except the power to amend the Constitution, to any legislative body in another sphere of government...

In terms of section 156(1)(b) of the Constitution national or provincial legislatures may assign matters to local government by legislation. This is known as the general assignment of legislative and executive powers. This means that by way of national legislation, the national government may assign a matter falling outside schedules 4B and 5B to the entire sphere of local government. An example of this would be national legislation assigning matters relating to electricity generation to the entire sphere of local government. Likewise, a provincial legislature may do the same and assign a

¹⁴⁴ *Blue Moonlight* para 20–28, 42–67.

¹⁴⁵ *Joseph* para 39.

matter/s to the entire local government under their province. There are however requirements and procedures that must be followed before and after the assignment.

Section 99 and 126 of the Constitution provides a different kind of assignment that allows national and provincial ministers to assign executive powers to specific municipal councils. The difference between this one and the previous assignments is that it only concerns executive powers and not legislative powers. Through an agreement with the municipality, electricity generation may also be assigned this way to specific municipalities.

From the above, it has been established that electricity generation is not a municipal competence in terms of schedules 4B and 5B of the Constitution. However, the national legislative authority can assign such powers to municipalities. This act of assignment may only apply to one municipality or to all municipalities. A practical example of this is that the national legislature may elect to assign any of its legislative or executive powers to the City of Cape Town only, as long as it has followed the mandatory consultation processes. This form of legislative assignment will remain in place until the legislation empowering the assignment is repealed.

One of the legislative assignments can be found in Section 84(1) of the Municipal Structures Act,¹⁴⁶ which provides *inter alia* as follows:

(1) A district municipality has the following functions and powers—

...

(c) Bulk supply of electricity, which includes for such supply, the transmission, distribution, and, where applicable, the generation of electricity. ...¹⁴⁷

The above essentially allows district municipalities to supply bulk electricity to the local authorities under their competence and if it elects to do so, may generate their electricity. The important thing to note is that this assignment is only applicable to district municipalities. However, the national Minister may after consulting the cabinet

¹⁴⁶ Municipal Structures Act 117 of 1998

¹⁴⁷ Section 84(1)(c) Municipal Structures Act.

member responsible for electricity, authorize local municipality to perform a function or exercise a power mentioned in section 84(1)(c) – bulk supply of electricity, transmission, and generation of electricity.¹⁴⁸

Other municipalities, like metros, must use a different route. Should local municipalities want to exercise the power to generate electricity allocated to the district municipalities, they may do so if the Minister allows in terms of section 84(3)(a).¹⁴⁹ Metropolitan municipalities since they cannot use section 84 of the Structures Act, can follow the Electricity Regulations Act and apply to the National Energy Regulator of South Africa (NERSA) for a license to generate their renewable energy. The important thing to note here is that the approval of the application for a license to generate electricity does not amount to an executive assignment in terms of section 99 of the Constitution.¹⁵⁰ This is because it is not the Minister that grants the license to generate electricity to the municipalities, but rather NERSA, the Minister in thus not assigning any power to the municipalities through an Act of parliament. The virtue of NERSA being responsible for the granting of licensing means that there is no agreement between the municipality and the Minister. As Steytler and De Visser aver, ‘This licensing process is akin to a delegation referred to in section 238(a) of the Constitution; an executive organ of state in any sphere of government (NERSA) delegates a power or function (electricity generation) to another executive organ of state (the municipal council).’¹⁵¹

3.5 INTERGOVERNMENTAL RELATIONS

The Constitution creates three spheres of government that are independent/autonomous. With that said, it requires the three spheres to work together. This is important in the electricity generation – as all spheres of government may assist each

¹⁴⁸ Section 84(3)(a) Municipal Structures Act.

¹⁴⁹ Section 84(3)(a) Municipal Structures Act.

¹⁵⁰ Section 99 of the Constitution provides as follows: A Cabinet member may assign any power or function that is to be exercised or performed in terms of an Act of Parliament to a member of a provincial Executive Council or to a Municipal Council. An assignment—

(a) must be in terms of an agreement between the relevant Cabinet member and the Executive Council member or Municipal Council;

(b) must be consistent with the Act of Parliament in terms of which the relevant power or function is exercised or performed; and

(c) takes effect upon proclamation by the President.

¹⁵¹ Steytler N and De Visser J (2018) 17-15.

other to achieve green energy goals. The support may be in the form of financial grants, technical skills, and other forms. Since electricity generation has been under the monopoly of national government through Eskom, there are some technical skills that can be transferred to local governments intending to generate electricity.

The Constitution echoes the values of intergovernmental relations, which are found in Chapter 3 of the Constitution. Sections 40 and 41 of the Constitution deal with the importance of 'cooperative government' between the respective 'spheres' of government. It lays down the principles of cooperative government and provides that there is one government that is made up of national, provincial, and local spheres of government.

The Constitution further uses the term 'sphere' as opposed to the term 'level' to show that all spheres are equal in government and that there is no hierarchy whereby one sphere is greater than the other. The provincial and national governments however have supervision powers over the local government. Though this does not mean that they can simply assume the powers and functions of local government. The Constitution provides that the three spheres are distinctive, interdependent, and interrelated.¹⁵² This is different from how previously the South African government was structured – as one level of government with all the powers. The distinctiveness of each sphere can be attributed to the autonomy of each sphere, the national government has powers to make laws via national legislation, and can make nationwide policies as White papers, the provincial sphere of government can make laws governing each province by way of provincial laws, and local government can make by-laws which regulate each independent municipality.¹⁵³ These different powers for each sphere are what make the three spheres of government distinctive.

Section 41(1) provides, *inter alia*, that all three spheres of government must look after the wellbeing of the citizens of South Africa; and must cooperate by assisting, supporting, and consulting with each other on things of common interest.¹⁵⁴ This places a duty on all three spheres to work together in securing the well-being of the

¹⁵² Section 40(1) Constitution.

¹⁵³ Section 43 Constitution.

¹⁵⁴ Section 41(1)(b) and (h) Constitution.

republic and the people. In the present case, one might then argue that as was discussed in chapter two, the courts have raised the importance of service delivery – all three spheres of government must work together to make sure that services, like, electricity are sustainably provided to communities.

The system of cooperative governance in terms of the Constitution requires all three spheres of government to work together, rather than compete.¹⁵⁵ The spheres ought to work in a single, unified system, collaborating and assisting one another. The Constitution allocates powers and functions to all three spheres, some competences are overlapping, and some are concurrent – this on its own shows that the Constitutional drafters wanted the three spheres of government to cooperate with each other in executing those functions. If you look at local government for instance, municipalities have powers and functions in schedules 4b and 5b which are their sole competence, however the Constitution has entrusted on the provincial and national government to supervise and assist the municipalities in executing their powers. As earlier argued, the Constitution also allows for the other spheres to allocate powers and functions to local government if local government is better positioned to execute such functions. This is a perfect example of co-operating.

In the case of electricity generation, the national government has allowed the local government to generate or procure electricity, provided they follow all the requirements.¹⁵⁶ And while local government is better equipped to handle electricity generation, this sphere of government still requires some support from the other spheres of government.

3.6 AMENDMENT IN TERMS OF THE ELECTRICITY REGULATION ACT

3.6.1 Amendments

On 16 October 2020, the Minister of Energy, Gwede Mantashe, gazetted the amendments to the Regulations issued in terms of the Electricity Regulations Act. The

¹⁵⁵ Section 41(1)(h) Constitution.

¹⁵⁶ A detailed analysis of this is done below in paragraph 3.6.

amendments were done in terms of section 35(4) of the Electricity Regulations Act, 2006 and it extend the procurement of new renewables, cogeneration, baseload, mid-merit, peak load, energy storage, and cross-border generation capacity to organs of State 'active in the energy sector' and include municipalities as active players in the energy sector.¹⁵⁷ The important amendment to the Regulations relevant to this paper is the amendment to regulation 5 of the Regulations issued in terms of the Electricity Regulations Act. Regulation 5 provides as follows:

A municipality as an organ of state may apply to the Minister to procure or buy new generation capacity in accordance with the Integrated Resource Plan and such municipality must-

- (a) conduct and submit a feasibility study as contemplated in sub-regulation (2), where it intends to deliver the new generation capacity project through an internal mechanism as contemplated in section 76(a) of the Municipal Systems Act:
- (b) submit proof that it has complied with the provisions of section 120 of the Municipal Finance Management Act and the Municipal Public-Private Partnership Regulations published by Government Notice No R. 309 in Government Gazette No. 27431 of 1 April 2005, where it intends to deliver the new generation capacity project through an external mechanism as contemplated in section 76 (b) of the Municipal Systems Act. And
- (c) submit proof that the application is aligned with its Integrated Development Plan.¹⁵⁸

The draft amendments to the regulations were gazetted in May 2020 for the public's comment, and they had an express requirement that the municipalities intending to carry out the powers contained therein the amended regulations needed to be of

¹⁵⁷ Creamer T "Electricity Regulations Amendment"
<https://www.engineeringnews.co.za/article/electricity-regulations-amended-to-allow-municipalities-to-develop-or-buy-power-2020-10-16> (accessed on 17 February 2022). See also Regulation 2 of the Regulations issued in terms of the Electricity Regulations Act, as amended in 2020.

¹⁵⁸ Amendment to Regulation 5 of the Regulations issued in terms of the Electricity Regulation Act, 2006.

sound financial standing. However, as it can be noted above, the amended regulations which were gazetted in October 2020, did away with that requirement. The amended regulations, instead, provide that the municipalities may apply to the Minister to establish new generation capacity through an internal mechanism in terms of section 76(a) of the Municipal Systems Act.¹⁵⁹ Section 76(a) of the Systems Act provides that a municipality may provide a service through an internal mechanism 'which may be a department or administrative unit within its administration; any business unit devised by the municipality. provided it operates within the municipality's administration and under the control of the council in accordance with operational and performance criteria determined by the council, or any other component of its administration'.¹⁶⁰ This means that the municipality is providing one of its services internally without outsourcing an independent third party to provide such services. There are many ways in which municipalities may carry out this function internally:

- (i) the municipality can produce electricity through wind farms and solar farms; or
- (ii) the municipality can involve the community in the energy mix by using by-laws that direct property developers to install solar panels on the buildings within the municipality, which will ensure that the residual energy not used by the property is transferred back into the municipal energy grid;

All of these mechanisms and others not mentioned herewith can be implemented into municipal planning.

If the municipality intends to deliver a new generation capacity through an external mechanism, then the regulations require the municipality to comply with the provisions of section 120 of the Municipal Finance Management Act. Section 120 empowers municipalities with powers to enter Public-Private-Partnerships. Section 120 (1) of the Municipal Finance Management Act provides as follows:

120. (1) A municipality may enter into a public-private partnership agreement, but only if the municipality can demonstrate that the agreement will-
- (a) provide value for money to the municipality;

¹⁵⁹ Regulation 5(2) Amendments to the Regulations issued in terms of the Electricity Regulations Act.

¹⁶⁰ Section 76(a) Local Government: Municipal Systems Act 4 of 2000.

- (b) be affordable for the municipality; and
- (c) transfer appropriate technical, operational, and financial risk to the private party.¹⁶¹

The regulations issued in terms of the Municipal Finance Management Act governing public-private partnerships provide a detailed definition of the public-private partnership. ‘Public-private partnership’ means a commercial transaction between a municipality and a private party in terms of which the private party –

- (a) performs a municipal function for or on behalf of a municipality, or acquires the management or use of [the] municipal property for its own commercial purposes, or performs both a municipal function for or on behalf of a municipality and acquires the management or use of [the] municipal property for its own commercial purposes;
- (b) assumes substantial financial, technical, and operational risks in connection with –
 - (i) the performance of the municipal function;
 - (ii) the management or use of the municipal property; or
 - (iii) both; and
- (c) receives a benefit from performing the municipal function, from utilizing the municipal property, or from both, by way of –
 - (i) consideration to be paid or given by the municipality or a municipal entity under the sole or shared control of the municipality;
 - (ii) charges or fees to be collected by the private party from users or customers of a service provided to them; or
 - (iii) a combination of subparagraphs (i) and (ii).¹⁶²

¹⁶¹ Section 120 Municipal Finance Management Act 56 of 2003.

¹⁶² “Public-Private-Partnership” Regulation 1 “Definitions” of the Local Government: Municipal Finance Management Act 2003 Municipal Public-Private Partnership Regulations.

From the above, we can deduce that a public-private partnership is a commercial agreement that benefits both the municipality and the private service provider. One other requirement that the municipality has to comply with which is not explicitly found in the amended regulations issued in terms of the Electricity Regulations Act, is that a municipality that intends to enter into a public-private partnership to create new generation capacity, must comply with section 78 of the Municipal Systems Act. Section 78 requires the municipalities to conduct a feasibility study. This requirement is also applicable to municipalities that wish to bring new generational capacity through an internal mechanism.

(i) Feasibility Study

In terms of the Systems Act, municipalities are obligated to conduct feasibility studies when deciding whether to use an internal or external mechanism.¹⁶³ The feasibility study must include the following matters:

- clear identification of the service in question;
- the number of years the service is likely to be outsourced;
- projected outputs;
- an assessment of how the outsourcing will provide value for money;
- how it will address the needs of the poor;
- how it will be affordable;
- how it will transfer appropriate technical, operational and financial risk; and,
- an assessment of the impact on staff, assets, IDP and budgets.

This requirement is important because it prevents municipalities from making rash decisions without first assessing whether they are viable, and the risks involved. This is important in the generation of electricity as well, since the amendments allow municipalities to either generate electricity through an internal mechanism or procure from independent power producers through an external mechanism, this feasibility

¹⁶³ Section 78 (3)(c) Systems Act.

study will allow municipalities to assess whether they are able to undertake this process and the risks involved. This is also important in the case of struggling municipalities as it will guide them to make an appropriate decision that is not rash and doesn't bring any value.

3.6.2 Shortcomings

The amendments issued in terms of the Electricity Regulations Act are positive steps toward the three spheres of government working together and allowing local government to have powers in the generation of electricity. Both the national and provincial spheres could provide support to the local government. The amendments on their own are not enough. They provide powers to the municipalities yet offer no support from the national or provincial spheres of government.

(i) Financial Resources

There is a need to provide a financial mechanism that supports renewable electricity generation technologies in South Africa.¹⁶⁴ The Regulations do not provide any support to the municipalities who plan on undertaking the functions and powers afforded to them to procure or produce their renewable energy. The municipalities will require financial support to undertake renewable energy projects in terms of the amended regulations. In order to provide a reliable source of energy, thereby reducing or ending the current loadshedding, and getting that energy from clean sources. The Auditor-General has said that almost half of the country's municipalities are under financial strain and are likely to get worse.¹⁶⁵ The financial position of just over a quarter of the 257 municipalities in the country is so dire that there is significant doubt that they will be able to continue meeting their obligations in the near future.¹⁶⁶ Some scholars argue that some causes of financial distress are beyond the municipality's control but are within the control of the Parliament, and such distress is caused by

¹⁶⁴ Musango J & Brent A 'Sustainable electricity generation technologies in South Africa: Initiatives, challenges and policy implications' 2011 *Energy and Environment Research* 130.

¹⁶⁵ Covary T "Same old funding model can't keep South African cities going or serve residents" (12 August 2021) <https://theconversation.com/same-old-funding-model-cant-keep-south-african-cities-going-or-serve-residents-165182> (date accessed 29 September 2021).

¹⁶⁶ Ensor L "Auditor-general appalled by the state of municipal finances" (30 June 2021) <https://www.businesslive.co.za/bd/national/2021-06-30-auditor-general-appalled-by-the-state-of-municipal-finances/> (date accessed 29 September 2021).

unfunded mandates, i.e., functions that a municipality is required to perform but for which adequate revenue instruments are not provided.¹⁶⁷ At other times, there are economic shifts that challenge a formerly sustainable municipality, e.g. when the main employer in a mining town shuts down. This is a transitional challenge as to which external assistance may be necessary until revenues and expenditures can be brought into alignment.¹⁶⁸ Some financial problems are internal to the municipality itself; these include a lack of proper financial management, such as under-collection of revenues or uncontrolled expenditure, and political dysfunction, such as that demonstrated in the City of Tshwane and Nelson Mandela Bay Metropolitan Municipality in 2019-2020.¹⁶⁹ In terms of the 2020-21 Auditor General's report, an assessment of the financial health of 230 municipalities and 18 municipal entities based on their financial statements showed increasing indicators of a collapse in local government finances and continued deterioration over the term of the previous administration.¹⁷⁰ It is worth noting, however, that lack of capacity which leads to poor management has also been mentioned as one of the drivers of municipal financial distress.¹⁷¹ The writer argues that if municipalities were to undertake the functions afforded by regulation 5, most of them will be in financial distress or will not be able to fulfil the financial mandate. With the allocation of powers under regulation 5, government should be affording the willing municipalities some form of financial support, the support can be in the form of conditional funding transfer. The Constitution makes provision for conditional and unconditional funding transfers from the national sphere of government to other spheres.¹⁷² South Africa's Constitution allocates three revenue sources to municipalities to fulfil their mandate: property taxes; surpluses generated from services; and funding transfers from the national government.¹⁷³

¹⁶⁷ Glasser M & Wright J 'South African municipalities in financial distress: What can be done?' (2020) 24 *Law, Democracy and Development* 417.

¹⁶⁸ Glasser M & Wright J (2020) 417.

¹⁶⁹ Glasser M & Wright J (2020) 417.

¹⁷⁰ Auditor General South Africa "Consolidated general report on local government audit outcomes MFMA 2020-21" 15 June (2022) 20.

¹⁷¹ Glasser M & Wright J (2020) 417

¹⁷² Section 227 of the Constitution.

¹⁷³ Covary T "Same old funding model can't keep South African cities going or serve residents" (12 August 2021) <https://theconversation.com/same-old-funding-model-cant-keep-south-african-cities-going-or-serve-residents-165182> (date accessed 29 September 2021). see also sections 229 and 229 of the Constitution.

(ii) Critical Skills Training and Support

Trained manpower capable of developing and manufacturing renewable energy technologies is a prerequisite for its successful deployment.¹⁷⁴ The availability of competent local government officials who can demonstrate performance and managerial leadership and accountability in terms of the mandate of local government is critical to the realization of strategic local government objectives.¹⁷⁵ As it stands, the local sphere of government lacks the personnel with the necessary skills in renewable energy. Municipalities have never undertaken any functions relating to renewable energy production. The Regulations make no provision for technical and skills assistance to qualifying and willing municipalities. The South African government has put much emphasis on job creation in the development of renewable energy.¹⁷⁶ While the need for creating jobs is recognized, the manpower resources, as well as skills of management and use of technology and equipment, are still limited.¹⁷⁷ It is thus necessary to clearly outline how the supply of skilled and technical manpower will be achieved.¹⁷⁸ Municipalities require technical assistance which addresses knowledge gaps, specific challenges, decision-making considerations, planning, and project implementation strategies related to the transition from coal-based energy to a renewable energy mix. The availability of requisite skills, both technical as well as administrative, will lead to improved performance in meeting developmental goals.¹⁷⁹ The South African government is afflicted by a scarcity of skills that impacts negatively on the productivity of the economy as well as on meeting developmental needs.¹⁸⁰ This is where the importance of section 78 comes in. The feasibility study will identify the skills necessary to carry out the functions and that will also allow the government to source such skills. Erasmus and Breier argue that the prevalence of scarce skills can be found in all spheres of government in which positions remain vacant for prolonged periods, chiefly because there is a deficit of qualified and experienced

¹⁷⁴ Musango J & Brent A 'Sustainable electricity generation technologies in South Africa: Initiatives, challenges and policy implications' 2011 Energy and Environment Research 129.

¹⁷⁵ Draai E & Oshoniyi O 'Scarce and critical skills for local government: Assessing the Nelson Mandela Bay Municipal area' 2013 *Journal of Public Administration* 868.

¹⁷⁶ Musango J & Brent A (2011) 130..

¹⁷⁷ Musango J & Brent A (2011) 130.

¹⁷⁸ Musango J & Brent A (2011) 130.

¹⁷⁹ Draai E & Oshoniyi O(2013) 868.

¹⁸⁰ Draai E & Oshoniyi O (2013) 869.

talent, either because such individuals are unavailable or do not meet the stipulated employment criteria.¹⁸¹ The national sphere of government has the power to facilitate technical skills training nationally, that way local government could benefit from the same. The national sphere of government can create technical skills policies and frameworks that could allow the local spheres of government in the worst-case scenario to source talent from abroad. It is my argument that the regulations should have made provision for support to the local sphere of government. The Regulations further make no provision for capacity interventions. Capacity building, skills development, and technology transfer require government support as this will also be needed, not only for the development of the generation plants but also for the manufacturing industries to provide the necessary inputs.¹⁸² As it stands, there is no provision for such on the amended regulations, and there is no policy that provides support to the local government institutions that wish to undertake renewable energy generation projects.

3.7. CONCLUSION

Local government is the sphere that is closest to people. It has been allocated powers and functional areas in terms of the Constitution and through different statutes. Municipalities have duties imposed on them by the Constitution and various other laws, the most important duty is service delivery. Municipalities have to deliver basic services to the communities in a sustainable manner. Basic services include water and electricity. With the state entity, Eskom failing to provide electricity that also affects the municipalities as they end up failing on their duty to provide electricity to communities. Electricity is important for many other things as well, municipalities require electricity for water purification and distribution, without electricity, again they wouldn't be able to fulfil their duty of providing basic services. The continual supply of electricity is crucial to the municipalities in fulfilling their constitutional duties. It thus makes sense for the municipalities to be able to generate their own electricity. This also allows the municipality to not have to rely on the failing Eskom. It was earlier argued that municipalities can be sued for basic service delivery – if they fail to fulfil

¹⁸¹ Erasmus, J & Breier M 'Skills shortages in South Africa: Case studies of key professions' 2009 Cape Town: HSRC Press.

¹⁸² Musango J & Brent A (2011) 130.

this duty. The municipalities would have little recourse against Eskom and cannot use Eskom as a defense.

As argued earlier, electricity generation is not included in the Constitution as a municipal competence. The municipalities that wish to generate their own electricity or purchase electricity from independent power producers can do so in terms of the amendments issued in terms of the Electricity Regulation Act. It has been argued however that such amendments are not enough. Municipalities need more support for them to undertake the functions provided in the amendments, one way of such support is funding. Other spheres of government should cooperatively work with local government to ensure that they are better equipped to undertake the functions of electricity generation or buying from the IPPS.

Some municipalities are better equipped to handle energy electricity generation and transmission. As will be shown in the next chapter wherein a study will be conducted to analyse how municipalities in other countries are taking charge in the electricity sector and how national and other levels/ spheres of government are providing support to the municipalities.

CHAPTER 4: COMPARATIVE LOCAL GOVERNMENT IN THE ENERGY SECTOR

4.1 Introduction

Municipalities around the globe are taking charge of governing matters relating to electricity generation and transmission. Some municipalities have successful electricity generation and transmission schemes, while some are struggling. This chapter examines the role of municipalities in the United States of America and Germany in electricity generation. Both these jurisdictions have been chosen because of their type of governance which is somewhat the same as that of South Africa. While both these countries are developed and South Africa is still a developing country, they stand to offer practical lessons for South African municipalities.

4.2 Municipalities in Germany

4.2.1 Introduction

Like in South Africa, municipalities in Germany enjoy autonomy which is guaranteed by the Constitution. The Constitution provides that municipalities have ‘the right to regulate all local affairs under their responsibility, within the limits prescribed by law.’¹⁸³ The significance of this right is that it prohibits federal and *Land* legislation from taking away local governments' rights to run their affairs or constraining this right to the point where the autonomy's substance is stripped away from within. It is important to note that municipalities can be dissolved by an act of parliament, and tasks can be taken away from municipalities or assigned to them ‘if special reasons of the public well-being speak for this action.’¹⁸⁴ Haschke holds that municipalities in Germany have the following rights which are protected by the constitution, and as such cannot be infringed by the federation or the *Länder*:

¹⁸³ Article 28, paragraphs 1 and 2 *Basic Law*, Germany's Constitution.

¹⁸⁴ Haschke D “Local Government Administration in Germany”
<https://germanlawarchive.iuscomp.org/?p=380> (date accessed 25 November 2022).

- (i) Personnel sovereignty: This grants the municipalities the right to select, engage, promote and dismiss staff.
- (ii) Organizational sovereignty: This encompasses the right of the municipalities to organize the administration themselves.
- (iii) Planning sovereignty: This grants the municipalities the power to organize and shape municipality territory under their responsibility by drawing up urban development plans (land use and building plans).
- (iv) Legislative sovereignty: This entails the right to pass municipality bylaws.
- (v) Financial sovereignty: This entitles the municipalities to be responsible for managing their income and expenditure.
- (vi) Tax sovereignty: This grants the municipalities the right to raise taxes (if this right has not been revoked by a higher law).¹⁸⁵

The municipalities in Germany share some characteristics of the South African municipalities. Municipalities in Germany are not equal and cannot be so in terms of their area, the number of inhabitants, financial power, political influence on the public administration system, etc.¹⁸⁶ Likewise, in South Africa municipalities are not equal, some have a higher population, and some less, some have resources which allow them to generate more finances than the other. Municipalities consist of a municipality council and a mayor, which are both elected in terms of federal law. The municipal council is the representative body of the municipality, elected by the voters based on universal, equal, and direct suffrage by a secret ballot in the individual territory.¹⁸⁷ The mayor can be elected in either one of two ways, namely directly by the individual citizens of that municipality who are eligible to vote, or indirectly by the municipal council.

The municipalities in Germany have the right to govern in their initiative and thus have been afforded discretion on whether to take on tasks or not. However, a distinction must be drawn between voluntary and mandatory self-government tasks.¹⁸⁸ The

¹⁸⁵ Haschke D "Local Government Administration in Germany"
<https://germanlawarchive.iuscomp.org/?p=380> (date accessed 25 November 2022).

¹⁸⁶ Miroslava P 'Municipalities in the Federal Republic of Germany – Progress and Current Situation' 2008 *Politics in Central Europe Journal* 59.

¹⁸⁷ Miroslava P (2008) 65.

¹⁸⁸ Miroslava P (2008) 65.

difference between mandatory municipal tasks and state tasks carried out by municipal administrative agencies is that the former is solely subject to legal oversight, whereas the latter is subject to both legal and technical control from the *Länder*.¹⁸⁹ One of the mandatory tasks for municipalities is the provision of water and energy. The way the municipality fulfils this task is its affair.¹⁹⁰ These powers granted to the municipalities in Germany have allowed municipalities to play a critical role in multilevel governance, especially in matters relating to energy.

4.2.2 Local Government and Renewable Energy in Germany

Like in South Africa, municipalities in Germany enjoy autonomy which is guaranteed by the Constitution. The Constitution provides that municipalities have ‘the right to regulate all local affairs under their responsibility, within the limits prescribed by law.’¹⁹¹ These powers granted to the municipalities in Germany have allowed municipalities to play a critical role in multilevel governance, especially in matters relating to energy.

Germany has had intentions to transition from traditional forms of energy which rely mainly on fossil fuel and nuclear, to renewable energy. Such intentions can be traced back to 1968.¹⁹² As such, Germany started harnessing renewable energy back then after the Chernobyl nuclear disaster which saw then-Chancellor Helmut Kohl and Environmental Minister Klaus Topfer implement the first ‘law on feeding in renewables’ in 1990.¹⁹³

Over the years, Germany has created a policy outlining the country’s goals that aim at improving the development and integration of renewable energies. Ambitious goals regarding the reduction of greenhouse gas emissions and the improvement of energy efficiency have been proclaimed.¹⁹⁴ This process of phasing out nuclear power in the

¹⁸⁹ Schönberger P ‘Municipalities as Key Actors of German Renewable Energy Governance: An Analysis of Opportunities, Obstacles, and Multi-Level Influences’ 2013 Wuppertal papers 11.

¹⁹⁰ Schönberger P (2013) 11.

¹⁹¹ Article 28, paragraphs 1 and 2 of the Basic Law, Germany’s constitution.

¹⁹² Von Hirschhausen C ‘The German “Energiewende”—An Introduction’ (2014) 3(2) *International Association for Energy Economics* 2.

¹⁹³ Von Hirschhausen C (2014) 2..

¹⁹⁴ Federal Government of Germany National Sustainability Development Strategy (2012) progress report 245.

short- and coal power in the mid-term is referred to as the German '*Energiewende*' (energy transition).¹⁹⁵ For this thesis, *Energiewende* will refer to the period of 2010 to the present date. The main objectives of the *Energiewende* were to phase out nuclear power stations, increase the share of renewables for electricity generation to at least 38% in 2020, 50% in 2030, 67% in 2040, and 80% in 2050, and the share of renewables in final energy consumption to 30% by 2030 and above 60% in 2050; reducing greenhouse gas emissions, compared to the 1990 levels, by 40% in 2020, 55% in 2030, 70% in 2040, and 80–95% in 2050; and setting ambitious targets for energy efficiency.¹⁹⁶ Germany involved all levels of government in the implementation of the above policy. Developments at the local and regional levels are crucial given Germany's federal political system and strong municipalities.¹⁹⁷ Municipalities can form energy firms (*Stadtwerke*) and engage in energy-related economic activities based on regional (*Länder*) municipal codes. As a result, municipalities are typically permitted to generate electricity.¹⁹⁸

The federal government of Germany included municipalities in its energy transition plans. Germany's federal government sets the framework for the *Energiewende* at the local level through legislation and policies, such as the Renewable Energy Act, the Federal Building Code, and the Energy Saving Ordinance.¹⁹⁹ The *Länderr*, on the other hand, work with municipalities on energy generation and efficiency matters. They drive the *Energiewende* forward through funding programs, investment in research, zoning laws (*Raumplanung*), and licensing and supervision procedures.²⁰⁰ As much as the states are providing support to municipalities, the municipalities are still left with some form of autonomy. They are still able to make their bylaws and policies. This bottom-up approach has seen municipalities playing a proactive role in local

¹⁹⁵ Hake, Fischer, Venghaus 'et al' 'The German Energiewende e History and status quo' (2015) 92 Elsevier 532.

¹⁹⁶ Von Hirschhausen C (2014) 4.

¹⁹⁷ Beveridge R & Kern K 'The Energiewende in Germany: Background, Developments and Future Challenges' (2013) *Renewable Energy Law and Policy Review* 10.

¹⁹⁸ Final report for the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety on Future expansion of renewable energy sources with special consideration of the federal states (2007) 49.

¹⁹⁹ Clean Energy available at <https://www.cleanenergywire.org/factsheets/cities-municipalities-role-energiewende> (date Accessed 17 April 2023).

²⁰⁰. Clean Energy available at <https://www.cleanenergywire.org/factsheets/cities-municipalities-role-energiewende> (Accessed date Accessed 17 April 2023).

implementation with as much power as possible. What is of significance about Germany is that the federal government and the states provide support to municipalities undertaking renewable energy efforts. One of the largest programs is the National Climate Initiative (NCI) administered by the Federal Ministry for the Environment, which supports climate action such as the development of local climate protection plans and the hiring of climate protection managers, thereby helping municipalities and counties to identify renewable energy potentials and build up capacities.²⁰¹

The municipalities in Germany, like the ones in the United States, generate electricity through municipal utilities (*Stadtwerke*). There are more than 900 German *Stadtwerke* active in electricity generation, supply, and distribution.²⁰² The majority of the utility companies are 100% owned by the municipalities.²⁰³ The municipal council and the mayor sit on the supervisory board of the utility company. While the director and the employees have some autonomy to ensure the delivery of electricity to the consumers.²⁰⁴ The utilities generate electricity from a mixed energy source.

4.2.2 Renewable Energy Generation in Freiburg, Germany

Freiburg, a city in southwestern Germany, has been widely recognized as a global leader in renewable energy production and sustainable development. The city's success story in promoting renewable energy dates back to the 1980s when it began to focus on environmental protection and the conservation of natural resources.²⁰⁵ The city's long-term vision and strategic planning have led to the implementation of a range of initiatives aimed at reducing greenhouse gas emissions and achieving energy self-sufficiency.

One of the most significant factors that have contributed to Freiburg's success in renewable energy is its strong political leadership and citizen engagement. The city's

²⁰¹ Schmid, Meister, Klagge, et al 'Energy Cooperatives and Municipalities in Local Energy Governance Arrangements in Switzerland and Germany' (2020) 29(1) *Journal of Environment & Development* 128.

²⁰² SALGA 'The Electricity Distribution Industry in Germany and South Africa- A Review of Policy and Regulation' Discussion paper (2018) 16.

²⁰³ SALGA (2018) 16.

²⁰⁴ SALGA (2018) 16.

²⁰⁵ ICLE "Local Governments for Sustainability" <https://iclei-europe.org/member-in-the-spotlight/freiburg/> (accessed 17 April 2023).

leadership has been committed to promoting sustainable development, and this has been reflected in the development of innovative policies and programs aimed at reducing energy consumption and promoting renewable energy generation.²⁰⁶ For instance, the city has set ambitious renewable energy targets, such as becoming energy self-sufficient by 2050.²⁰⁷ The city has also implemented innovative programs, such as the establishment of a district heating system that utilizes waste heat from a nearby industrial plant to provide heat and hot water to more than 3,000 households.²⁰⁸ Another critical factor in Freiburg's success in renewable energy generation is its investment in research and development. The city has established research institutions such as the Fraunhofer Institute for Solar Energy Systems (ISE), which is one of the world's leading research centres for solar energy. The Fraunhofer ISE has been instrumental in developing innovative technologies such as solar photovoltaic panels and solar thermal systems.²⁰⁹ It is worth noting additionally that, the city has partnered with local universities to establish research programs aimed at developing new technologies and solutions to support the transition to renewable energy. One of the additional attributes that have contributed to Freiburg's success in renewable energy generation has been facilitated by its favorable regulatory and policy environment. The city has implemented policies that incentivize the adoption of renewable energy technologies, such as feed-in tariffs and tax credits. For example, the city provides financial incentives for property owners who install solar panels on their rooftops.²¹⁰ The city has also implemented building codes that require new buildings to meet high energy efficiency standards.

Importantly, Freiburg's success in renewable energy generation can be attributed to its culture of collaboration and partnership. The city has established partnerships with

²⁰⁶ ICLE “Local Governments for Sustainability” <https://iclei-europe.org/member-in-the-spotlight/freiburg/> (accessed 17 April 2023).

²⁰⁷ Stadt Freiburg “Environmental and Climate Protection” https://www.freiburg.de/pb/site/Freiburg/get/params_E-291838155/1839760/Magazin%20UmwSch%20EN%20V3%20Screen-1.pdf (Date Accessed 17 April 2023).

²⁰⁸ Weber M ‘The role of citizen initiatives in the energy transition: Experiences from Freiburg, Germany’ (2019) 234 *Journal of Cleaner Production* 1045.

²⁰⁹ Stadt Freiburg “Environmental and Climate Protection” https://www.freiburg.de/pb/site/Freiburg/get/params_E-291838155/1839760/Magazin%20UmwSch%20EN%20V3%20Screen-1.pdf (Date Accessed 17 April 2023).

²¹⁰ Stadt Freiburg https://www.freiburg.de/pb/site/Freiburg/get/params_E-291838155/1839760/Magazin%20UmwSch%20EN%20V3%20Screen-1.pdf (Date Accessed 17 April 2023).

local businesses, research institutions, and other municipalities to promote sustainable development and renewable energy generation. For example, the city has established partnerships with other municipalities to establish joint energy cooperatives aimed at promoting renewable energy generation and energy efficiency.²¹¹

4.3 MUNICIPALITIES IN THE UNITED STATES OF AMERICA

The United States' governance power is divided between the federal government and the States.²¹² All the powers granted to the federal government are derived from the Constitution.²¹³ The remaining powers belong to the States.²¹⁴ All States were self-governing and independent. When the States decided to unite and form the federal government, they gave certain powers and functions to the federal government as per the Constitution and kept all the remaining powers.²¹⁵

This is different to South Africa where powers are shared and/or divided between the three spheres of government. The remaining powers not mentioned in the Constitution are reserved solely for the national government.

In June 2017, former US president Donald Trump announced that the US would be pulling out from the Paris Climate Accord.²¹⁶ More than 250 city mayors met in Miami to discuss energy issues and raise their concerns about climate change and pleaded their support for the Paris Agreement.²¹⁷ The cities are taking charge of the just energy transitions.

Municipalities in the United States (sometimes referred to as Cities or Towns) fall under the governance of the States. Municipalities are creatures of State powers. The

²¹¹ Weber M (2019) 1045.

²¹² Connell J, "Federalism" <https://www.law.cornell.edu/wex/federalism> (accessed 4 February 2023).

²¹³ Connell J, "Federalism" <https://www.law.cornell.edu/wex/federalism> (accessed 4 February 2023).

²¹⁴ Connell J, "Federalism" <https://www.law.cornell.edu/wex/federalism> (accessed 4 February 2023).

²¹⁵ Connell J, "Federalism" <https://www.law.cornell.edu/wex/federalism> (accessed 4 February 2023).

²¹⁶ Milman O "Donald Trump confirms US will quit Paris climate agreement" <https://www.theguardian.com/environment/2017/jun/01/donald-trump-confirms-us-will-quit-paris-climate-deal> (date accessed 4 February 2023).

²¹⁷ Alvarez B "Mayors, Sidestepping Trump, Vow to Fill Void on Climate Change" (2017) <https://www.nytimes.com/2017/06/26/us/mayors-trump-climate-change.html> (Date accessed 4 February 2023).

States decide which powers are granted to the municipalities.²¹⁸ Simply put, municipalities have no natural or inherent powers to do anything. State constitutions do, however, allow the municipalities to govern matters relating to their municipal concerns, like electricity generation and transmission. Municipalities have the power to create municipal utility companies. Municipal power utility companies are not for profit and only serve the communities under the municipalities and, in some cases, contribute to the State's energy sector. Municipal utilities can own and operate their electricity generation and transmission. Smaller cities or towns often jointly create and operate an electric utility.²¹⁹

4.3.1 Financing of Renewable Energy Projects

Cities can generate renewable energy as an internal mechanism or enter into Power Purchase Agreements, the same as Public-Private Partnerships in South Africa. Power purchase agreements are mostly preferred by the Cities as they present solutions without risks and without too many costs to the city. In terms of the Power purchase agreement, the municipality mostly allows a third party to install renewable energy generation tools. The municipalities will pay a long-time fixed rate to the third party, and the third party will be in charge of maintaining the solar systems.²²⁰

4.3.2 Power Purchase Agreements

The power purchase agreements are legal instruments in terms of which cities enter into an agreement with a third party for the generation and procurement of clean

²¹⁸ Silverman C "Municipal Home Rule in Wisconsin" <https://www.lwm-info.org/DocumentCenter/View/948/6-16-Claire-Legal-Comment-home-rule-june-2016?bidId=> (date accessed 7 November 2023).

²¹⁹ Silverman C "Municipal Home Rule in Wisconsin" <https://www.lwm-info.org/DocumentCenter/View/948/6-16-Claire-Legal-Comment-home-rule-june-2016?bidId=> (date accessed 7 November 2023).

²²⁰ Martinez et al. 'Moving towards 100% renewable energy: Drivers behind city policies and pledges' (2018) Academic Commons 17.

energy.²²¹ The city does not own the company. It is rather owned by another third-party entity that is financing the deal.²²² The third-party company normally installs renewable energy generation technologies in the city and generates electricity, in turn, such electricity is sold to the city. The third-party company and the city have a long-term fixed procurement rate. This, on its own, better allows the city to budget and plan for energy while keeping the energy rates low for the consumers.

The power purchase agreements are beneficial to both the city and the third-party company, as they both enjoy some federal tax rebates in terms of the federal tax incentives aimed at encouraging the use of renewable energy.²²³ The other benefits include:

- (i) No upfront/low upfront costs to the city;
- (ii) The ability for a tax-exempt entity to enjoy lower electricity prices due to savings passed on from federal tax incentives;
- (iii) A predictable cost of electricity over 15 – 25 years;
- (iv) No need to deal with complex system design and permitting;
- (v) No operating and maintenance responsibilities.²²⁴

Because of the above and many other benefits, many cities in the USA have a strong preference for power purchase agreements.

Purchasing power in terms of the agreements allows the cities to get power from renewable energy sources while limiting their costs and risks. All major risks are borne by the third-party entity. This further provides the cities with a predictable cost of electricity over the years. There is also nothing preventing the cities from generating some of the renewable electricity themselves or through their city utilities.

Power purchase agreements also benefit the community in the sense that in some cases, members of the community are allowed to generate their own electricity from

²²¹ Leung J & Bailey A 'Buying clean electricity: how cities benefit from power purchase agreements' (2018) *Center for Climate and Energy Solutions Policy document 2*.

²²² Leung J & Bailey A (2018) 2.

²²³ US Department of Energy <https://betterbuildingssolutioncenter.energy.gov/financing-navigator/option/power-purchase-agreement> (date accessed 4 February 2023).

²²⁴ US Department of Energy <https://betterbuildingssolutioncenter.energy.gov/financing-navigator/option/power-purchase-agreement> (date accessed 4 February 2023)..

solar panels, and any excess energy they have remaining can be sold to the city. This, on its own, encourages the community to use renewable energy and save electricity since they can sell it to the city. Power purchase agreements also benefit small-scale energy producers. It is called 'net metering.'²²⁵ Net metering provides an incentive for small-scale energy producers by allowing them to 'exchange' power they produce and sell with the utility during a billing period with power that they or their affiliates take from the utility.²²⁶ In the United States, net metering, implemented at both state and local levels, is now regarded as the most significant incentive among several incentives to promote renewable energy distributed generation.²²⁷

Power purchase agreements have long been existing in other countries, mostly Asian countries, and research show that it has benefitted all the stakeholders.²²⁸ They can be pursued in two forms, individual and/or jointly.²²⁹ Some cities prefer to enter into an individual agreement with the independent power producer for the sole benefit of the city, while some cities jointly enter into an agreement with independent power producers. There are two main advantages of having multiple customers in a PPA. First, aggregating demand into a larger bulk purchase can reduce the per unit cost of the contract (sometimes by up to 15 percent), and second, some institutions within the agreement may have a better credit rating than others, and this can be potentially leveraged to improve the contract terms.²³⁰

4.3.3 Nashville-Vanderbilt Solar Project

The United States cities are granted powers to enter Public-Private-Partnerships (PPPs). The Nashville-Vanderbilt Solar Project is one of those PPPs. This is a partnership between the City of Nashville with Vanderbilt University, Nashville Electric Service (NES), and the Tennessee Valley Authority (TVA) to construct a 125 MW

²²⁵ Wan Y "Net Metering Programs" report for the US Department of Energy (1996) 1.

²²⁶ Wan Y (1996) 1.

²²⁷ Wan Y (1996) 1.

²²⁸ Celvakumaran et al "Technical Constraints of Integrating Net Energy Metering from the Malaysian Perspective," (2018) *IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC)*, Kota Kinabalu, Malaysia 757.

²²⁹ Leung J & Bailey A (2018) 2.

²³⁰ Fisher A Public-Private Partnerships for 100% Clean Energy: Prospects for City and Business Collaboration (unpublished Master's thesis, Duke University, 2019) 30-31.

utility-scale solar array as part of TVA's Green Invest program. The deal allocates 100 MW of the energy generated from the array to Metro-Nashville and 25 MW to co-subscriber Vanderbilt University. Metro-Nashville will be the first local government in TVA's service territory to participate in the Green Invest program, contributing to a broader, growing trend of cities using utility green tariff programs to acquire renewable energy.²³¹ This is one of the most significant municipal renewable energy transactions ever executed in the Southeastern United States. In addition to lowering Nashville's carbon emissions by an amount equal to eliminating 14,166 automobiles from the road yearly for the term of the 20-year agreement, Nashville's share of the energy produced is sufficient to power over 11,000 houses annually. Metro-Nashville intends to contribute to expanding the accessibility of renewable energy more broadly throughout the TVA area as the first local authority to take part in Green Invest. Additionally, it aims to persuade major clients in the public and commercial sectors, notably other municipalities, to follow Metro-example Nashville's and pursue access to utility-scale solar through the program.²³²

4.3.4 The City of Chicago and other US cities

The city of Chicago recently entered into an agreement with a third-party company, Constellation Energy, to purchase renewable energy for all the city-owned facilities. In terms of this agreement, Constellation Energy will be generating renewable energy and then supplying it to the city. This move is in line with the city of Chicago's Climate Action Plan, which a 62% carbon emissions reduction by 2040, including through increasing access to and use of renewable energy.²³³

²³¹ TVA "American Cities Climate Change" <https://www.tva.com/about-tva/tva-at-a-glance#:~:text=TVA%20is%20the%20nation%27s%20largest,industrial%20customers%20and%20federal%20facilities> (Date Accessed 28 October 2022).

²³² Vanderbilt University "Vanderbilt and Nashville undertake bold new renewable energy partnership to address climate change" (10 November 2020) <https://news.vanderbilt.edu/2020/11/10/vanderbilt-and-nashville-partner-on-bold-new-renewable-energy-partnership-to-address-climate-change/> (Date Accessed 28 October 2022).

²³³ Pyzyk K "Chicago commits to 100% renewable energy at city facilities by 2025" (15 August 2022) <https://www.utilitydive.com/news/chicago-commits-to-100-renewable-energy-at-city-facilities-by-2025/629614/> (Date Accessed: 30 October 2022).

Many other US cities are also entering into power purchase agreements, while some others are making use of city utility companies. Seattle is one of those. The city of Seattle owns a utility company, Seattle City Light, which oversees generating and supplying electricity to the city. In 2020, the city produced 100% of its energy from renewable energy sources. Over 86% came from hydropower.²³⁴ The city supplements its energy generation with power purchase agreements. The power purchase agreements are specifically from renewable energy sources.

The primary takeaway from the US cities is that they are making use of mixed energy sources. If the city cannot afford to run its own renewable energy projects, they use third parties who generate electricity and then supply the same to the city at long-term fixed fees.

The City of Aspen in Colorado is the third city in the world to run on 100% renewable energy. The most interesting thing about this city is that it met all its renewable energy objectives without significant costs. It has a utility company, Aspen Electric which manages the generation, procurement, and supply of electricity. It generates electricity from renewable energy sources and procures the rest from a third-party power purchase agreement with MidAmerican Energy.²³⁵

While municipalities are making strides in the renewable energy sector, it is worth mentioning that some cities have not yet shifted to 100% renewable energy. In terms of the data from the U.S. Energy Transformation and Administration agency, the U.S. generates electricity from mixed energy sources, which include fossil fuels, nuclear and renewable energy.²³⁶ Over the years, cities have increased the renewable energy sources in their energy mix.²³⁷ According to data from the Local Government Renewables Action Tracker, American cities purchased 4,370 megawatts (MW) of

²³⁴ Where Does Your Power Come From? <https://www.seattle.gov/city-light/energy-and-environment#:~:text=Where%20Does%20Your%20Power%20Come,Skagit%20and%20Pend%20Oreille%20Rivers> (Date Accessed: 30 October 2022).

²³⁵ Best A “For a small Colorado utility, 100% renewable energy is old news” <https://energynews.us/2018/06/08/for-a-small-colorado-utility-100-renewable-energy-is-old-news/> (Date Accessed 30 October 2022).

²³⁶ EIA “Electricity in the United States” <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php> (Date accessed 6 February 2023).

²³⁷ EIA “Electricity in the United States” <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php> (Date accessed 6 February 2023).

clean energy in 2021, which is sufficient to power more than 940,000 households in the country on a yearly basis.²³⁸ The number of renewable energy agreements signed by 155 local governments in 2021 was up 55% from the previous high of 2020 and by 25% more cities.²³⁹

This data shows that while most of the cities have not fully transitioned to renewable energy sources, they are finding ways to include renewable energy sources into their energy mix. And in the long run, they could possibly rely on a fully renewable energy mix. Cities cannot simply fully transition to renewable energy. They must start by integrating renewable energy into their mix and, from there, increase the renewable energy share until fully renewable.

4.4 CONCLUSION

From the above, municipalities are more than capable of handling matters relating to electricity generation and distribution. Research shows that municipalities generating their own electricity or making use of public-private agreements are better able to fulfil their constitutional mandate of providing basic services, especially electricity, to the community.

South Africa can learn lessons from the two countries in the sense that the South African Constitution, the Municipal Systems Act, and the amended regulations to the Electricity Regulations Act all make provision for public-private agreements. South African municipalities could enter into these agreements to procure electricity.

South African municipalities could also form utility companies, which would be governed by the municipalities but at the same time be autonomous and handle the generation and distribution of electricity to the consumers. These utilities would allow the municipality to continue taking charge of the other municipal duties while the utilities are independent, under supervision, taking care of the electricity generation and distribution. Any profit generated by the municipal utilities could be transferred back to the municipality to use in other sectors and basic services.

²³⁸ City renewables “Local Governmental Renewables Tracker” <https://cityrenewables.org/engagement-tracker/> (Date Accessed 6 February 2023).

²³⁹ World Resources Institute (2022) <https://www.wri.org/insights/us-clean-energy-trends> (Date Accessed 6 February 2023).

The concept of net metering, which is currently in use in America and several Asian countries, has the potential to be implemented in South Africa. This system encourages consumers to generate their own electricity through Photovoltaic (PVC) panels. Any excess electricity produced can be sold back to the municipality. From the above, the South African local government can learn that they are not expected to fully transition to renewable energy, but to first add renewable sources into their grid and gradually increase the share.

CHAPTER 5: CONCLUSION

5.1 Introduction

This thesis aimed to analyze the amendments to the regulations issued in terms of the Electricity Regulation Act that empower municipalities to generate their own electricity and purchase from Independent Power Producers.²⁴⁰ This analysis was done by examining the Constitutional provision that relates to the powers and functions of local government, legislation, and case law. This was done to determine whether local government has any duty to generate, procure or reticulate electricity, and if so, whether they have any duty to generate renewable energy. Lastly, whether the amendments to the regulations provided local government institutions with enough powers and resources to carry out the task, this chapter will provide the findings of each chapter and provide recommendations.

5.2 South African Local Government Duties

5.2.1 Electricity Framework

The South African local government electricity framework is a complex system that involves the provision of electricity to communities by municipalities. The duty to provide electricity is enshrined in the Constitution of South Africa, which mandates municipalities to provide basic services.²⁴¹ While the Constitution does not explicitly mention the duty to provide electricity, it has been argued in the previous chapters that such a duty exists.

²⁴⁰ Regulation 5 of the Amendments to the Electricity Regulations on New Generation Capacity issued in terms of the Electricity Regulation Act, 2006.

²⁴¹ Section 153 of the Constitution mandates municipalities to "... structure and manage its administration, and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community."

The electricity framework in South Africa is governed by several pieces of legislation, including the Electricity Regulation Act (ERA)²⁴² and the Municipal Systems Act. ERA provides for the regulation of the generation, transmission, distribution, and use of electricity in South Africa, while the Municipal Systems Act sets out the roles and responsibilities of municipalities in providing basic services such as electricity to their residents.

One of the key features of the South African electricity framework is the National Energy Regulator of South Africa (NERSA), which is responsible for regulating the electricity supply industry in South Africa.²⁴³ NERSA is responsible for setting electricity tariffs and issuing licenses to electricity suppliers, among other things. In addition to NERSA, there are several other entities involved in the South African electricity framework, including Eskom, the state-owned power utility responsible for the generation, transmission, and distribution of electricity in South Africa, and the Department of Energy, which is responsible for the country's energy policy.²⁴⁴

The duty to provide electricity is a crucial aspect of the South African local government electricity framework. There is a lack of clarity around the roles and responsibilities of municipalities in providing electricity, which can lead to confusion and inefficiencies. Currently, the source of the municipal duty to provide electricity is the *Joseph* case which was discussed in previous chapters.

5.2.2 Developmental Duties

The role of local government is to be developmental, ensuring the general well-being of its inhabitants by improving their quality of life sustainably.²⁴⁵ Local governments should aim to solve common national development problems, create new development opportunities, and achieve common national development goals.²⁴⁶ This is particularly important in South Africa, where municipalities are responsible for providing services

²⁴² Act 4 of 2006.

²⁴³ NERSA <https://www.nersa.org.za/our-profile/> (date accessed 22 March 2023).

²⁴⁴ NERSA was established in terms of section 3 of the National Energy Regulator Act 40 of 2004. See also <https://www.nersa.org.za> (date accessed 22 March 2023).

²⁴⁵ Section 153 Constitution.

²⁴⁶ See discussion on <https://www.oecd-ilibrary.org/sites/c4fa35e5-en/index.html?itemId=/content/component/c4fa35e5-en> (date accessed 20 May 2023).

such as electricity, access to potable water, proper sanitation, and waste removal. The Constitution, the White Paper, and the Municipal System Act all provide a framework for the Constitutional developmental mandate to be realized. Schedules 4B and 5B of the Constitution list competence areas for local government, which include basic community services like electricity reticulation. However, the local government's developmental mandate is not limited to service provision, as there are overlapping issues like environmental rights to consider. Section 24 of the Constitution guarantees everyone the right to a healthy environment, which the local government must consider when providing services. Failure to adhere to this can result in legal action being taken against the local government by the community. Therefore, the developmental mandate of local government is crucial for redressing past imbalances and providing sustainable services to the communities they serve.

5.3 The Role of Local Government in the Provision of Electricity

The provision of electricity and gas reticulation is one of the functional areas that local government has executive authority over, as listed in Schedule 4B of the Constitution.²⁴⁷ The definition of reticulation is inconclusive as there is no definition of such in the Constitution, but it generally refers to the distribution side of electricity and the processes involved. There is a legal duty for municipalities to provide basic electricity services, as electricity is considered one of the most important basic municipal services and is necessary to ensure an acceptable and reasonable quality of life. The Constitutional Court has held that municipalities are obliged to provide water and electricity to the residents in their area as a matter of public duty,²⁴⁸ and the Supreme Court of Appeal has held that electricity is a component of basic services that municipalities are constitutionally and statutorily obliged to provide to the residents.²⁴⁹ Such obligations to provide basic municipal services are sourced from both the Constitution and legislation, and the right to access electricity has been

²⁴⁷ Refer to previous chapters on the discussion of reticulation.

²⁴⁸ *Mkontwana v Nelson Mandela Metropolitan Municipality* 2005 (1) SA 530 (CC) at para 38.

²⁴⁹ *Eskom Holdings SOC Ltd v Resilient Properties (Pty) Ltd and Others; Eskom Holdings SOC Ltd v Sabie Chamber of Commerce and Tourism, and Others; Thaba Chweu Local Municipality and Others v Sabie Chamber of Commerce and Tourism, and Others* [2020] ZASCA 185 (29 December 2020) at para 13.

created as a result. This right, however, still needs to be developed as it creates more questions that are yet to be answered by the courts.²⁵⁰

5.4 The Role of Local Government in Generating Electricity

The South African Constitution grants the power of electricity and gas reticulation to local government but is silent on electricity generation. This has led to debates regarding whether the national government or local government has the authority to regulate electricity generation. The Electricity Regulation Act of 2006 regulates electricity generation, and the National Energy Regulator of South Africa is responsible for enforcing the regulatory framework provided for in the act. Any entity that wants to generate or distribute electricity must apply to NERSA for a license. While municipalities have no inherent power to generate electricity, they can obtain this power via an act of assignment or through section 156(5) of the Constitution, which grants municipalities the power to exercise any power concerning a matter reasonably necessary for the effective performance of their functions. Municipalities are well-positioned to plan and manage energy generation, which would allow them to reduce costs and generate more revenue from electricity sales.²⁵¹ The court has held that local governments have powers beyond those specified in schedules 4B and 5B in cases involving socio-economic rights, such as the right to housing and the provision of basic municipal services, including electricity. Some local governments, like the large municipalities, are better suited to understand and manage matters involving energy generation and distribution at the local level through the use of by-laws. The court has held that the environment is an area of legislative and executive authority that should reside in all three levels of government.²⁵² Likewise, electricity.

5.5 Amendments to the Regulations Issued in terms of the Electricity Regulations Act

²⁵⁰ The issue has been discussed in the above case in the Constitutional Court which saw the division on the issue between the majority and minority judgment. See *Eskom Holdings SOC Ltd v Vaal River Development Association (Pty) Ltd and Others* [(CCT 44/22) [2022] ZACC 44; 2023 (5) BCLR 527 (CC); 2023 (4) SA 325 (CC) (23 December 2022)

²⁵¹ Refer to the discussion in chapter 3.4.

²⁵² *Le Sueur* para 20.

In October 2020, the Minister of Energy, Gwede Mantashe, gazetted amendments to the Regulations issued in terms of the Electricity Regulations Act. The amendments extend the procurement of new renewables, cogeneration, baseload, mid-merit load, peak load, energy storage, and cross-border generation capacity to organs of states active in the energy sector, including municipalities. The important amendment to the Regulations relevant to this paper is the amendment to Regulation 5 of the Regulations issued in terms of the Electricity Regulations Act. This amendment allows a municipality as an organ of the state to apply to the Minister to procure or buy new generation capacity in accordance with the Integrated Resource Plan. If the municipality intends to deliver a new generation capacity through an external mechanism, then the regulations require the municipality to comply with the provisions of section 120 of the Municipal Finance Management Act, which empowers municipalities to enter into Public-Private-Partnerships. One other requirement that the municipality has to comply with, which is not explicitly found in the amended regulations issued in terms of the Electricity Regulations Act, is that a municipality that intends to enter into a public-private partnership to create new generation capacity must comply with section 78 of the Municipal Systems Act.

The Electricity Regulations Act amendments have granted local governments the power to generate electricity, but the lack of financial support and skilled manpower could hinder their ability to do so. Municipalities need financial assistance and technical training to procure renewable energy. Financial instability has been a major issue in many municipalities, with 50% under a financial strain, while over a quarter face significant doubt about their ability to meet their obligations. The availability of competent local government employees who can demonstrate performance and managerial leadership and accountability to work on such energy duties is also critical. However, the Regulations make no provision for technical and skills assistance to qualifying and willing municipalities. To address these shortcomings, there should be provision for technical skills training and financial assistance in the regulations, along with capacity building and technology transfer.

5.5 Recommendations for South African Municipalities

These are, *inter alia*, some of the municipal duties identified and previously discussed in this thesis:

- a) The municipalities have a duty to provide basic services, which include electricity.
- b) Municipalities have a duty to protect the environment.
- c) Municipalities are required to be developmental.

The issue of electricity touches on all the above duties. The main issue the thesis aims to resolve is to identify whether the amendments to the Regulations issued in terms of the Electricity Regulations Act are sufficient to allow municipalities to fulfill their duties in South African law. In the previous chapters, it was identified that while the amendments are progressive, in the sense that they are changing some of the status quo, which is the centralization of electricity generation powers to the national government through Eskom, they were found, however, not sufficient for the municipalities.

It is important to acknowledge that not all municipalities are equal; the discussion in chapter 2 of the historical context of the South African municipalities sheds some light on why municipalities are different. Without repeating the same argument already made in the previous chapters, it is important that when powers are granted to municipalities, there should be some form of support given as well.

Based on the issue identified, it is argued that the power relating to electricity generation, distribution, and procurement should be shared amongst the three spheres of government. The decentralization of power would allow positive competition, which stands to benefit the communities.

In all three spheres, it is recommended that the South African government develop or update the current electricity legal framework. As it stands, there are so many inconsistencies. An example of this is the fact that the issue of the duty to provide electricity by the municipalities had to be answered by the courts. The legislation is inconsistent and not clear. A comprehensive legislative framework that covers the issue of generation, reticulation, and procurement of electricity by the national,

provincial and local government would provide some clarity on all actors of their roles and responsibilities. Further, this recommendation is because times are changing, what might have worked in the 1990s or early 2000s when legislation was enacted might not work in the present day. Legislation must be progressive to keep up with the times.

On the issue of the Amendments to the regulations issued in terms of the Electricity Regulations Act, It is argued that such granting of the powers to municipalities must be followed by some form of a national grant. I argue for the creation of a National Energy Fund, focusing solely on renewable energy, which would be a governmental agency yet independent from all influence. The Fund can be administered by a body comprising experts and scholars in the field of energy, with the main purpose of the Fund to provide support to municipalities undertaking electricity generation, procurement, and distribution. Such a Fund shall make grants available to municipalities, monitor implementation and provide the necessary support. Grants can also be allocated to universities for research. As time progresses, the Fund can also provide funding to independent power producers as well. The grants can also be in the form of loans – to provide liquidity to the fund. In Chapter 2, an example was made of the funding from the international community, which the national government had secured for the transition from coal-based energy to renewable; such funding can be used for the creation of the Energy Fund.

5.6 Comparative Lessons for South Africa

The analysis of the energy sectors of South Africa, the USA, and Germany has revealed that there are significant differences in the way that municipalities approach the provision of clean energy. South African municipalities face unique challenges in terms of the availability of resources and the need to address historical inequalities, corruption, mismanagement, and non-accountability. However, there are important lessons that can be learned from the experiences of the USA and Germany in particular.

The USA has a highly decentralized energy system, with many municipalities generating their own electricity. This has led to significant innovation in the energy sector, with a focus on renewable energy sources such as wind and solar power. However, the lack of a national energy policy has led to inconsistencies and difficulties in implementing clean energy strategies.

Germany, on the other hand, has a highly centralized energy system with a focus on renewable energy and a robust national policy framework. This has allowed for a coordinated approach to the transition to clean energy, with significant investments in renewable energy infrastructure and research and development. However, the transition has been expensive, and there are concerns about the impact on energy prices. Some municipalities have undertaken the renewable energy process making use of the national energy policies.

5.7 Recommendations

To solve the issues raised in the problem statement of this thesis, the following recommendations are made, taking into account the discussions in the previous chapters, including the lessons from the comparative chapter four.

Recommendation 1: Adopt supportive policies

Both the United States and Germany have adopted policies to promote clean energy. In the United States, the Federal Production Tax Credit and Investment Tax Credit have encouraged the deployment of wind and solar energy. In Germany, the Renewable Energy Act and the Energy Conservation Act have provided support for renewable energy development and energy efficiency. These policies have created a supportive environment for clean energy development.

It is recommended that the South African national government learn from this and adopt supportive policies to encourage the development of clean energy. Municipalities can provide incentives for the installation of solar panels, offer financing

options for clean energy projects, and promote the use of electric vehicles. It is important to note, however, that policies must be consistent, and the spheres of government have to work together in the creation of these policies. Working together ensures that the policies are within the national and local energy frameworks. In Chapter 2, the same argument was made that the Constitution requires all three spheres to work together for the benefit of the communities.

Recommendation 2: Invest in research and development

The United States and Germany have invested in research and development to promote clean energy. The United States has invested heavily in research on renewable energy, while Germany has invested in energy storage and grid integration research. These investments have resulted in new technologies and lower costs for clean energy.

South African government at the national and local levels can also invest in research and development to promote clean energy. For example, municipalities can partner with universities and research institutions to study the feasibility of clean energy projects and to develop new technologies.

Recommendation 3: Encourage public participation

Both the United States and Germany have encouraged public participation in clean energy development. In the United States, community solar projects have allowed residents to invest in solar projects and receive credits on their energy bills. In Germany, citizens are allowed to invest in renewable energy projects and receive guaranteed feed-in tariffs.

South African municipalities can also encourage public participation in clean energy development. For example, municipalities can offer community solar projects or allow citizens to invest in clean energy projects and receive credits on their energy bills.

While this is already being done by some municipalities – it is still not being done by most.

Recommendation 4: Develop partnerships

Both the United States and Germany have developed partnerships to promote clean energy. In the United States, utilities, corporations, and government agencies have partnered to develop renewable energy projects. In Germany, utilities have partnered with citizens and local communities to develop renewable energy projects.

South African municipalities can also develop partnerships to promote clean energy. For example, municipalities can partner with private utilities, corporations, and government agencies (for example, the Department of Energy) to develop renewable energy projects. They can also partner with citizens and local communities to develop community solar projects or other clean energy projects.

5.5 Conclusion

Based on the research conducted on the South African local government electricity framework, it is clear that the provision of electricity is a crucial duty that municipalities are mandated to provide. However, there needs to be more clarity around the roles and responsibilities of municipalities in providing electricity as the lack of such, can lead to confusion and inefficiencies. To address this issue, South Africa needs a comprehensive electricity framework. South African local government can draw lessons from USA and German municipalities on renewable energy generation or procurement.

In the USA, municipalities have been successful in implementing renewable energy projects through various strategies, including community solar programs, energy efficiency initiatives, and partnerships with private sector companies. Similarly,

German municipalities have been at the forefront of renewable energy generation, with many implementing community-owned renewable energy projects. South African local governments can learn from these experiences and adopt similar renewable energy generation or procurement strategies. This can help to reduce costs and generate more revenue from electricity sales, while also promoting sustainable development and reducing reliance on traditional energy sources.

Overall, the South African local government electricity framework must continue to evolve and adapt to meet the needs of communities sustainably and efficiently. Through the adoption of innovative strategies and lessons learned from other municipalities/cities, South African local governments can enhance their capacity to provide reliable and sustainable electricity services to their residents while also contributing to the country's renewable energy goals.

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