

South Africa's Journey to Climate Change Regulation: *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 2017 2 All SA 519 (GP)

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Abstract

Concerns over climate change are increasingly reaching an urgent level. Many countries have begun focusing their efforts on mitigating its devastating impact. At the same time countries need to ensure their economic growth and development, thus calling for greater energy usage leading to increased greenhouse gas emissions. As the environment struggles to adapt to the rapid changes brought about by climate change, the effects are felt by the most vulnerable of the world's population. Reports from the Intergovernmental Panel on Climate Change have outlined the reasons and the effects of climate change providing actions required to mitigate these effects. Unfortunately developing countries, including South Africa, are the most affected. The current energy system in the country is primarily based on fossil fuels, which emit the greatest amount of greenhouse gases. To ensure that South Africa mitigates the impact, government needs to safeguard and promote sustainable development. To do this South Africa should weigh its energy mix in relation to the environment and the wellbeing of its citizens. A comprehensive and robust regulatory framework on climate change is required thus ensuring the achievement of South Africa's developmental goals well into the future and ensuring participation in the global effort against climate change. *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 2017 2 All SA 519 (GP) signifies a good start towards the effective regulation of climate change in South Africa.

Keywords

Climate change; regulatory framework; South Africa.

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1 Introduction

Climate change is:¹

The ongoing trend of changes in the earth's general weather conditions as a result of an average rise in the temperature of the earth's surface often referred to as global warming.

Due to the rise in human activity, in line with industrial and population growth and activities such as deforestation,² there has been an increase in the emission of greenhouse gases (GHG) into the atmosphere, such as carbon dioxide, methane and nitrous oxide.³ The release of these gases has adversely impacted on the earth's natural environment and on the ability of the climate to adapt to an increasing rise in the earth's temperature.⁴ Currently, there are global efforts focused on the mitigation of climate change, which attributes extreme weather changes to "human activities".⁵ If the increase in average global temperature is not kept under 2 degrees, there may be "potentially catastrophic" impacts, especially on countries such as South Africa.⁶ Increasingly, the global population has become more aware of its role in causing climate change and there are efforts to ameliorate this man-made disaster.⁷

As countries unite to discuss and implement ways of mitigating these effects through the implementation of the United Nations Framework on Climate Change (UNFCCC), the Kyoto Protocol⁸ and more recently the Paris

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¹ National Climate Change Response White Paper 8 in Gen N 757 in GG 34695 of 19 October 2011 (hereinafter White Paper).

² White Paper 8.

³ Section 1 of the *National Environmental Management Act: Air Quality Act* 39 of 2004.

⁴ White Paper 8. Generally, increases in temperatures have occurred at a much slower pace and over a prolonged period, giving the climate time to adjust to the changes. The more rapid change has not allowed for this adjustment and the result is extreme weather changes which include longer droughts in some areas, or increased rain in others, a much hotter climate and increased sea levels. See the fuller discussion in the White Paper.

⁵ White Paper 9. Also see Parry *et al* "Summary for Policymakers" 9, where it is accepted that the many changes in the world's natural systems are due to human influence.

⁶ White Paper 9.

⁷ *United Nations Framework Convention on Climate Change* (1992) 1 (hereinafter UNFCCC).

⁸ *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (1998) (hereinafter Kyoto Protocol). The Kyoto Protocol (1997) "constitutes the main legal instrument on climate change" - see Deleuil 2012 *RECIEL* 272. All member countries to the UNFCCC meet annually at a Conference of the parties, (COP) with the purpose of promoting the goals of the UNFCCC. See UNFCCC 2020 <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop>.

Agreement,⁹ it remains each individual country's responsibility to ensure that it contributes to the solution rather than to the problem. Although a united effort is needed to mitigate climate change,¹⁰ it is recognised that countries' capabilities and available resources are not equal.¹¹ This is catered for by the common but differentiated responsibilities principle, which acknowledges the inequality between the priorities of developed countries and those of developing countries.¹²

As a developing country and as a non-Annexe 1 country in terms of the Kyoto Protocol, South Africa is not one of the countries obliged "to take the lead" on climate change.¹³ As one of the highest contributors of GHG emissions due to its heavy reliance on coal,¹⁴ also as a water stressed country¹⁵ and a country that would be greatly disadvantaged by the effects of climate change,¹⁶ arguably South Africa should take a stronger stance against the effects of climate change. Despite this, the country's climate change laws are arguably not as advanced as they could be to overcome the environmental challenges.

The landmark Paris Agreement, adopted by almost 200 parties, highlights the increased global efforts to combat climate change.¹⁷ South Africa's role in such an endeavour must therefore increase to ensure its own wellbeing

⁹ The Paris Agreement is a "legally binding international treaty" that was adopted at COP 21 in 2015. Its aim is to limit global warming and all participating countries submit nationally determined targets (NDC's) to outline their plans to reduce greenhouse gases (GHG) emissions. UNFCCC 2021 <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

¹⁰ Mitigation of climate change is defined as "a human intervention to reduce the sources or enhance the sinks of greenhouse gases" and can take various approaches. Edenhofer *et al* "Summary for Policymakers" 4. What is certain is that a united effort by all countries is required since climate change affects the globe.

¹¹ Articles 1.7, 2.1 and 3.1 of the Kyoto Protocol. The Kyoto Protocol distinguishes between developed countries and those still developing. The developed countries are listed as Annexe 1 countries and have binding obligations in terms of the protocol; also see art 3.1- 3.2 of the UNFCCC.

¹² Deleuil 2012 *RECIEL* 271. The common but differentiated responsibilities principle recognises that while a united effort is required against climate change, all countries do not have the same capacity to contribute. A differential approach and expectation from each country according to its capabilities will not unduly tax developing countries.

¹³ Article 3.1 of the UNFCCC.

¹⁴ White Paper 8.

¹⁵ White Paper 9.

¹⁶ White Paper 9. The effects of climate change on South Africa particularly are of concern. The effects would be felt across important sectors such as water and agriculture. See Van der Bank and Karsten 2020 *Air, Soil and Water Research* 1. Also see the discussion in part 4 below and Niang *et al* "Africa" 1209.

¹⁷ UNFCCC 2021 <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

as well as to do its part for the rest of the world.¹⁸ A step in the right direction was made in the judgment of *Earthlife Africa Johannesburg v Minister of Environmental Affairs*,¹⁹ (the *Thabametsi* case), which considered whether the impacts on climate change of a coal-fired power station constitute "a relevant factor" to be considered in an environmental impact assessment report for the purpose of obtaining an environmental authorisation in terms of the *National Environmental Management Act* (NEMA).²⁰ This case note explores the impact of the judgment on the law on climate change and will argue that, while the existing regulatory framework has made a significant contribution to discharging South Africa's climate change responsibilities, the framework needs to be more robust to ensure a positive contribution to combatting climate change.

This note initially explores South Africa's current energy practices, thus setting the context for the understanding of the importance of the *Thabametsi* case judgment. The existing legal framework is then examined in the context of a description of South Africa's particular vulnerability to climate change. The facts and outcome of the case are discussed thereafter with the view that the state as custodian of the environment must ensure its protection through a comprehensive climate change regulatory framework.

2 South Africa's energy profile

South Africa's economy is "energy intensive"²¹ with coal as the dominant fuel,²² due to the substantial coal resources that the country enjoys.²³ South Africa's significant coal reserves rank it as the third largest exporter of coal. These reserves also primarily fuel South Africa's electricity production with at least 77% of its energy coming from coal.²⁴ The ample reserves of coal generally mean that the country's energy supply is secure.²⁵ However, the historical context of the country has resulted in a population characterised by abject poverty and inequality with a large number unable to access

¹⁸ White Paper 9.

¹⁹ *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 2017 2 All SA 519 (GP) (hereinafter *Thabametsi*).

²⁰ *National Environmental Management Act* 107 of 1998 (hereinafter NEMA; also see *Thabametsi* para 91. The environment is defined by NEMA in s 1 as: "the surroundings within which humans exist and that are made up of – (i) the land, water and atmosphere of the earth; (ii) micro-organisms, plant and animal life; (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and the physical, chemical aesthetic and cultural properties and conditions of the foregoing that influence health and wellbeing."

²¹ Davidson "Energy Policy" 4.

²² Davidson "Energy Policy" 4.

²³ Tait and Winkler 2012 *Journal of Energy in South Africa* 8.

²⁴ Eskom 2021 https://www.eskom.co.za/AboutElectricity/ElectricityTechnologies/Pages/Coal_Power.aspx.

²⁵ Tait and Winkler 2012 *Journal of Energy in South Africa* 8.

energy generally, and electricity in particular.²⁶ It is because of this legacy that the country's energy policies are necessarily driven towards the alleviation of inequality, poverty and by association other socio-economic ills such as unemployment.²⁷ The abundance of coal therefore is offered as a compelling reason to use it as the cheaper energy source of choice, to address the critical issues faced by the country.²⁸ At the same time, South Africa acknowledges the need for sustainable development,²⁹ which places the use of coal as an energy choice at odds with sustainable development on account of its high GHG emissions.³⁰ Although the country must address its obligation to reduce GHG emissions, the use of coal-fired power looks set to be the preferred source to ensure the socio-economic challenges of the country are overcome.³¹ Progress has been made towards using cleaner alternative sources such as renewable energy through the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).³² Additionally investment has been made by the Department of Mineral Resources and Energy in various sectors such as energy efficiency and public transport in order to reduce emissions.³³ The country's energy sector has also set the target to be "environmentally sustainable" by 2030. Despite this progress, the country's energy policies still prioritise coal. For example, the Integrated Resource Plan (IRP)³⁴ envisages 6.3 MW of coal as part of the energy mix,³⁵ and over 90% of South Africa's electricity is derived from coal.³⁶ In addition the updated IRP of 2019³⁷ shows that coal

²⁶ In 1990 only a third of the population had access to electricity. Since then, the country's National Electrification Programme has provided electricity to poor households with the aim of universal electrification. Tait and Winkler 2012 *Journal of Energy in South Africa* 8. The Department of Mineral Resources and Energy has set a target of universal electrification by 2025. DMRE 2020 <http://www.energy.gov.za/files/aboutus/DMRE-Annual-Performance-Plan-2020-2021.pdf> (hereinafter DMRE).

²⁷ Davidson "Energy Policy" 6, 7.

²⁸ Tait and Winkler 2012 *Journal of Energy in South Africa* 9; also see *Thabametsi* para 26.

²⁹ Winkler 2006 *Energy Policies for Sustainable Development* 2, where sustainable development is defined as "Development that meets the present needs and goals of the population without compromising the ability of future generations to meet theirs." Also see Feris 2010 *PELJ* 79.

³⁰ Humby 2018 *JEL* 145; also see White Paper 8-9.

³¹ Humby 2018 *JEL* 145; also see Tait and Winkler 2012 *Journal of Energy in South Africa* 9.

³² DMRE 18. The REIPPPP is the largest programme of its kind on the continent of Africa and has been hailed as a success. See Eberhard 2013 *Viewpoint* 4.

³³ Integrated Resource Plan 8 in GN 1360 in GG 42784 of 18 October 2019.

³⁴ Integrated Resource Plan for Electricity 2010-2030 in GN 400 in GG 34263 of 6 May 2011 (hereinafter IRP 2010).

³⁵ IRP 2010 6.

³⁶ DMRE 42.

³⁷ Integrated Resource Plan in GN 1360 in GG 42784 of 18 October 2019 (hereinafter IRP 2019).

is still a part of the energy policy.³⁸ Interestingly, the IRP also includes emission reductions as an objective,³⁹ and the IRP 2019 also records the non-binding guidelines suggested by the International Labour Organisation (ILO) for a "just transition towards environmentally sustainable economies".⁴⁰ Arguably, this is a sensible approach since it is because of the existence of the well-established coal-fired system that the country has both the resources and the knowledge in coal-based systems and can address energy needs faster in this way.⁴¹ To this end, the IRP 2019 provides that "South Africa should not sterilise the development of coal resources" and states that this should be done with the adoption of "cleaner coal technologies".⁴² Notably, however, there is a lack of deeper discussion specifically on climate change. While there are discussions and while South Africa is a part of negotiations surrounding climate change, including GHG emission reductions and caring for the environment, a specific inclusion of the link to climate change is missing.⁴³ The prioritisation of coal use is also supported by the shortage of electricity experienced by the country, which necessitates long periods of load shedding, thereby crippling the country's growth efforts.⁴⁴ It is this critical balance that the country must achieve, to ensure that its population has access to energy, which includes access to electricity, but also to ensure environmental sustainability.⁴⁵ The Constitution⁴⁶ itself recognises that sustainable development includes environmental protection, social needs and economic development and thus this interplay, in the South African context, requires the use of coal.⁴⁷ Coal usage contributes to economic growth goals but negatively impacts on the natural environment. It is recognised that climate change adaptation is important for sustainable development but a balance needs to be attained between social progression and protection of the earth's resources.⁴⁸ There are many instances where effective environmental governance is hampered because decisions by the state prioritise economic development over environmental protection.⁴⁹ The *Thabametsi* case highlights this delicate balancing act and shows how the country should begin to move towards a

³⁸ IRP 2019 41, as a long-term observation "coal remains dominant in the energy mix for the planning period up to year 2030".

³⁹ IRP 2010 7.

⁴⁰ IRP 2019 45.

⁴¹ Tait and Winkler 2012 *Journal of Energy in South Africa* 8-9.

⁴² IRP 2019 46.

⁴³ Van der Bank and Karsten 2020 *Air, Soil and Water Research* 2.

⁴⁴ IRP 2019 34, 40.

⁴⁵ White Paper on Energy Policy 9 in GN 3007 in GG 19606 of 17 December 1998 (hereinafter White Paper on Energy Policy).

⁴⁶ *Constitution of the Republic of South Africa*, 1996 (hereinafter the Constitution).

⁴⁷ Van der Bank and Karsten 2020 *Air, Soil and Water Research* 4.

⁴⁸ Van der Bank and Karsten 2020 *Air, Soil and Water Research* 2.

⁴⁹ Feris 2010 *PELJ* 74. See also Jegede and Makulana 2019 *Obiter* 399.

proper consideration of climate change while still addressing its energy requirements.⁵⁰

3 South Africa's current climate change laws

In order to appreciate the significance of the *Thabametsi* judgment, it is necessary to discuss the existing South African laws and policy around climate change. Since climate change means:

A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods⁵¹

and where rapidly rising temperatures are a consequence of these changes, the earth's natural resources are not able to recover as well or as fast as they should.⁵² These natural resources form part of the natural environment that provides food security, water and other resources necessary for human survival.⁵³ It is therefore no stretch of the imagination to conclude that protection of the environment is key to the mitigation of climate change and its effects.⁵⁴

The Constitution in section 24 specifically guarantees the right to "an environment that is not harmful to ... health or well-being".⁵⁵ The section also provides for the protection of the environment "for the benefit of present and future generations", which involves containing pollution and ensuring sustainable development, among other things.⁵⁶ This provision effectively requires the state to ensure that the environment is protected for the benefit of the public for successive generations and is the overarching provision for the protection of the environment.⁵⁷ This means that South Africa will have to look at its policies on GHGs (discussed below) again. While it is important to address current energy needs, it is equally important to ensure that any action taken today does not jeopardise the environmental future.⁵⁸

⁵⁰ *Thabametsi* paras 32-34.

⁵¹ Article 1.2 of the UNFCCC.

⁵² White Paper 8.

⁵³ White Paper 8.

⁵⁴ White Paper 8.

⁵⁵ Section 24(a) of the Constitution.

⁵⁶ Sections 24(b)(i)(ii) and (iii) of the Constitution. A theme also followed in NEMA in the Preamble; also see White Paper 11.

⁵⁷ Blackmore 2018 *RECIEL* 187. This is in line with the public trust doctrine which Blackmore argues essentially mandates the state or the government as a trustee to use the trust property – in this case the environment – in the interest of the public.

⁵⁸ Ottinger and Jayne 2000 *Pace Envtl L Rev* 2.

The policy on climate change is provided for in the National Climate Change Response White Paper (the White Paper).⁵⁹ At the outset the White Paper recognises South Africa's particular vulnerability to the effects of climate change.⁶⁰ It also refers to the balance required between contributing to the worldwide effort to reduce GHG emissions and to "successfully tackl[ing]" its developmental goals.⁶¹ Significantly, the White Paper accepts that climate change is "one of the greatest threats to sustainable development"⁶² while at the same time also seemingly stating that overcoming the country's socio-economic challenges such as poverty and unemployment would take precedence.⁶³ The White Paper also acknowledges the role that South Africa must play in reducing GHG emissions as a member of the global community.⁶⁴

As such, the White paper considers both adaptation and mitigation measures with an admission that the country's emissions are mostly from the energy industry.⁶⁵ A number of Near Term Priority Flagship Programmes are discussed in recognition of the urgency required in addressing climate change. These programmes will include measures to mitigate and adapt to climate change.⁶⁶ Overall, the White Paper considers the government's approach to climate change and the role it should play in the near and long term. It is informed by section 24 of the Constitution and NEMA as well as the United Nations Millennium Declaration and the UNFCCC.⁶⁷

While there is a policy aimed at regulating climate change, there is no specific piece of legislation that provides for climate change overall.⁶⁸ There is, however, legislation at national level that regulates the use of natural resources. The NEMA incorporated the Constitution's provisions and paved the way for further legislation on specific areas in the environment such as

⁵⁹ White Paper 5.

⁶⁰ White Paper 5, 8, 9.

⁶¹ White Paper 5.

⁶² White Paper 9.

⁶³ White Paper 11.

⁶⁴ White Paper 25.

⁶⁵ White Paper 26.

⁶⁶ White Paper 30, 31, these include the Climate Change Response Public Works Flagship Programme and the Renewable Energy Flagship Programme both of which can assist with reducing emissions and building capacity to adapt to the effects of climate change.

⁶⁷ White Paper 5. The Millennium Declaration is a declaration that unites the globe in affirming and protecting common world interests such as peace, security and disarmament and includes "protecting our common environment". The Declaration supports sustainable development and aims to "spare no effort to free all of humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities ...". *United Nations Millennium Declaration* (2000).

⁶⁸ *Thabametsi* paras 84, 85, 88.

the *Air Quality Act*⁶⁹ whose purposes are, among others, to prevent pollution and secure sustainable development,⁷⁰ and which in the preamble specifically incorporates the wording of section 24 of the Constitution. Other Acts pertaining to the safeguarding of the environment include the *National Water Act*,⁷¹ which recognises water as a scarce resource that is "unevenly distributed" in South Africa.⁷² Its purpose includes consideration of preserving water for the future through "sustainable use in the public interest,"⁷³ and the *Mineral and Petroleum Resources Development Act* (MPRDA),⁷⁴ which protects the sustainable development of the state's minerals.⁷⁵

As a signatory to the UNFCCC, the Kyoto Protocol and the more recent Paris Agreement South Africa is obliged, amongst its other responsibilities, to formulate its responses to the responsibility to mitigate GHG emissions and "mainstream climate change considerations into social, economic and environmental policy".⁷⁶ While acknowledging these responsibilities, as a developing country its economic growth and the eradication of poverty are key priorities.⁷⁷ The role of access to energy and specifically electricity is a mandatory concern for the government if the country is to achieve its developmental goals.⁷⁸ The intermittent load shedding the country has experienced since 2008 has reached critical proportions, resulting in so-called stage 6 load shedding⁷⁹ with crippling effects on the economy.⁸⁰ The fact that the electricity industry is mainly coal-based, however, directly conflicts with the world's call for cleaner energy paths.⁸¹ As pointed out by Humby, this conflict is further evident in the country's commitments in terms of the Paris Agreement, where the country has recently adopted a Peak,

⁶⁹ *National Environment Management: Air Quality Act* 39 of 2004.

⁷⁰ Long title of *National Environment Management: Air Quality Act* 39 of 2004.

⁷¹ *National Water Act* 36 of 1998 (hereinafter the *Water Act*).

⁷² Preamble of the *Water Act*.

⁷³ Section 2(d) of the *Water Act*.

⁷⁴ *Mineral and Petroleum Resources Development Act* 28 of 2002 (hereinafter the MPRDA)/

⁷⁵ Long title of the MPRDA.

⁷⁶ White Paper 9,10.

⁷⁷ National Planning Commission *National Development Plan 2030* "Executive Summary" 17, 23.

⁷⁸ Tait and Winkler 2012 *Journal of Energy in South Africa* 8, 9.

⁷⁹ This is where 6 000 MW are to be saved from the system, something never experienced before the end of 2019. Anon 2019 http://m.engineeringnews.co.za/article/flooding-a-major-factor-in-move-to-stage-6-load-shedding-eskom-2019-12-10/rep_id:4433.

⁸⁰ Naidoo and Njini 2019 <https://www.moneyweb.co.za/news/economy/load-shedding-raises-risk-of-second-sa-recession>.

⁸¹ Tait and Winkler 2012 *Journal of Energy in South Africa* 9.

Plateau and Decline approach to its GHG emissions on account of its developmental needs.⁸²

While the White Paper was published in 2011 setting out the state's policy on climate change, it has taken over eight years for further development. In 2019, however, the *Carbon Tax Act*⁸³ was passed, which effectively imposed a tax on carbon dioxide GHG emissions.⁸⁴ As with the White Paper and the National Development Plan (NDP), the *Carbon Tax Act* acknowledges the increasing urgency of managing GHG emissions, which cause climate change.⁸⁵ It also recognises the necessity to manage South Africa's own wellbeing, together with its responsibility as a global citizen to partake in the efforts to mitigate the effects of climate change for the sake of sustainable growth.⁸⁶ More importantly, it seeks to achieve more environmentally responsible behaviour with the imposition of a tax on harmful emissions and offers rewards as incentives to promote the use of cleaner energy.⁸⁷ It is the first piece of legislation that speaks specifically to climate change, although it is not a comprehensive law that covers all aspects of climate change in all sectors. The time taken from formulation of the policy on the carbon tax initiative in 2013⁸⁸ to the promulgation of the Act in 2019 reflects the somewhat slow progression towards a greener economy. This is also reflected in the fact that since the appearance of the White Paper there has been minimal movement in the specific regulation of climate change.

Specifically, in June 2018 the government released the Climate Change Bill,⁸⁹ which is aimed at giving effect to the policy set out in the White Paper.⁹⁰ Included in the Bill's objectives is to provide for an "effective management of climate change impacts"⁹¹ and to make a "fair contribution to the global effort".⁹² It also recognises the goal of sustainable development by ensuring that the socio-economic priorities of "economic, employment and environmental development" must proceed in a sustainable manner.⁹³

⁸² Humby 2018 *JEL* 145; also see UNFCCC Date Unknown <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/South%20Africa%20First/South%20Africa.pdf> (hereinafter INDC) 1.

⁸³ *Carbon Tax Act* 15 of 2019 (hereinafter the *Carbon Tax Act*).

⁸⁴ Long title of the *Carbon Tax Act*.

⁸⁵ Preamble of the *Carbon Tax Act*.

⁸⁶ Preamble of the *Carbon Tax Act*.

⁸⁷ Preamble of the *Carbon Tax Act*.

⁸⁸ Carbon Tax Policy Paper 2013 (see National Treasury 2013 <http://www.treasury.gov.za/public%20comments/Carbon%20Tax%20Policy%20Paper%202013.pdf>).

⁸⁹ GN 580 in GG 41689 of 8 June (hereinafter the Bill).

⁹⁰ Preamble of the Bill.

⁹¹ Section 2(c) of the Bill.

⁹² Section 2(b) of the Bill.

⁹³ Section 2(c) of the Bill.

The protection offered in section 24 of the Constitution is reiterated in the Bill's principles, which provide for the protection of the climate for the future.⁹⁴ In line with the common but differentiated responsibilities doctrine,⁹⁵ South Africa's limited capabilities in respect of the mitigation of climate change are also recognised.⁹⁶ Generally, the Bill deals largely with the establishment of bodies to administer the climate change mitigation envisaged by it.⁹⁷ Since the time frame for commentary closed,⁹⁸ the Bill has yet to become enforceable. Thus, while there has been movement towards the regulation of climate change, this movement remains ineffectual.

4 South Africa's vulnerability to climate change

The urgent need for South Africa to change its approach to its energy demands is a result of the unique impact climate change will have on the country. In this regard, much has been said about South Africa's vulnerability to climate change.⁹⁹ According to the Intergovernmental Panel on Climate Change (IPCC), while climate change is a concern for the world at large, the experiences of the effects of climate change are vastly different between regions.¹⁰⁰ South Africa's situation is akin to that of the rest of Africa, which is a heavily populated continent.¹⁰¹ Among other climate change effects, the continent's temperature has increased and will continue to increase because of human behaviour.¹⁰² This increase, specifically in Southern Africa, is far above the naturally changing environment¹⁰³ and has led to much hotter summers and warmer winters together with an increased probability of heat waves in South Africa.¹⁰⁴ Africa's vulnerability to climate change affects human rights,¹⁰⁵ and increases the strain on the economy in areas such as agriculture, which in turn threatens food security, from which

⁹⁴ Section 3(b) of the Bill.

⁹⁵ Deleuil 2012 *RECIEL* 271. The principle of common but differentiated responsibilities recognises that while a united effort is required against climate change, all countries do not have the same capacity to contribute. A differential approach and expectation from each country according to their capabilities will not unduly tax developing countries.

⁹⁶ Section 3(c) of the Bill.

⁹⁷ Abdinor 2019 <https://www.dailymaverick.co.za/article/2019-07-11-explainer-heres-how-climate-change-law-will-affect-the-way-you-do-business-in-south-africa/>.

⁹⁸ This was in August 2018.

⁹⁹ White Paper 9. Also see Jegede and Makulana 2019 *Obiter* 402, where the authors point out that this is the first time South Africa's vulnerability has been recognised by a court. *Thabametsi* paras 25-27.

¹⁰⁰ Hewitson *et al* "Regional Context" 1139.

¹⁰¹ Niang *et al* "Africa" 1205.

¹⁰² Niang *et al* "Africa" 1206. South Africa is set to warm by "an equilibrium earth warming of about 2 degrees to 4 degrees". See Van der Bank and Karsten 2020 *Air, Soil and Water Research* 1.

¹⁰³ Niang *et al* "Africa" 1209.

¹⁰⁴ Niang *et al* "Africa" 1211.

¹⁰⁵ Niang *et al* "Africa" 1211.

the poorest would suffer the most.¹⁰⁶ Water scarcity is also a concern as the prevalence of droughts increases, also impacting on food security.¹⁰⁷ Water scarcity was of particular concern in the *Thabametsi* case as the coal-fired power station would strain the already scarce water resources in the Limpopo area.¹⁰⁸ Other related negative effects include an impact on general health, an increase in malnutrition,¹⁰⁹ and would include the occurrence of diseases such as malaria.¹¹⁰ The continent's ability to adapt is hampered by a lack of implementation of climate change management measures, especially where they would be useful in addressing poverty and other economic concerns prevalent to the region.¹¹¹ This rings true in the South African context as South Africa's vulnerability surely mirrors the region's vulnerability.¹¹² For example, an expected increase in sea levels will negatively affect the coastal areas with high lying areas such as Gauteng experiencing more flooding and increased temperatures which could lead to the introduction of malaria.¹¹³ As Van der Bank and Karsten point out, there has been a significant increase to the average annual temperature in South Africa which will negatively impact on water, food security and natural resources such as the ecosystems and biodiversity.¹¹⁴

It is therefore clear that addressing climate change requires a radical change from the current practices and approach to energy and that climate change is in fact "a deeply economic and social problem".¹¹⁵ It must therefore be acknowledged by the government that pursuing economic growth and mitigating climate change are not separate endeavours and are in fact recognised as "interrel[ated]".¹¹⁶ As pointed out by Winkler *et al*, this same recognition is evident in international instruments such as the UNFCCC, in which sustainable development is a key objective together with lowering GHG emissions.¹¹⁷ It is unfortunate, however, that climate change is often overlooked in favour of economic development especially in areas with concerns about poverty and inequality.¹¹⁸

¹⁰⁶ Niang *et al* "Africa" 1211-1212, 1221.

¹⁰⁷ Niang *et al* "Africa" 1220.

¹⁰⁸ *Thabametsi* para 44.

¹⁰⁹ Niang *et al* "Africa" 1221.

¹¹⁰ Niang *et al* "Africa" 1222.

¹¹¹ Niang *et al* "Africa" 1227.

¹¹² Niang *et al* "Africa" 1227.

¹¹³ Kehew *et al* 2013 *Local Environment* 731.

¹¹⁴ Van der Bank and Karsten 2020 *Air, Soil and Water Research* 1. For a more detailed discussion see Van der Bank and Karsten 2020 *Air, Soil and Water Research* 1-2.

¹¹⁵ Winkler *et al* 2015 *International Environmental Agreements* 370.

¹¹⁶ *Thabametsi* para 82, where the court states that "Section 24 recognises the interrelationship between the environment and development".

¹¹⁷ Article 2 of the UNFCCC as correctly pointed out in Winkler *et al* 2015 *International Environmental Agreements* 370.

¹¹⁸ Winkler *et al* 2015 *International Environmental Agreements* 371.

5 The facts of the case

The matter relates to the granting of an environmental authorisation required for activities listed in terms of section 24(1) of NEMA. Thabametsi Power Company (Pty) Ltd, the fifth respondent, an independent power producer (IPP), sought to construct a coal-fired power station in the Limpopo Province.¹¹⁹ Its application for environmental authorisation was granted by the Chief Director early in 2015. Earthlife Africa Johannesburg (Earthlife), unsuccessfully appealed the Chief Director's decision to the Minister of Environmental Affairs (the Minister) hence the High Court appeal.¹²⁰ The matter brought before the court concerned Earthlife's application to review the Minister's decision. The application for review was brought in terms of section 8 of the *Promotion of Administrative Justice Act* (PAJA)¹²¹ because Earthlife argued that the Department of Environmental Affairs (DEA) had failed to consider relevant information and that this was "unlawful, irrational and unreasonable".¹²²

Since the regulations to the NEMA require that the construction of a coal-fired power station undergoes an environmental impact assessment,¹²³ the dispute at hand concerned the content of this report. Section 24O of the NEMA outlines the criteria to be considered in the granting of an environmental authorisation. Specifically section 24O(b)(i) states that "all relevant factors" must be considered, which includes "pollution, environmental impacts or environmental degradation likely to be caused".¹²⁴ The authorisation granted to Thabametsi did not specifically consider the climate change impacts of the coal-fired power station on the surrounding region and Earthlife therefore challenged the authorisation on this basis.¹²⁵ Despite upholding the authorisation, the Minister had conceded that the climate change impacts of the project had not been sufficiently considered. She thus amended the authorisation granted by adding a condition to it.¹²⁶ The condition required Thabametsi to undertake a climate change impact assessment before embarking on the project.¹²⁷

¹¹⁹ *Thabametsi* para 1.

¹²⁰ *Thabametsi* para 2.

¹²¹ *Promotion of Administrative Justice Act* 3 of 2000 (hereinafter PAJA).

¹²² *Thabametsi* para 10; s 8 of the PAJA allows for judicial review where a court may grant an order that is just and equitable.

¹²³ Environmental Impact Assessment Regulations in GN R982, R983, R984 and R985 in GG 38282 of 4 December 2014. An environmental impact assessment involves "a systematic process of identifying, assessing and reporting environmental impacts associated with an activity."

¹²⁴ Section 24O(b)(i) of the NEMA.

¹²⁵ *Thabametsi* para 2.

¹²⁶ *Thabametsi* para 7.

¹²⁷ *Thabametsi* para 8.

In its appeal Earthlife argued that a climate change impact assessment is a relevant factor for the purposes of section 24O and ought to be fully undertaken and included in any environmental impact assessment (EIA) report before an application for environmental authorisation can be considered.¹²⁸ Such a climate change impact assessment would include assessments of the potential contribution of a coal-fired power station to climate change over its lifetime, its resilience to the effects of climate change on its operation, its water supply and increases in temperature and how the "effects may be avoided, mitigated or remedied".¹²⁹

Even though the Minister, in the appeal decision, required a climate change impact assessment to be conducted before the power station could begin construction, the condition did not allow for the authorisation to be withdrawn should such an assessment show that an authorisation should not have been granted.¹³⁰ On this basis Earthlife considered the granting of the authorisation by the Chief Director in the first place, without the consideration of a climate change impact assessment, as "unlawful, irrational and unreasonable".¹³¹

It was therefore Earthlife's contention that a proper interpretation of section 24O of the NEMA together with its Regulations,¹³² compels the conduct of a climate change impact assessment before the granting of an environmental authorisation.¹³³ This, read together with Regulation 31(2), which provides that the EIA report must contain all necessary information including the physical, biological and social impacts on the surrounding environment, among others,¹³⁴ means that a climate change impact assessment is a relevant factor for section 24O(1)(b) and necessary information in terms of Regulation 31(2).¹³⁵ If the relevant and necessary information is not contained in the assessment, an authorisation cannot be granted.¹³⁶ Earthlife's position was also based on the interpretation of the country's broader environmental laws and policies such as section 24 of the Constitution and its membership in bodies such as the UNFCCC.¹³⁷

The DEA pointed out, correctly, that there is no specific provision in South African law or policy requiring a climate change assessment for an

¹²⁸ *Thabametsi* para 5.

¹²⁹ *Thabametsi* para 6.

¹³⁰ *Thabametsi* para 9.

¹³¹ *Thabametsi* para 10.

¹³² Environmental Impact Assessment Regulations in GN R543 in GG 33306 of 18 June 2010.

¹³³ *Thabametsi* para 12.

¹³⁴ Regulation 31(2)(d) and (g) of GN R543 in GG 33306 of 18 June 2010.

¹³⁵ *Thabametsi* para 15.

¹³⁶ Regulation 34(2)(b) of GN R543 in GG 33306 of 18 June 2010.

¹³⁷ *Thabametsi* para 12; also see Deleuil 2012 *RECIEL* 272.

environmental authorisation and that no such obligation exists under international law either.¹³⁸ While the DEA emphasised its commitment to addressing climate change, it highlighted South Africa's developmental needs, which at present outweigh the climate change concerns.¹³⁹ It agreed with the premise that energy is a key contributor to the country's continued growth and development.¹⁴⁰ The country is, however, constantly plagued by a lack of electricity specifically and the crippling effects of load shedding.¹⁴¹ As a result, using the country's ample coal resources is an effective way to address the pressing electricity needs.¹⁴² Unfortunately, the use of coal results in increased GHG emissions, which is at odds with the move to cleaner energy.¹⁴³

The DEA's argument was that the above considerations show that the continued use of coal is necessary for the near future at least, to meet the country's energy needs.¹⁴⁴ It therefore asked the court to take this into account when considering the DEA's position in granting the environmental authorisation to Thabametsi.¹⁴⁵

6 The court's decision

In order for the court to decide if indeed the Chief Director's decision to grant the authorisation was irregular, the court needed to decide whether the assessment of possible climate change impacts were a necessary requirement for an environmental authorisation.¹⁴⁶ In answer to this question, the court found that "on a plain reading of section 24O(1) of the NEMA..." a climate change impact assessment is "indeed relevant".¹⁴⁷ The court found that the GHG emitted from a coal-fired power station constitutes pollution, and that this pollution has adverse effects on the air and the environment. This finding was something all parties agreed on.¹⁴⁸

As stated above, the overarching environmental provision informing South African environmental laws and policy is found in section 24 of the

¹³⁸ *Thabametsi* para 16; also see Humby 2018 *JEL* 146.

¹³⁹ *Thabametsi* para 19.

¹⁴⁰ *Thabametsi* para 18.

¹⁴¹ Donnelly 2019 <https://mg.co.za/article/2019-02-11-eskom-escalates-to-stage-4-load-shedding/>.

¹⁴² *Thabametsi* paras 19 and 26; also see IRP 2019 41.

¹⁴³ *Thabametsi* para 25; also see Tait and Winkler 2012 *Journal of Energy in South Africa* 8-9.

¹⁴⁴ *Thabametsi* para 19; also see INDC 1, where the country's "Peak, Plateau and Decline" stance supports this. This means that the use of GHG emissions will continue to increase for some time.

¹⁴⁵ *Thabametsi* para 19.

¹⁴⁶ *Thabametsi* para 78.

¹⁴⁷ *Thabametsi* para 78.

¹⁴⁸ *Thabametsi* para 78.

Constitution. It specifically protects the right to a healthy environment¹⁴⁹ and expressly provides for the protection of the environment for the present as well as for the future.¹⁵⁰ The court highlighted the connection between sustainable development and mitigating the effects of climate change. It also stated that the needs of the present must be considered in the light of ensuring a safe environment for the future.¹⁵¹ As discussed above, achieving this delicate balance is exactly the challenge presently faced by the country.¹⁵² However, even though the use of coal may seem to be the easiest path to take, continuing with its use may compromise the achievement of sustainable development.¹⁵³

Among other provisions the court analysed section 24O(1)(b) of the NEMA, where the relevant factors required to be considered for an environmental authorisation include pollution and environmental degradation.¹⁵⁴ The principles of environmental management in section 2 of the NEMA are an aid to the authorities considering environmental authorisation. These principles are binding on the authorities when taking decisions under the NEMA and specifically encourage sustainable development.¹⁵⁵ The court also considered the position internationally in instruments such as the UNFCCC, which requires all member states to consider and counteract the effects of climate change in all matters related to the environment.¹⁵⁶

Taking all of these factors and others into account, it is not surprising that the court concluded that climate change is a relevant factor in terms of section 24O(1) of the NEMA and is something that must be considered before an environmental authorisation can be granted.¹⁵⁷ Consequently, the court found that the decision taken by the Chief Director was reviewable under the sections of the PAJA since the decision had been taken without his having all the relevant information before him.¹⁵⁸ In considering the Minister's decision, it was pointed out that the Minister, in her decision on the appeal, also found that a climate change impact assessment was necessary and was lacking in the information before the Chief Director initially. It also correctly suggested that, in this light, the better decision would have been to ask that the Chief Director consider the granting of the

¹⁴⁹ Section 24(a) of the Constitution.

¹⁵⁰ Section 24(b) of the Constitution.

¹⁵¹ *Thabametsi* paras 81-82.

¹⁵² White Paper on Energy Policy 9.

¹⁵³ White Paper 9.

¹⁵⁴ *Thabametsi* para 79.

¹⁵⁵ Sections 23 and 24 of NEMA; also see *Thabametsi* para 80.

¹⁵⁶ Article 4(1)(f) of the UNFCCC; also see *Thabametsi* para 83.

¹⁵⁷ *Thabametsi* para 91.

¹⁵⁸ *Thabametsi* para 101.

environmental authorisation anew instead of upholding the authorisation with a condition.¹⁵⁹

7 Analysis of the decision

The court's ruling has changed the way that EIAs will be performed going forward and has shown that a climate change impact assessment is a relevant factor to consider before allowing new coal-fired power stations to be built.¹⁶⁰ This is in line with the context in which South Africa finds itself in terms of its vulnerability to climate change and its own growth challenges.¹⁶¹ In the absence of specific legislation in this area, this case holds particular significance to climate change jurisprudence¹⁶² and arguably signals the start of the radical change that is needed. This may also consequently change the planning of the future provision of energy and lead to cleaner ways to use coal.¹⁶³ The decision may also indicate the court's view that, while South Africa's socio-economic priorities remain crucial to its continued development, securing sustainable development requires giving equal regard to climate change.¹⁶⁴ In the course of the matter, a further GHG assessment and a climate resilience assessment was undertaken by the Fifth Respondent. Their results directly contradicted the earlier reports considered by the Chief Director before he granted the environmental authorisation and showed the potential for substantial damage to the surrounding environment.¹⁶⁵ The court's "powerful statements associating climate change impact assessment with sustainable development"¹⁶⁶ and its finding that a climate change assessment is a relevant factor in an EIA aptly shows the importance of the relationship between climate change and energy usage.¹⁶⁷

The court's decision marks the start of continuing litigation ultimately highlighting the need for more focused and responsive regulation on the issue of climate change.¹⁶⁸ The decision accords with South Africa's strong stance in climate change negotiations and shows that the absence of a specific statutory obligation does not exclude an existing legal duty to

¹⁵⁹ *Thabametsi* para 107.

¹⁶⁰ *Thabametsi* para 90.

¹⁶¹ White Paper 9.

¹⁶² Ashukem 2017 *LEAD Journal* 43.

¹⁶³ Tait and Winkler 2012 *Journal of Energy in South Africa* 9.

¹⁶⁴ Jegede and Makulana 2019 *Obiter* 402.

¹⁶⁵ *Thabametsi* paras 48-50.

¹⁶⁶ Humby 2018 *JEL* 149.

¹⁶⁷ *Thabametsi* para 78.

¹⁶⁸ Humby 2018 *JEL* 155, where she states that "the stage ... has been set for another court battle"; see for example Squazzin 2019 <https://www.fin24.com/Economy/government-taken-to-court-after-doubling-coal-emission-limits-20190506>.

protect against the impact of climate change.¹⁶⁹ The case also highlights the crucial role of judicial review in the legal system. Since there is no specific law pertaining to climate change the provisions of PAJA were used. There is a strong case to be made, especially considering the importance of climate change in the survival of the earth, that specific climate change laws are necessary.¹⁷⁰ While the court's adjudication of the matter before it granted adequate relief in this case, waiting for the law to offer relief on a case-by-case basis constitutes a piecemeal approach to an issue that calls for a solid regulatory foundation.¹⁷¹ As the custodian of public property, the government is obliged to advance the sustainability of the environment and in so doing improve the country's ability to withstand the effects of climate change.¹⁷² It can therefore be argued that the lack of comprehensive legislation specifically governing climate change constitutes a failure of the state to protect the resources entrusted to it and the rights afforded in section 24 of the Constitution.¹⁷³ Furthermore Van der Bank and Karsten argue that one of the aims of so-called "climate litigation" is to hold the government accountable to their "policy commitments".¹⁷⁴ The courts have indeed acknowledged that while judicial decisions do contribute to a change in the legal climate they are episodic and in certain cases comprehensive legislation is necessary.¹⁷⁵

8 Conclusion

It is therefore clear that to achieve the sustainable development required for South Africa's growth and to address climate change, an effective mitigation plan is required. This can be successful only if South Africa formulates an effective legal framework that specifically regulates the country's responses and adaptation to climate change.¹⁷⁶ While a comprehensive policy document exists together with the formulation of a Bill, and some regulation towards the mitigation of climate change in the form of the *Carbon Tax Act* has recently been enacted, the required urgency is still lacking. Instead of

¹⁶⁹ Ashukem 2017 *LEAD Journal* 41.

¹⁷⁰ Ashukem 2017 *LEAD Journal* 41.

¹⁷¹ See *J v Director General Department of Home Affairs* 2003 5 SA 621 (CC) in *Minister of Home Affairs v Fourie* 2006 1 SA 524 (CC) (hereinafter *Fourie*) para 58, where the court said that it was "unsatisfactory for the courts to grant piecemeal relief".

¹⁷² Blackmore 2018 *RECIEL* 187. Also see Van der Bank and Karsten 2020 *Air, Soil and Water Research* 3, where they argue that in terms of s 24(b) of the Constitution the state must "take positive steps to attain" and protect the right to a healthy environment.

¹⁷³ Blackmore 2018 *RECIEL* 187-188.

¹⁷⁴ Van der Bank and Karsten 2020 *Air, Soil and Water Research* 7, where "climate litigation" is litigation used to enforce proper regulation on climate change.

¹⁷⁵ *Fourie* para 116.

¹⁷⁶ Ottinger and Jayne 2000 *Pace Envtl L Rev* 1; also see Van der Bank and Karsten 2020 *Air, Soil and Water Research* 7.

aligning the developmental goals with climate change, thereby arguably achieving both important goals simultaneously, South Africa continues to fall back on its past practices. Thus, while the *Thabametsi* judgment has made a "meaningful contribution"¹⁷⁷ to the country's consideration of climate change, the journey's end to effective climate change mitigation remains a distance away.

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¹⁷⁷ Humby 2018 *JEL* 146. Humby also points out that because there is no specific regulation on climate change this paves the way for a constitutional challenge, see Humby 2018 *JEL* 154.

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List of Abbreviations

COP	Conference of the Parties
DEA	Department of Environmental Affairs
DMRE	Department of Mineral Resources and Energy
EIA	environmental impact assessment
GHG	greenhouse gases
ILO	International Labour Organisation
INDC	Intended Nationally Determined Contribution
IPCC	International Panel on Climate Change
IPP	independent power producer
IRP	Integrated Resource Plan
JEL	Journal of Environmental Law
LEAD Journal	Law, Environment and Development Journal
MPRDA	Mineral and Petroleum Resources Development Act
NDP	National Development Plan
NEMA	National Environmental Management Act
Pace Env'tl L Rev	Pace Environmental Law Review
PAJA	Promotion of Administrative Justice Act
PELJ	Potchefstroom Electronic Law Journal
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme

RECIEL	Review of European Comparative and International Environmental Law
UNFCCC	United Nations Framework Convention on Climate Change