Centre *for* Environmental Rights
Advancing Environmental Rights in South Africa

Climate Secretariat
Department of Forestry, Fisheries and the Environment
By email: climatesecretariat@environment.gov.za

Copied to:

Mr Maesela Kekana
Chief Directorate: International Climate Change Relations and Negotiations
Department of Forestry, Fisheries and the Environment
By email: MJKekana@environment.gov.za

Mkhuthazi Steleki
Department of Forestry, Fisheries and the Environment
By email: MSteleki@environment.gov.za

Our ref: NL/TL
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Dear Messrs

COMMENTS ON SOUTH AFRICA'S DRAFT UPDATED NATIONALLY DETERMINED CONTRIBUTION UNDER THE PARIS AGREEMENT

1. We write to you as the Centre for Environmental Rights (**CER**) in response to the Department of Forestry, Fisheries and the Environment's ("**the Department**") draft updated Nationally Determined Contribution ("**draft NDC update**"), published on 30 March 2021.

2. The CER is a member of the Life After Coal Campaign - a collaborative campaign made up of groundWork, Earthlife Africa and the CER. It aims to: discourage the development of new coal-fired power stations and mines; reduce emissions from existing coal infrastructure and encourage a coal phase-out; and enable a just transition to sustainable energy systems for the people.

3. This initial written comment sets out South Africa's legal obligations to address the climate crisis under both domestic and international law; and then describes our concerns and recommendations in relation to the draft NDC update.

INTRODUCTION

4. We are in a decade of unprecedented urgency, as global net human-caused emissions of carbon dioxide (**CO2**) need to fall by about 45 percent from 2010 levels by 2030 (within less than 10 years) in order to have any hope of limiting temperature increase to 1.5 degree Celsius,[1] which is confirmed by the Intergovernmental Panel on Climate Change (**IPCC**) to be the tipping point for our climate. The draft NDC update "warmly welcomed" the IPCC's 1.5 degree special report and considers it "*to be of highest importance in guiding our actions*".[2] In further setting the tone for the necessary level of ambition, the draft NDC update takes into account the Call to Action

[1] See https://climateanalytics.org/briefings/coal-phase-out/.
[2] Draft NDC update at page 2.

Cape Town: 2nd Floor, Springtime Studios, 1 Scott Road, Observatory, 7925, South Africa
Johannesburg: G/F the Cottage, 2 Sherwood Road, Forest Town, Johannesburg, 2193, South Africa
Tel 021 447 1647 (Cape Town)
www.cer.org.za

issued by Conference of the Parties (**COP**) 23 and 24, the Talanoa Dialogue, and the Sustainable Development Goals adopted in 2015.

5. South Africa, as a country, is extremely vulnerable to the effects of climate change – this is confirmed in the country's own National Climate Response Policy of 2011. Allowing global temperature increases to exceed the 1.5 °C mark would have severe consequences for Southern Africa.[3] These consequences will largely be felt through: significant warming (as high as 5–8°C, over the South African interior by the end of this century);[4] impacts on water resources, such as changes in water availability; and a higher frequency of natural disasters (flooding and drought), with cross-sectoral effects on human settlements, health, disaster risk management and food security.[5] It bears emphasis that this has drastic implications for human survival and the way that we live.

6. The country has already experienced significant warming in comparison to the rest of the world,[6] and already the impacts of drought, extreme weather events, and fires in South Africa have cost the country billions.[7] Virtually every province in the country has recently experienced, or is currently experiencing, severe drought, which is crippling livelihoods and jobs, and will have long-term impacts on food security and food prices. Government is having to subsidise these high costs, and will increasingly have to do so.[8]

7. Government has also acknowledged that it is the most vulnerable groups in South Africa that are on the receiving end of these devastating weather events, including low-income households, the elderly, children, and disabled persons.[9] Climate change is yet another challenge that women will experience disproportionately to men.[10]

8. According to Climate Analytics, global coal use in electricity generation must fall by 80% below 2010 levels within less than 10 years (by 2030) to avoid exceeding the 1.5 degree Celsius limit.[11] This is a substantial reduction, and the consequences of failing to achieve this are well known to be catastrophic.

9. It is the Constitutional imperative of government, to ensure that people in South Africa are protected against these impacts – that their rights enshrined in the Bill of Rights in the Constitution of the Republic of South Africa, 1996 ("**the Constitution**") are respected, protected, promoted and fulfilled.

10. This means that within this decade – the decade of mandatory action – significant ambition is needed to get South Africa where it needs to be in terms of its mitigation and adaptation efforts, to ensure that South Africa achieves

[3] https://www.ipcc.ch/sr15/chapter/spm/.
[4] Long Term Adaptation Scenarios: Climate Trends and Scenarios for South Africa at page 128.
[5] Long Term Adaptation Scenarios: Climate Trends and Scenarios for South Africa at page 129.
[6] From 1931 to 2015, western parts of South Africa, "including much of the Western and Northern Cape, and also in the east over Gauteng, Limpopo and the east coast of KwaZulu-Natal," warmed by "2°C/century or even higher – in the order of twice the global rate of temperature increase. See Republic of South Africa, Department of Environmental Affairs, South Africa's Third National Communication under the United Nations Framework Convention on Climate Change at 12 (March 2018), https://unfccc.int/sites/default/files/resource/South%20African%20TNC%20Report%20%20to%20the%20UNFCCC_31%20Aug.pdf.
[7] Western Cape Government: Environmental Affairs and Development Planning "Western Cape Climate Change Response Strategy 2nd Biennial Monitoring and Evaluation Report 2017/18" (March, 2018) available at https://www.westerncape.gov.za/eadp/files/atoms/files/WC%20Climate%20Change%20Response%20Strategy%20Biennial%20M%26E%20Report%20%282017-18%29_1.pdf.
[8] See examples of the impacts of the country-wide droughts at https://pmg.org.za/committee-meeting/29261/; https://www.sanews.gov.za/south-africa/kzn-roll-out-drought-emergency-plan; and https://www.politicsweb.co.za/politics/declare-nw-a-drought-disaster-area-to-assist-agris
[9] National Climate Change Adaptation Strategy, 2019, at page 9.
[10] *Ibid.*
[11] See https://climateanalytics.org/briefings/coal-phase-out/.

a *timely* transition to a climate resilient and sustainable society that provides for the developmental aspirations of all its people.[12] The alternative is not an option and the draft NDC update is a crucial step in this regard.

11. Increasingly and across the world, litigation is being instituted against governments for failures to take adequate steps to stop or prevent the harms of the climate crisis. Cases challenging governments' emissions targets or policies, or lack thereof, have increased.[13] These cases are predominantly based on human rights claims and constitutional duties. If successful, they have scope for broad and substantial GHG emission reductions, and strong precedents upholding fundamental rights, many of which are underpinned by a safe and healthy environment. Some of the earlier cases of this kind, which have already seen their days in court, are *Urgenda Foundation v State of the Netherlands; Ashgar Leghari v Federation of Pakistan*; and *Future Generations v Ministry of the Environment and Others* (Colombia). All of them were successful at obtaining orders against the respective governments to take steps to improve their climate action efforts. In these cases the litigants relied on fundamental rights and/or duties of care imposed on their governments – similar to those entrenched in South African law and addressed below.

12. We have previously expressed our deep concern over the absence of the urgent progress needed from government to tackle the climate crisis. We have addressed numerous letters, submissions and presentations to a wide variety of government fora.[14] A primary concern in this regard has been the delay in the promulgation of the Climate Change Act and delays in the regulation of greenhouse gas (**GHG**) emission mitigation and climate change adaptation in South Africa. We urge the Department to use the opportunity of updating South Africa's NDC to show our country's commitment to a genuinely ambitious response to the climate emergency, the impacts of which we are currently experiencing.

13. In summary, our main concerns with the proposed draft NDC update are that - while it is an improvement on the current NDC - it still does not do enough to get South Africa to where it needs to be, in order to adequately respond to the urgency and risks posed by the climate crisis. As such, it does not comply with domestic law, and as it is not South Africa's "highest possible ambition" – despite its national circumstances - it does not comply with the Paris Agreement. In short, the concerns, as set out in detail below, are the following:

    13.1 Process: We are concerned with the unduly short timeframe given for comment on the draft NDC update and the Department's failure to make relevant and underlying records available prior to the comment deadline.

    13.2 Mitigation measures:

        13.2.1. The draft NDC update's emission reduction commitments are not adequate or aligned with the urgent action required to meet the Paris Agreement targets;

        13.2.2. The draft updated NDC is not consistent with reducing emissions at the required highest possible level of ambition;

        13.2.3. South Africa's mitigation targets do not represent its fair share of global mitigation efforts, which consider the principle of common and differentiated responsibilities; and

[12] This is based on the vision of the National Adaptation Strategy, namely: "*To transition to a climate resilient South Africa, which will follow a sustainable development path, guided by anticipation, adaptation and recovery from a changing climate and environment to achieve our development aspirations*."

[13] See https://climate-laws.org/cclow/litigation_cases.

[14] See for example our submissions of 2015 on the draft intended nationally determined contribution at https://cer.org.za/wp-content/uploads/2016/07/CER-REPRESENTATIONS-TO-PCEA-CC-COP21-PUBLIC-HEARINGS-20-9-2015-1.pdf and our letter to the Portfolio Committee on Environment of 2020 at https://cer.org.za/wp-content/uploads/2020/02/Letter-to-Portfolio-Committee_Climate-Crisis-Prioritisation-28-1-20.docx.pdf

13.2.4. the draft NDC update fails to factor in long-term necessary emission reductions (beyond 2030);

13.3 Adaptation:

13.3.1. Adaptation plans require urgent integration and implementation; and

13.3.2. Adaptation measures are thwarted by current government decisions exposing South Africa to further climate vulnerability.

13.4 Support:

13.4.1. While financial support is important, South Africa's climate action cannot be premised or conditional on the provision of support; and

13.4.2. South Africa must first and foremost seek to reduce its exposure to the high costs of the climate crisis and avoid locking itself into expensive and unnecessary fossil fuel infrastructure.

13.4.3. Investment reporting to promote transparency and accountability is crucial.

LEGAL BACKGROUND

14. As a formal document, which sets out South Africa's commitments under the Paris Agreement – an instrument ratified by South Africa's government - the NDC must comply, and be aligned, with certain provisions of South Africa's laws.

15. We set out briefly below the relevant legal provisions and policies, with which the NDC must be consistent and aligned.

The Constitution

16. South Africa is a sovereign democratic state founded on human dignity, the achievement of equality and the advancement of human rights and freedoms. The supreme law of the Republic is the Constitution. All law or conduct inconsistent with it is invalid.

17. Section 24 of the Constitution guarantees an unqualified right to an environment that is not harmful to health or well-being;[15] and it confers the right 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 (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.[16]

18. The State has a duty to uphold and protect the right to an environment not harmful to health or wellbeing. Taking steps to guard against the harmful impacts of climate change on our environment and human health is required by the obligation to realise the Constitutional environmental right, as well as the duty of care contained in section 28 of the National Environmental Management Act, 1998 – which is referred to below.

[15] Section 24(a), the Constitution.
[16] Section 27(1), the Constitution.

19. The importance of the protection of the environment cannot be overstated. The Constitutional Court has confirmed that "*its protection is vital to the enjoyment of the other rights contained in the Bill of Rights; indeed, it is vital to life itself. It must therefore be protected for the benefit of the present and future generations*."[17]

20. Other Constitutional rights that are relevant in our response to climate change, and are dependent on the existence of a stable environment, include: the right of access to water and food,[18] the right to equality;[19] the right to human dignity;[20] and children's rights;[21] given the far-ranging and disproportionate impacts of the climate crisis. Other relevant rights include the rights to just administrative action[22] and of access to information.[23]

21. In our comment below, we submit that many of the various issues detailed below, render the draft NDC update in conflict with the Constitution, as the supreme law of the Republic. The Constitution also regulates international agreements - section 231 states, inter alia, that, "*(2) An international agreement binds the Republic only after it has been approved by resolution in both the National Assembly and the National Council of Provinces, unless it is an agreement referred to in subsection (3)"*. Having obtained this approval, the Paris Agreement referred to below is binding on the Republic.

22. Section 231(4) states that *"Any international agreement becomes law in the Republic when it is enacted into law by national legislation; but a self-executing provision of an agreement that has been approved by Parliament is law in the Republic unless it is inconsistent with the Constitution or an Act of Parliament*."

The National Environmental Management Act

23. The updated NDC must be aligned, and comply with, the National Environmental Management Act, 1998 (**NEMA**). NEMA was enacted to give effect to section 24 of the Constitution. This is national legislation binding on all state bodies, to develop, *inter alia*, a framework for integrating good environmental management into all development activities.[24]

24. Section 28 of NEMA ("**the duty of care**") places a duty of care on every person who "*causes, has caused or may cause significant pollution or degradation of the environment [to] take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment*." This duty extends to all organs of state and extends to degradation caused by climate change.

25. The section 28 duty of care requires the Department to ensure that our updated NDC reflects a reasonable measure to the country's response to the climate crisis – under international obligations and Constitutional imperatives for a healthy environment for present and future generations.

26. Section 2 of NEMA lists principles which are guidelines by reference to which any organ of state must exercise any function when taking any decision which may significantly affect the environment or its protection.[25] The updated NDC must therefore be aligned with section 2 of NEMA. This includes, for example:

[17] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* (CCT67/06) [2007] ZACC 13, at para 102.
[18] Section 24(b), the Constitution.
[19] Section 9, the Constitution.
[20] Section 10, the Constitution.
[21] Section 28, the Constitution.
[22] Section 33, the Constitution.
[23] Section 32, the Constitution.
[24] Preamble, NEMA.
[25] Section 2(1), NEMA.

26.1 the principle that "*global and international responsibilities relating to the environment must be discharged in the national interest*";[26]

26.2 "*the social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment*";[27]

26.3 "*[e]nvironmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons*";[28]

26.4 "*the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment*";[29]

26.5 "*The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured*";[30] and

26.6 the need for a "*risk averse and cautious approach, which takes into account the limits of current knowledge about the consequences of decisions and actions*" ("the precautionary principle").[31]

27. The above principles apply throughout the Republic to the actions of all organs of state that may significantly affect the environment.[32]

SA's International Law Obligations Relating to Climate Change

28. South Africa is a party to both the United Nations Framework Convention on Climate Change (**UNFCCC**) and the Paris Agreement on Climate Change. South Africa ratified the Paris Agreement in 2016. In accordance with section 231 of the Constitution as referenced above, this agreement binds the Republic

29. The UNFCCC — now universally ratified — called for efforts to mitigate the adverse effects of climate change on human health and welfare.[33] The Paris Agreement went a step further, calling on states to "*respect, promote and consider their respective obligations on human rights*" including the rights of the child and intergenerational equity, when "*taking action to address climate change*."[34]

30. In the Paris Agreement, State Parties pledged to keep global warming well below 2°C above pre-industrial levels and to pursue efforts to limit it to 1.5°C.[35] To achieve this, they set voluntary emission reduction targets called

[26] Section 2(1), NEMA.
[27] Section 2(4)(i), NEMA.
[28] S2(4)(c), NEMA.
[29] 2(4)(p), NEMA.
[30] Section 2(4)(f), NEMA.
[31] Section 2(4)(a)(vii), NEMA.
[32] Section 2(1), NEMA.
[33] UN Framework on Climate Change, 1771 UNTS 107; UN Doc. A/AC237/18 (Part II)/ Add 1 (1992), art. 1(1), art. 3(3) (hereinafter "UNFCCC") (May 9, 1992).
[34] Paris Agreement, *supra* note 19.
[35] *Id.* article 2(1).

Nationally Determined Contributions (**NDCs**)[36] and pledged to reduce emissions at the "highest possible ambition."[37]

31. NDCs under the Paris Agreement set targets that are expressed in the estimated total annual emission of carbon dioxide equivalents ("**CO_2e**") (i.e., all GHGs), measured in megatons ("**Mt**") meaning a million tons.

32. Successive NDCs must "*represent a progression beyond the Party's then current nationally determined contribution*".[38] The Paris Agreement will – by its own provisions - be implemented to reflect the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

33. Under the Paris Agreement, parties must revise and enhance their NDCs every five years in a manner that is consistent with the principles and provisions of the Paris Agreement and the UNFCCC.

34. South Africa's first intended nationally determined contribution was submitted in 2015, and the first NDC was submitted on 1 November 2016 – it is that NDC, which is now being updated and to which these comments relate. South Africa is due to lodge its updated NDC before 1 November 2021.

35. The Paris Agreement urges those Parties whose NDCs contain a time frame up to 2025, to communicate by 2020, a new NDC and requests those Parties whose NDCs contain a time frame up to 2030, to communicate or update by 2020 these contributions.[39] According to South Africa's current NDC "*The time-frames within the PPD trajectory range that are communicated in South Africa's INDC are 2025 and 2030*". Arguably, the NDC update should have been submitted in 2020, and South Africa should have submitted a new NDC - not merely an update of the current NDC. This is relevant because by providing an updated NDC instead of a new NDC, the South African government has conveniently avoided mandatory compliance with the stricter 'information clarity, transparency, and understanding'(ICTU) requirements for second and subsequent NDCs, in accordance with Annex 1 of decision 4/CMA.1 (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement). The consequence is that the "voluntary" provision of the information by government from Annex I of decision 4/CMA.1 does not necessarily "enhance" the substantive information provided, but rather facilitates a 'cherry-picking' approach where government discloses some specific information behind South Africa's level of ambition but has left out a significant level of detail - as is evident from Table 3 in the draft NDC update, ironically titled "information to facilitate clarity, transparency and understand of South Africa's updated NDC". Item 1 on this table states that "*this section is not applicable to the South African NDC, since the first NDC and this update do not define mitigation target in relation to a reference point, but as a fixed level GHG emissions range in 2025 and 2030. Therefore, each entry below is marked "Not applicable"".* This approach diminishes South Africa's contribution to the overall objective of the UNFCCC regime.

36. The decision to follow the updating route, as opposed to developing a second NDC (which the draft NDC update instead undertakes to do in 2025), is noted with due concern, in this decade of mandatory action, and where access to information underlying South Africa's goals is pivotal.

37. In our submission below, we argue, *inter alia*, that the draft NDC update does not represent South Africa's highest possible level of ambition, based on science and equity for the reasons provided below. In other words, the draft NDC update in its current form does not meet the requirements of the Paris Agreement.

[36] *Id.* article 3.
[37] *Id.* article 4.
[38] Article 4(3).
[39] Paragraphs 23 and 24.

Legislative steps taken to address climate change since the adoption of the NDC and ratification of the Paris Agreement

38. At present, South Africa's primary legislation for regulating the emission of GHGs is the National Environmental Management: Air Quality Act (**NEMAQA**). It seeks to protect the environment by enhancing air quality, preventing air pollution and ecological degradation, and improving the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people. Although there are presently no direct GHG emission limits under NEMAQA, the Act seeks to regulate GHG emissions through its atmospheric emissions licensing regime, pollution prevention plan requirements, and indirectly through emission and air quality standards for various air pollutants. In 2017 National GHG Reporting Regulations – to regulate GHG reporting - and Pollution Prevention Plan Regulations under NEMAQA, were enacted – to regulate voluntary GHG emission reductions by emitters of listed GHG priority pollutants.

39. The Carbon Tax Act came into effect in 2019. It is being gradually implemented in phases with the second phase commencing in 2023. It imposes a tax on prescribed persons for every ton of carbon dioxide equivalent of GHG emitted.

40. It has long been government's intention to enact comprehensive legislation – that spans beyond air emission management under NEMAQA - to address climate change in South Africa. The Climate Change Bill has been waiting in the pipelines since at least 2018. Nearly 3 years have passed since the Climate Change Bill's comment process of August 2018. We have seen no meaningful progress on the Bill since then, and no steps to prioritise its finalisation, despite calls for this and the evident need to get the necessary regulatory framework in place, as a start, to regulating climate adaptation and mitigation in South Africa. It is crucial that efforts under the NDC update be aligned with the Climate Change Act, once promulgated, and vice versa.

41. A reading of the draft NDC update gives the impression that there has been significant progress in South Africa's efforts to reduce GHG emissions across its largely coal-dependent economy. It refers to various strategies and plans under the adaptation and mitigation components, which are already published, and those which are forthcoming. However, it begs the question as to what policies, legislation, and/or regulations have been implemented since 2015 that have actually realised a significant reduction in South Africa's GHG inventory, diversifying the economy with clear sectoral emission targets, and setting it on a just transition pathway compatible with a low-emission development strategy to 2050?

42. We submit that in answering this question, South Africa is found wanting:

    42.1 as mentioned above, there has been a significant and inexplicable delay in promulgating framework legislation in the form of the Climate Change Act, with no clear timelines or plans for mandatory GHG emission limits;

    42.2 South Africa's electricity plan - the 2019 IRP - includes 4500 MW of new fossil fuels (coal and gas) for electricity generation – the Life After Coal campaign has objected to these coal and gas to power allocations in a range of other appropriate forums, supported by expert analysis – see the 'mitigation' section below; and

    42.3 although a crucially important policy document to guide South Africa's adaptation process over the next 10 years, the National Climate Change Adaptation Strategy published in 2019, is a "*national strategy and as such does not go into detail of how adaptation will take place in the many sectors impacted by climate change*".[40] Systematic adaptation with mitigation co-benefits is what is required, now, not further planning. To the contrary, current government decisions are locking South Africa into long-term GHG-intensive infrastructure that will undermine adaptation measures and increase adaptation costs - this is addressed further below.

[40] NCCAS at page 10.

South Africa's Climate Change Policies

43. As mentioned above, various climate change policies have been developed – under domestic legislation and the UNFCCC. Some of them include:

    43.1 The National Climate Change Response Policy (**NCCRP**), published in 2011. It presents the South African Government's vision for an effective climate change response and the long-term, just transition to a climate-resilient and lower-carbon economy and society;

    43.2 South Africa's (first) Low Emission Development Strategy 2050 (**LEDS**), published in December 2018 under the UNFCCC; and

    43.3 The National Climate Change Adaptation Strategy of 2019 (**NCCAS**).

44. For purposes of these comments, we refer to this excerpt from the LEDS: "I*f left unaddressed, climate change is likely to come at a significant cost to the economy and society. This includes impacts on water resources, food production and increased vulnerabilities of impoverished communities. For this reason, the South African government regards climate change as a considerable threat to the country and its socio-economic development and has the potential to undo or undermine many of the advances made in recent years*."[41]

45. In relation to SA's adaptation needs, notably the NCCAS confirms the following, *inter alia*:

    "*The South African economy is dependent on primary sectors such as agriculture and mining, particularly minerals extractives, which are natural resource dependent and energy intensive, with energy generation being very important as it is also subject to climate variability and change. Therefore, changes in climate are predicted to exacerbate these challenges, as increased temperatures, rainfall variability and increased coastal storms and sea level rise will have direct impacts on South Africa's natural resources and infrastructure, affecting food security and health, threatening water and coastal resources, and impacting on development. These impacts will be especially felt by the poor, as they will be more exposed to them and have fewer resources to cope with these impacts. Climate change is therefore predicted to result in further widening of the gap between the rich and poor (Ziervogel et al. 2014; Chikulo 2014). Climate change impacts are however, already happening in South Africa with increased storms, drought conditions and temperature increases being felt across different parts of the country*."[42]

46. What the above demonstrates is that South Africa has – through its own policies - recognised its vulnerability and exposure to extreme harms as a result of the climate crisis, to which it is also a significant contributor. This is not in dispute.

47. Under the Constitution, NEMA and international law, South Africa is under a legal obligation to implement reasonable, adequate, and precautionary measures to ensure against these harms. For the reasons set out below, the draft NDC update, in its current form, does not meet these legal requirements.

OBJECTIONS TO THE DRAFT NDC COMMENT PROCESS

48. In addition to the comments on the substantive provisions of the draft NDC update (made below), we make the following comments on the consultation process followed in relation to the draft NDC update.

49. We note that a number of supporting documents, that informed the draft NDC, have not been made available as part of this written comment process, despite an email request from the CER to the Department on 15 April 2021. It was requested that the supporting documents be made available to all stakeholders for due consideration, in particular, the document/s that informed the comparison of the upper end of South Africa's target range to the

[41] LEDS at page 6.
[42] NCCAS at page 13.

Climate Equity Reference Calculator (**CERC**) 2 degree allocation and the Climate Action Tracker (**CAT**)'s fair share range. CER received no response to this email request.

50. We have also requested more time to comment on the draft NDC update due to, *inter alia*, the technical nature of the draft NDC update and the necessity for comprehensive input onto the document. More time should have been given to enable a wide range of stakeholders to consider and comment on the document. As it is, 20 working days is a very short time – and, we submit, inadequate - for obtaining the necessary expert input, and drafting meaningful comments on the draft NDC update.

51. We emphasise in the section below that the updated NDC is a vitally important international commitment that steers South Africa's domestic mitigation action for the next 5 years – it is during this period that the world has to ensure that it is on track to effectively halve global emissions by 2030, to avoid irreversible, catastrophic, climate change. The public must be assured – through its own independent expert verification where time and resources allow – that the updated NDC, in fact, reflects South Africa's highest possible level of ambition.

52. To the extent that we are aware, no attempt has been made by the Department to ensure that those most exposed to the impacts of the climate crisis, and who stand to be most affected by South Africa's NDC update – namely young people, women, rural and coal-affected communities - have an opportunity to meaningfully consider and comment on the draft NDC update during the short period for written comment.

53. This process disregards the Constitutional rights of access to information[43] and administrative justice.[44] Importantly, it fails to meet the NEMA section 2 principle that requires the promotion of the participation of all interested and affected parties in environmental governance, and requires that all people have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and ensures participation by vulnerable and disadvantaged persons.

54. Given the significance of, and public interest in, the NDC and its update process, we object to: the short timeframe provided for written comment on the draft NDC update; the failure to make the draft NDC update more accessible to the public and affected stakeholders; and the refusal to make underlying records available to the public. The flaws in this process must be remedied before the NDC update can be finalised, and we reserve our rights to supplement these comments upon receipt of the requested underlying records.

SUBSTANTIVE COMMENTS ON THE DRAFT NDC UPDATE

<u>Mitigation</u>

55. South Africa's current official NDC is to limit emissions to between 398 and 614 Mt CO_2e by 2025 and 2030. The draft NDC update proposes to limit GHG emissions to a range from 398-510 Mt CO2-eq from 2021 to 2025 and to limit emissions to between 398 and 440 Mt CO_2e from 2026 to 2030.[45]

56. The draft NDC provides that meeting these targets "*will require the implementation of South Africa's Integrated Resource Plan [2019*]."[46]

57. We further note the following statements in the draft NDC update:

    57.1. regarding the principle of fair share mitigation - "*South Africa has undertaken further detailed analysis of its relative fair share, updating the information provided in the first NDC. A fair share framework was*

[43] Section 32 of the Constitution.
[44] Section 33 of the Constitution.
[45] Table 1, Draft NDC Update, Table 1.
[46] Draft NDC Update at page 14.

developed, as a lens on how South Africa's mitigation contribution represents a fair share of global mitigation efforts (UCT 2020)";[47] and

57.2. "*South Africa has updated its NDC target ranges taking into account our status as a developing count[r]y, our national circumstances and common but differentiated responsibility and respective capability and the long-term temperature goal as specific in the Paris Agreement's Article 2, in the light of the latest science. South Africa considers these updated mitigation goals as our highest possible ambition in light of our national circumstances, and as South Africa's fair contribution to the long-term mitigation goal*."[48]

58. In addition to the draft NDC target ranges, the NDC references South Africa's commitment to a net zero CO_2 target ("**net zero carbon emissions**") by 2050 as part of a statement in its LEDS submitted to the UNFCCC.

59. As explained, and for the reasons set out below, while the draft NDC update is an improvement from the current NDC, what is proposed in the draft NDC update is not South Africa's highest possible ambition or fair share of global mitigation, as required by the Paris Agreement as well as the Constitution and NEMA.

i. The draft NDC'S emission reduction commitments are not adequate or aligned with the urgent action required to meet the Paris Agreement targets

60. Using statistical models, scientists estimate that annual global GHG emissions under current policies will fall far short of meeting commitments under the Paris Agreement to keep global warming well below 2°C above pre-industrial levels, much less 1.5°C. For example, Climate Action Tracker estimates that as of 2020, current policies in place around the world are projected to "*reduce baseline emissions and result in about 2.9°C warming above pre-industrial levels*."[49] The unconditional pledges and targets that governments have made, including NDCs and some long-term targets as of September 2020, would limit warming to about 2.6°C above pre-industrial levels, or in probabilistic terms, likely (66% or greater chance) limit warming below 2.8°C.[50] This is far from the needed 1.5 °C (where we need to be) or even 2 °C.

61. The UN Environmental Program in 2021 has determined that: "*At the current rate, warming will reach 1.5°C by around 2040 and possibly earlier. Taken together, current national policies to reduce greenhouse gas emissions put the world on a pathway to warming of at least 3°C by 2100*."[51]

62. In other words, urgent action is necessary to reverse course and drastically reduce global GHG emissions to avoid catastrophic global warming. The UN Environmental Program has also noted:

> "*Limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to further limit the temperature increase to 1.5°C requires rapid implementation and a significant strengthening of pledges under the Paris Agreement. Globally,* ***net carbon dioxide emissions need to decline by 45 per cent by 2030 compared with 2010 levels and reach net zero by 2050 to put the world on a pathway to 1.5°C*** *with a probability of about 50 per cent, whereas more ambitious targets would be necessary for higher certainty. A pathway to 2°C would require global emissions to be reduced by 25 per cent by 2030 compared with 2010 levels and reach net zero by around 2070.[52]"* (emphasis added).

[47] Draft NDC Update at page 29.
[48] P13, Draft NDC Update at page 13.
[49] Climate Action Tracker, Temperatures: Addressing Global Warming, https://climateactiontracker.org/global/temperatures/
[50] *Ibid*.
[51] United Nations Environmental Program, United Nations Environment Programme (2021). Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies, p.14, https://www.unep.org/resources/making-peace-nature.
[52] UNEP 2021 report, p. 15-16.

63. Not only can South Africa afford to be much more ambitious in its emission reduction plans – as will be shown below – it **must** be much more ambitious in setting GHG emission limits aligned with the 1.5°C target as a matter of necessity, and as a legal obligation under the Constitution and NEMA section 28 duty of care. South Africa's updated NDC must pledge much stronger emission reductions targets in order to meet the Paris Agreement objectives.

ii. The draft updated NDC is not consistent with reducing emissions at the required "highest possible ambition"

64. As explained above, the draft NDC update claims to have set mitigation targets at the highest possible ambition. This statement is disingenuous and inconsistent with the facts. It would be entirely feasible for South Africa to reduce its emissions substantially, particularly by focusing on opportunities in the electricity sector.

65. We note that the lowest figure for the emission ranges for 2025 and 2030 – 398 Mt CO2e – has not been adjusted from the current NDC. In other words, that is intended to remain the same, and a more ambitious figure has not been provided for the draft NDC update.

66. In the Department's own presentation on the draft NDC, it reflects a GHG emission low range figure closer to 340 Mt CO2e – even with implementation of the 2019 IRP and the Department's planned policies and measures (PAMS) – far lower than the proposed 398 Mt CO2e low range. In other words, there is no risk in government adopting a more ambitious NDC emission target. This is would be entirely aligned with government's existing plans and policies.

67. The NDC low range could be tightened even further through feasible and affordable strategic interventions in the electricity sector that could see substantial beneficial emission reductions. As stated above, the draft NDC update is formulated to allow for the full implementation of the 2019 Integrated Resource Plan for Electricity ("**2019 IRP**"). This includes 1500 MW of new coal power and 3000 MW of new gas power to be developed by 2030, while also capping the annual build out of renewable energy.

68. It is common cause that South Africa's energy sector is by far the largest source of the country's GHG emissions. The draft NDC update itself states that the long-term decarbonisation of the South African economy, will in the 2020s focus primarily on the electricity sector. The Department of Mineral Resources and Energy has a substantial role to play in setting an ambitious target for the country's NDC.

69. The inclusion of coal and gas in the 2019 IRP has been widely criticised, as they are not necessary to meet energy demand, and in the case of coal, this is much more expensive than other energy sources. The 2019 IRP itself confirms that the inclusion of coal is not part of the least-cost electricity pathway for South Africa.[53]

70. Other experts also note that coal and gas are unnecessary to meet South Africa's electricity needs. Indeed the government could save money, meet electricity demand and substantially reduce GHG emissions by refraining from developing new fossil fuel infrastructure. A recent assessment by Meridian Economics and the Council for Scientific and Industrial Research (CSIR) of the South African electric power system shows clearly that the least-cost scenario for the grid involves rapidly building large amounts of wind and solar generation in the near term

[53] See IRP 2019 at page 91, "*Without a policy intervention, all technologies included in the promulgated IRP 2010–2030 where prices have not come down like in the case of PV and wind, will not be deployed because the least-cost option only contains PV, wind and gas*."

(not fossil fuel coal and gas, as currently proposed in the 2019 IRP).[54] This is also reflected in the draft NDC update comments submitted by Meridian Economics.[55]

71. It is clear that the revised NDC's endorsement of the fossil-fuel build out in the 2019 IRP is inconsistent with South Africa's highest possible ambition. Even with the unacceptable 2019 IRP plans included in the NDC, the emission reduction range could be lowered. The least-cost electricity planning pathway for South Africa does not even include new coal, and does not need to include new gas. Importantly, because South Africa could affordably achieve electricity security without dirty fossil fuels, the principle of common and differentiated responsibility, and/or South Africa's national circumstances, should not prevent South Africa from setting stronger target ranges.

iii. South Africa's mitigation targets do not represent its fair share of global mitigation efforts, which consider the principle of common and differentiated responsibilities

72. The draft NDC update references a fair share model that is calculated as the Climate Equity Reference Framework.[56] However, as mentioned, the draft does not provide any data or details explaining how South Africa's fair share was determined under this framework, nor does it share the UCT 2020 publication that purports to calculate South Africa's fair share (see paragraph 56 above). Further, the application of the Climate Equity Reference Framework to the draft NDC update by the Climate Equity Reference Project,[57] shows that the draft NDC update is in fact not aligned with the framework, as demonstrated below.

73. The Climate Equity Reference Framework calculates each country's fair share based on its share of the global responsibility for causing the climate problem (i.e. its historical and ongoing emissions) and its share of the global capacity to address the problem (i.e. its financial capacity, with exemptions for the incomes of the poorest which are reserved for poverty eradication and other sustainable development priorities). In other words, it seeks to give meaning to the principle of common and differentiated responsibilities. Under this framework, each country's fair share is expressed as an equity range with an upper and lower bound. This range is defined by the broad range of equity perspectives that the diverse, global Civil Society Equity Review Coalition members accepted as fair and equitable. Details can be found in the reports issued each year since the Paris COP in 2015.[58]

74. The framework calculates that the fair share range – for South Africa – amounts to between 0.46% and 0.70% of the global effort in 2030. The fair share is calculated for both a 1.5°C pathway and a 2°C pathway. (Note, the 2°C pathway should not be considered consistent with the "*well below* 2°C" provision of the Paris Agreement.) The former requires about 1½ times as much mitigation effort globally (31 $GtCO_2eq$) as the latter (21 $GtCO_2eq$) below a baseline of 57 $GtCO_2eq$ (excluding LULUCF).[59]

75. An independent climate science initiative – the Climate Equity Reference Project - was appointed by Earthjustice and the CER to compare the 2030 mitigation targets in South Africa's draft NDC update to its fair share of the

[54] CSIR, 2020, Technical report, "Systems analysis to support increasingly ambitious CO2 emissions scenarios in the South African electricity system".
Meridian Economics, 2020, "A Vital Ambition: Determining the Cost of Additional CO2 Emission Mitigation in the South African Electricity System", Version 1.06 (https://meridianeconomics.co.za/wp-content/uploads/2020/07/Ambition.pdf.).

[55] Submission in response to South Africa's proposed updated First
Nationally Determined Contribution under the Paris Agreement - https://meridianeconomics.co.za/wp-content/uploads/2021/04/NDC-Submission_Meridian-Economics.pdf.

[56] Draft NDC Update at page 23.

[57] Note that this work was conducted by Christian Holz, Sivan Kartha and Tom Athanasiou at Climate Equity Reference Project https://climateequityreference.org/.

[58] See http://civilsocietyreview.org/ for details, as well as their annual NDC assessments, including results for a wide range of countries.

[59] Due to large uncertainty in global national-level LULUCF data sets, the Climate Equity Reference Calculator calculates fair shares of the global mitigation effort excluding LULUCF. Since the targets in the South African NDC and draft updated NDC are expressed inclusive of LULUCF, we adjust these targets by removing an assumed 12 $MtCO_2$ LULUCF sink contribution from the target figures.

global mitigation effort to limit climate change. The findings from this comparative assessment are contained in a memo attached as Annexure 1.[60]

76. The assessment found that South Africa's share (0.46% - 0.70%) of this global mitigation effort in 2030 is 146-223 MtCO2eq below baseline projections for the 1.5°C pathway, and 96-148 MtCO2eq for the 2°C pathway (excluding LULUCF). Based on the projection of a South African baseline of 509 MtCO2eq in 2030 and the mitigation shares cited immediately above, the assessment results – expressed as 2030 emissions targets – are shown in Table 1 below. To make the results of the fair share calculations (which exclude LULUCF) directly comparable with the draft NDC update range (which includes LULUCF), Table 1 presents the fair share results adjusted for LULUCF, under the assumption of a 12 MtCO2 LULUCF sink in 2030:

Table 1. South Africa NDC range compared to fair share of 1.5°C and 2°C global pathways

	South Africa NDC (2030)	
	official NDC ($MtCO_2eq$)	**draft updated NDC ($MtCO_2eq$)**
	including LULUCF	
NDC range (lower)	398	398
NDC range (upper)	614	440

	Fair Share (2030)	
	1.5°C ($MtCO_2eq$)	**2.0°C ($MtCO_2eq$)**
	excluding LULUCF	
CSO equity range (lower)	286	362
CSO equity range (upper)	364	413
	*including LULUCF **	
CSO equity range (lower)	274	350
CSO equity range (upper)	352	401

77. According to Table 1, the entire draft updated NDC range for 2030 (including its more ambitious end – 398 $MtCO_2eq$, including LULUCF) **does not satisfy the fair share target range for the 1.5°C pathway** (274 - 352 $MtCO_2eq$). (There is a shortfall of effort of at least 46 $MtCO_2eq$ compared to a fair share effort of 146 - 223 $MtCO_2eq$.)

78. Table 1 also shows that most of the draft NDC update range for 2030 (410 - 452 $MtCO_2eq$, excluding LULUCF) **does not satisfy the fair share target range for the 2.0°C pathway** (362 - 413 $MtCO_2eq$); only the lower bound of the draft NDC range satisfies the upper bound of the fair share target range for 2.0°C.

79. The draft NDC update also claims that the updated target ranges for 2025 and 2030 "lie well within" the Climate Action Tracker fair share range estimations for South Africa.[61] However, this contradicts the Climate Action Tracker's own conclusions about the draft updated South African NDC.

80. According to Climate Action Tracker, South Africa's original and current NDC is "highly insufficient" and falls outside of its "fair share" range.[62] Warming would reach between 3°C and 4°C if other countries were to adopt similar NDCs.[63] In particular, Climate Action Tracker notes that the 2019 IRP is inconsistent with meeting the Paris Agreement objectives. It states:

> "*The IRP2019 aims to decommission over 35 GW (of 42 GW currently operating) of coal-fired power capacity by 2050. To be in line with the Paris Agreement goals, South Africa would need to adopt more ambitious climate action beyond the IRP2019, such as further increasing renewable energy capacity by 2030 and beyond, stopping the planned commissioning of 1.5 GW*

[60] Climate Equity Reference Project authors: Christian Holz, Sivan Kartha, and Tom Athanasiou.
[61] Draft NDC update at page 23.
[62] Climate Action Tracker, *South Africa* (updated 22 September 2020), https://climateactiontracker.org/countries/south-africa/.
[63] *Ibid*.

of new coal capacity, fully phasing out coal-fired power generation by latest 2040, and avoiding investing in natural gas."[64]

81. Although an improvement, Climate Action Tracker has found that the draft updated NDC's upper target is "insufficient" and lower level target is "2°C compatible".[65] Climate Action Tracker concludes: "*The proposed NDC update represents progress beyond its previous submission but may still no be compatible with limiting global warming to 2°C above pre-industrial levels, let alone with the Paris Agreement's 1.5°C limit*."[66]

82. Even if the lower range of the draft NDC could satisfy the fair share target range for the 2.0°C pathway, based on the demonstrated harms for South Africa to result from a 2°C global average temperature increase, not only is this not aligned with South Africa's fair share obligations under the Paris Agreement, it is also inconsistent with the government's Constitutional obligations and NEMA section 28 duty of care.

iv. The draft NDC fails to factor in long-term necessary emission reductions (beyond 2030)

83. The draft NDC update states that the "*mitigation component of this update of South Africa's first NDC is our contribution to the longterm goal for mitigation, as stated in Article 4.1*". Yet the plan does not sufficiently look beyond 2030 i.e. it does not truly reflect long-term commitments. It avoids addressing the consequences of locking South Africa into GHG emission-intensive plans and infrastructure past the year 2030 and well beyond 2050.

84. Further, setting an ambitious target alone will not be sufficient. There needs to be a clear indication – through SA policy and decision-making – that South Africa is, **in fact**, on the necessary trajectory to achieve its committed emission reductions. Among other key milestones, this means committing to the longer-term goal of **zero fossil fuels in electricity generation, and a coal power phase-out, by at least 2040** (though 2035 would be preferred); **and a zero fossil fuel economy by 2050.** Steps must be taken now to move in the necessary direction, as opposed to having to achieve substantial and unrealistic emission reductions after 2030. We are not seeing the necessary indications that South Africa is on this trajectory. On the contrary, we are seeing commitments to a number of long-term high-emitting projects, some of which are listed below.

85. We note the following paragraphs in the draft NDC update:

"The long-term decarbonisation of the South African economy, will in the 2020s focus primarily on the electricity sector; in the 2030s, a deeper transition will take place in the electricity sector, coupled with a transition in the transport sector towards low emission vehicles, while the 2040s and beyond will be characterized by the decarbonization of the hard-to-mitigate sectors. The key challenge during the implementation periods of this first NDC (2021 to 2025, and 2026 to 2030) will be the transition in the electricity sector, and addressing the economic and social consequences resulting from this transition in coal-producing areas. South Africa's electricity is currently provided by a number of large coal plants located in the Mpumalanga province, where most of the country's coal resources are to be found.

Implementing the NDC will require the implementation of South Africa's Integrated Resource Plan (most recently finalised in 2019), which contemplates a massive investment in renewable energy over the next decade. This will also result in a number of co-benefits, such as reduced air pollution in the key air pollution hot spot of the country,

[64] Climate Action Tracker, South Africa (updated 22 September 2020), https://climateactiontracker.org/countries/south-africa/fair-share/.
[65] Climate Action Tracker, South Africa (updated 30 March 2021), https://climateactiontracker.org/climate-target-update-tracker/south-africa/ ("insufficient" is defined as "not consistent with holding warming below 2°C let alone with the Paris Agreement's stronger 1.5°C limit. If all governments NDCs were in this range, warming would reach 2°Cand up to 3°C.")
[66] *Ibid*.

lower water use in a water-scarce country, and rapidly adding additional electricity generation capacity to the South African electricity system, which is currently capacity constrained".[67]

86. We submit that the above timeframes are too vague and require a more detailed, science-based, timeline with target dates during 2030 and 2040. We of are the view that a "massive" investment in renewable energy over the next decade is an exaggeration, given the arbitrary annual constraint on renewable energy capacity in the 2019 IRP.

87. Despite the acknowledgement of the co-benefits of investment into renewable energy and the acknowledgment that "*South Africa is also fortunately blessed with abundant renewable energy resources, and developments in the economics of renewable energy technologies over the last decade are very favourable to low-carbon development in the country*",[68] there is a concerted effort by government to prioritise expensive, polluting, water-intensive, and unnecessary fossil-fuel based projects – to the exclusion of renewable alternatives – that will likely wind up as stranded assets at great cost to the national fiscus.

88. In terms of "*rapidly adding additional electricity generation capacity*", we reiterate the conclusion from the recent assessment by Meridian Economics and the CSIR of the South African electric power system, which shows clearly that the least-cost scenario for the electricity grid, involves rapidly building large amounts of wind and solar generation in the near term.

89. We refer to the range of decisions and plans that seemingly have not been factored into the draft NDC update, yet, which would have a significant long-term impact on SA's GHG emissions beyond, and including, 2030, and its ability to achieve the 1.5 or even 2 degrees goal. Some examples include the following:

    89.1. The "emergency" procurement of 1220 MW of electricity for 20 years from three gas-fired "power ships" along the coastline of South Africa – this emergency capacity was not envisaged in the 2019 IRP as being from gas - it falls within the allocation to "Other" in Table 5 of the 2019 IRP and does not fall into the 3000 MW in the IRP specifically allocated to gas.[69] These projects are expected to emit at least 56 million tons of CO2 eq over the next 20 years.[70]

    89.2. The Limpopo Economic Development Agency's proposed Musina Makhado Special Economic Zone (also known as EMSEZ or MMSEZ), an industrial mega-complex that will include a 3300 MW coal-fired power station. The project's own climate impact assessment states that (although not all GHG emissions have been calculated, such as emissions from the coking plant, coal washery, vanadium and steel plants etc), the EMSEZ project is expected to generate approximately 1 billion tonnes of carbon dioxide equivalent of direct and energy indirect emissions over the lifetime of the project - 10-16% of the South Africa's entire carbon budget.[71]

    89.3. Eskom's proposed and authorised 3000 MW gas power generation plant. The anticipated annual GHG emissions (not including lifecycle emissions) from this project will be 4.6 million tons CO2e.[72] Given that this is an Eskom project and not an independent power producer, it would not be able to participate in the September 2020 determination for 3000 MW gas power for procurement (referred to in paragraph 89.4 below). In other words, the 3000 MW allocated to gas in the 2019 IRP has already been fully subscribed to

[67] Draft NDC Update at page 4.
[68] *Ibid*.
[69] See p42, 2019 IRP and the 7 July 2020 Ministerial Determination for 2000MW of electricity capacity from a range of sources.
[70] https://www.dailymaverick.co.za/article/2021-04-11-hot-gases-heated-seawater-and-wonky-figures-point-to-environmental-dangers-of-floating-kettles/
[71] Climate impact assessment at page 51, see also https://cer.org.za/wp-content/uploads/2020/11/gW-ELA-and-MEJCON-Objection-to-the-EMSEZ-DEIR-22.10.2020.pdf.
[72] P214, Final Environmental Impact Report.

independent power producers. Eskom's 3000 MW gas plant would come over and above that capacity and as such is not factored into the draft NDC calculations.

89.4. The Minister and Department of Mineral Resources and Energy's plans to procure 1500 MW of new coal and 3000 MW of new gas are factored into the 2019 IRP, though it does not seem that consideration has been given to the concomitant lock-in to new fossil fuel generation capacity and associated infrastructure beyond 2030 and even 2050.

89.5. The Department of Water and Sanitation's proposed phase 2A of the Mokolo Crocodile Water Augmentation Project intended primarily to pipe water to enable coal mine and power station developments in the water-scarce Waterberg. Not only would this enable more GHG emissions through enabling coal development in the Waterberg, it would also exacerbate South Africa's climate vulnerability by diverting water to unnecessary fossil fuel projects and exposing pristine water resources to pollution through this inter-basin transfer.

90. Allowing these projects to proceed as envisaged, would render our NDC commitments redundant – likely taking us over the emission reduction trajectory limits - and bring us into breach of the obligations under the Paris Agreement as well as the Constitution.

91. As mentioned, South Africa intends to commit to a net zero CO_2 target by 2050 as part of a visionary statement in its LEDS 2050 submitted to the UNFCCC.

92. It is important to note that the objective of "net zero" and "zero emissions" are not the same. Net zero is the balance between emissions produced and emissions removed, [73] while zero emissions means the real end of GHG emissions. [74] Under net zero, GHG emissions may continue as usual, or even increase, banking on removal of CO_2 from the atmosphere using unproven negative emissions technologies and nature-based solutions.[75]

93. Net zero commitments often rely on carbon offsets, either nature-based solutions, such a tree planting, or engineered Carbon Capture and Storage (**CCS**). Under the guise of offsets, governments can evade their responsibilities and continue polluting, business as usual, for decades. [76]

94. Net zero can hide many loopholes that can delay meaningful climate action. [77] All carbon sequestration technologies, including those for fossil fuels, are currently expensive, energy-intensive, risky, and their deployment at scale is unproven, making it irresponsible to base net zero targets on uncertain future technologies to compensate for present day emissions. [78]

95. In 2021, 41 climate scientists declared "net zero by 2050" to be misleading for a number of reasons. [79] First, the ability of vegetation, soils and rocks to capture carbon is *limited*, and is needed to sink the carbon that has *already*

[73] Editorial Board, *Net-zero carbon pledges must be meaningful*, Nature (1 April 2021), https://www.nature.com/articles/d41586-021-00864-9.
[74] D. MacLaren, *The Problem with Net-Zero Emissions Targets*, Carbon Brief (30 September 2019), https://www.carbonbrief.org/guest-post-the-problem-with-net-zero-emissions-targets
[75] *Ibid*.
[76] T. Anderson/Action Aid, Why "net zero" is not good enough, Thompson Reuters Foundation News (5 February 2020), https://news.trust.org/item/20200205160427-r1ydk.
[77] *Ibid*.
[78] A. Skelton et al. (41 scientists), *10 myths about net zero targets and carbon offsetting, busted*, Climate Home News (November 12, 2020), https://www.climatechangenews.com/2020/12/11/10-myths-net-zero-targets-carbon-offsetting-busted/; J. Dyke et al., *Climate Scientists: concept of net zero is a dangerous trap* (April 22, 2021), https://theconversation.com/climate-scientists-concept-of-net-zero-is-a-dangerous-trap-157368.
[79] A. Skelton et al.

been emitted.[80] Moreover, it is misleading to claim that nature-based solutions can compensate for fossil fuel emissions, as such solutions are part of the Earth's fast (biological) carbon cycle, meaning their carbon storage ends when terrestrial or aquatic organisms die and their carbon is released into the atmosphere.[81] The slow (geological) carbon cycle that includes fossil fuels involves the circulation of carbon from the atmosphere to the rocks of the Earth's interior, with deposition taking millions of years.[82] Furthermore, net zero policies do not consider how old forests--or other intact ecosystems of high biodiversity and species richness that contain centuries of captured carbon--must not be lost, as the carbon they release upon death would take hundreds of years to be recaptured by a new plantation or recovering ecosystem.[83]

96. Climate policy experts caution that net zero *could* be a useful goal to drive needed transformations *if* it is defined to mean **rapid GHG reduction to near zero, with the remainder of emissions balanced out through restoration of already-degraded ecosystems**.[84] Unfortunately, the term is often vaguely defined and is used to disguise inaction while the world hurtles towards a disastrous global warming.[85] Certainly "net zero" cannot be relied on by the fossil fuel sector to continue with business as usual. Net zero targets for far- off dates such as 2050 are meaningless without near term milestones, aggressive interim targets, and clear annual progress reporting.[86] Such long-term targets, based on unproven new technologies, can be simply gestures to give a positive impression.[87]

97. We therefore strongly caution against the reference to net zero emissions by 2050, and point out that the public requires a very clear delineation of what is intended and meant by government's notion of net zero in addition, more detail on how it plans to get there with aligned, long-term climate commitments. The NDC must factor in long-term necessary emission reductions (beyond 2030) and towards a clear 2050 pathway.

98. Insofar as the electricity sector is concerned, we reiterate that what is needed is zero fossil fuels in electricity generation by at least 2040 (though 2035 would be preferred); and a zero fossil fuel economy by 2050. As above, we require a clear commitment to rapid GHG reductions to near zero, with the remainder of emissions (in sectors where it is extremely difficult/impossible to eradicate GHG emissions) balanced out through restoration of already-degraded ecosystems.

Adaptation

i. Adaptation plans require urgent integration and implementation

99. We note in the adaptation component in the draft NDC update that the NCCAS will serve as South Africa's National Adaptation Plan and it "*further provides a policy instrument in which national climate change adaptation objectives for the country can be articulated to provide overarching guidance to all sectors of the economy in implementing adaptation*".[88] The draft NDC update goes on to state that "*[t]he NCCAS is grounded in the South African Constitution, particularly Section 24, of the Bill of Rights which includes, the right to a safe and healthy environment. The draft Climate Change Bill provides a legislative basis for the implementation of the NCCAS, as such will foster institutional coherence and enhance climate change adaptation governance across the spheres, national and sub-national layers of government in South Africa*."[89]

[80] *Ibid*.
[81] *Ibid*.
[82] *Ibid*.
[83] *Ibid*.
[84] T. Anderson/Action Aid, Why "net zero" is not good enough.
[85] *Ibid*.
[86] M. Vincent, The Problem with zero carbon pledges, Financial Times, (November 29, 2020), https://www.ft.com/content/83edfedd-77e7-4877-a016-b00b6b6d0307.
[87] *Ibid.*
[88] Draft NDC Update at page 6.
[89] *Ibid*.

100. The NCCAS itself provides that "*adaptation to climate change presents South Africa with an opportunity to transform both health and the economy, to strengthen the social and spatial fabric, and to become more competitive in the global marketplace. However, systemic changes are required in order to minimise the impacts of climate change. Technological advancements that consider social and economic factors can assist in making these transformative changes*".[90] The NCCAS vision is as follows:

> *"To transition to a climate resilient South Africa, which will follow a sustainable development path, guided by anticipation, adaptation and recovery from a changing climate and environment to achieve our development aspirations."*[91]

101. The NCCAS is divided into a number of strategic objectives, corresponding interventions, and outcomes to realise this overall vision. Importantly, the NCCAS goes beyond the "*priority adaptation related sectors*" identified in NCCRP. The sectors covered are: water; agriculture and commercial forestry; health; biodiversity and ecosystems; human settlements (urban, rural and coastal); disaster risk reduction and management; transportation and infrastructure; energy; mining; and oceans and coast.

102. Evidently, every aspect of South African society and its development aspirations are vulnerable to the current and anticipated impacts caused by climate change. The transition to a 'climate resilient South Africa' that reduces human, economic, environment, physical and ecological infrastructure vulnerability, depends on decisions and actions that are taken today. As stated above, South Africa is already feeling and paying for the impacts of the climate crisis – severe droughts and fires being a prime example. Therefore while planning is an important and necessary step, implementation, through prioritisation, needs to begin in earnest.

103. We reiterate that the NCCAS is a broad national strategy and does not go into detail of how adaptation will be implemented in the many critical sectors impacted by climate change. We submit that in accordance with the Goals in Table 1 – South Africa's First Adaptation Communication – in the draft NDC update, implementation will be accelerated with 'enhanced climate change adaptation governance and legal frameworks' and 'mainstreaming and integrating climate considerations in national development, sub-national and sector policy frameworks for the period 2021 to 2030':

    103.1. <u>enhanced climate change adaptation governance</u>: again, the key issue here is that the three climate change adaptation institutional structures sit under the Climate Change Bill and the delay in promulgating the Climate Change Act since public comment in 2018 is considerable, especially in this decade of action to 2030. Notwithstanding the publication of the NCCAS, this delay in finalising the Climate Change Bill has severe implications for South Africa's ability to adapt to the impacts of climate change, only increasing sector vulnerability; and

    103.2. <u>integrating climate adaptation and resilience considerations in development planning and sector frameworks</u>: the NDC spans emissions across the economy, and not one particular sector. It is therefore expected that the various relevant departments and all tiers of government, in addition to the Department (DFFE), take the necessary steps to ensure adequate levels of ambition in reducing GHG emissions and 'climate proofing' basic services and community infrastructure. DFFE may be the 'focal point' for climate change mitigation and adaptation planning, however, a successful transition to a climate resilient South Africa following a sustainable development path will require coherent and rational action across government authorities. We note here that although it is commendable that a national adaptation policy has been developed and all provinces, as well as district municipalities have produced climate change adaptation plans, this will be meaningless unless integrated development planning and decision-making gives effect to these adaptation plans in place. In this regard, the 'Monitoring &

[90] NCCAS at page 9.
[91] NCCAS at page 19.

Evaluation' and 'Implementation Framework' sections in the NCCAS will be particularly important to track both the implementation and efficacy of adaptation interventions across sectors and tiers of government.

ii. Adaptation measures are thwarted by current government decisions exposing South Africa to further climate vulnerability

104. The draft NDC update states that "*[e]nsuring that no one is left behind as we move from a high GHG emission, low-employment energy development pathway to a low emission, climate-resilient and job-rich pathway, is central to our national work on development and climate change*". The challenge that South Africa faces is that historical and social injustices have already left the majority of people living in South Africa 'behind', and it is fair to say that the manifestations of state capture and irregular government expenditure have exacerbated these realities.

105. It is with this understanding that the introductory and contextual text in the NCCAS is so important and extracts from these sections have been highlighted above, including the recognition of the disproportionate impacts of climate change events on vulnerable groups, the widening of the equality and equity gap, and the systematic changes necessary to transform both the health sector and the economy and to strengthen South Africa's social and spatial fabric. The NCCAS emphasises the gravity of the climate change threat and the degree of urgency required to minimise the climate crisis.

106. Yet, it is against this backdrop that the South African government persists with the decisions and plans outlined in paragraph 89 above, which would have a significant long-term impact on SA's GHG emissions to 2030, and beyond, and its ability to meet the NDC commitments and obligations to achieve the 1.5 degrees goal. Moreover, locking South Africa into GHG-intensive, polluting and water-intensive fossil fuel developments will only intensify the impacts of climate change in South Africa, undermining efforts to transition to a climate resilient society and increasing the estimated adaptation investments reflected in Table 1 in the draft NDC update.

107. There is a disconnect between South Africa's present mitigation ambition and the NCCAS. The Paris Agreement affirms that mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans can contribute to mitigation outcomes under this Article 4. It follows that 'insufficient' mitigation measures – per the revised CAT classification – will have adverse, and potentially irreversible, consequences for South Africa's capacity to achieve its developmental aspirations within the NCCAS vision. We submit the two following points in this regard:

    107.1. The draft NDC update states that the "*NCCAS is aligned with the country's policy and legislation, building on principles therein. . .*" – given the wide-reaching nature and import of the NCCAS as a policy document, we submit that other policy and legislation should align with the vision, principles, objectives and interventions in the NCCAS. By way of example, the NCCAS explicitly recognises "*the National Development Plan (NDP) of South Africa seeks to eliminate poverty, deliver environmental protection and promote economic development by 2030. However, the NDP does not test the sensitivity of achieving these goals in light of climate change and variability. Finance set aside for development needs to incorporate climate change so that infrastructure and communities are resilient to future climate impacts. Furthermore, climate change needs to be mainstreamed into budgetary processes in all spheres of government.*"[92]

    107.2. The draft NDC update bemoans the disproportionate climate change impacts and burden of adaptation that South Africa, southern Africa, and the African region is saddled with. It observes that *"[p]oor communities have low capacity to adapt and thus suffer the most from impacts*". We do not dispute that the African continent bears a disproportionate burden in addressing climate change impacts and that there is a skewed historical responsibility for GHG emissions; however, we are of the view that it is both

[92] The NCCAS at page 13.

disingenuous and misguided for South Africa to call for financial, technical, and capacity support from developed nations, while rolling out a new carbon-intensive suite of large-scale coal-fired and gas-fired power stations and a fossil gas development plan, which are surplus to South Africa's needs.

108. In short, and in looking to implement measures to adequately adapt to the climate crisis, government must refrain from GHG emission-intensive projects that contribute to these harms.

109. In addition it must abandon unnecessary projects that expose South Africa to further climate harms through, for example, using and polluting scarce water resources or destroying arable land needed for food security. We refer, as examples in this instance, to the proposed phase 2A of the Mokolo Crocodile Water Augmentation Project, referred to above; and to the government facilitating the opening of a new coal mine inside a strategic water source area.[93] Government must refrain from exacerbating our vulnerability to the climate crisis by deliberately negatively impacting on the resources that are needed for our resilience.

Support

110. The draft NDC states that "*South Africa's key goal for its updated first NDC is to access significantly higher levels of climate finance during the periods of implementation of the first NDC, accessing a total of USD 4.5 billion per year from multilateral and bilateral sources by 2025, and a total of USD 8 billion per year by 2030, equally distributed between adaptation and mitigation, and additional finance mobilized on this basis, as well as other forms of support from bilateral and multilateral sources as required*." We further note the estimated adaptation investment during the period 2021-2030 in Table 1 – South Africa's First Adaptation Communication; notably that South Africa plans to mobilise a significant amount of funding through multilateral funding mechanisms between the range of USD 16 billion and USD 267 billion.

111. While we certainly acknowledge the importance and need for financial support in responding to the climate crisis, we state below the basis for our concerns in respect of South Africa's envisaged support under the draft NDC.

i. South Africa's climate action cannot be premised, or conditional, on the provision of support

112. The draft NDC states that its effective implementation, and the implementation of the measures envisaged, are premised on continued effective multilateral cooperation and on the provision of support, both for implementation by developing countries.

113. We acknowledge the necessity and fairness for mitigation and adaptation measures to be properly resourced, particularly by those countries that have historically contributed to the crisis. Yet we emphasise that the country's obligations to take steps to mitigate the severe effects of the climate crisis are not, nor can they be, subject to, or conditional upon, international support.

114. These obligations exist independently and find their basis within the Constitution and Bill of Rights. In other words, whether or not funding is provided for mitigation and adaptation efforts in South Africa, the government is under a legal obligation to take effective climate action.

115. "*South Africa expects developed countries to continue to provide and mobilize climate finance and to support country-driven strategies, consistent with Article 9*". We recognise the importance of equitable measures and justice in addressing the climate crisis on a global scale, as stated above, this must include support from developed countries who have contributed to the crisis. By the same token, South Africa is currently the world's 12th largest

[93] Refer to https://cer.org.za/programmes/mining/litigation/mabola-protected-environment for more information on the proposed Yzermyn Colliery in the Mabola Protected Environment near Wakkerstroom in Mpumalanga.

GHG emitter,[94] and within the African continent, it has the highest GHG emissions. Furthermore, South Africa's per capita emissions are well-above the global average. On that basis, South Africa owes a considerable climate debt to its African neighbours. At the very least, South Africa should be at the forefront of taking meaningful climate action for Africa and should be supporting other African nations, particularly those most vulnerable to the climate crisis.

ii. South Africa must seek to reduce its exposure to the high costs of the climate crisis and avoid locking itself into expensive and unnecessary fossil fuel infrastructure

116. It is not clear from the draft NDC update how any international support is envisaged to be financed. This detail is important given South Africa's current exposure to what is already significant debt.

117. First and foremost, South Africa must seek, and use all means, to reduce its exposure to high costs related to the climate crisis. Examples here include refraining from investing in unnecessary harmful fossil fuel infrastructure likely to become stranded in a few years, or costly projects where there are cleaner and cheaper alternatives. In this regard we refer to the projects listed above at paragraph 89 as examples.

118. Second, insofar as South Africa requires external finance to fund adaptation measures, the government must desist with plans that expose South Africa to these high costs, for example, plans that pose major risk of harm to our precious limited water resources like the proposed coal mine in the Mabola protected environment.[95] South Africa is far less likely to obtain the finance and support it requires in order to decarbonise or adapt to the climate crisis if it persists with its plans to build out compromising fossil fuel generation capacity and to willfully contribute to its own exposure to these risks. **South Africa is unlikely to access the finance that it needs if it is not ambitious in its climate action.** In this regard, the government is placing its own mitigation efforts and support in jeopardy, given the eligibility criteria for climate finance. For example, the Green Climate Fund's eligibility requirement of potential for impact.[96]

119. The draft NDC update recognises the electricity sector as the major area for decarbonisation and support. It states that over the next decade, the NDC will require a much greater investment programme, as specified in the 2019 IRP, of between R860 billion and R920 billion (in 2019 Rands; USD60-64 billion) in order to decarbonise its electricity sector. "*The shift away from coal that IRP 2019 requires, will require support in the form of transition finance, and associated technology and capacity-building*".[97] The draft NDC update talks about requiring support for non-fossil-fuel development in Mpumalanga, and for longer term decarbonisation. In line with what has already been stated above, this request for support is disingenuous given the government's plans to build out over 10 000 MW of **new** fossil fuel electricity generation infrastructure in the coming years (this includes the new coal (1500 MW) and gas (3000 MW) capacity provided for in the 2019 IRP, the 1220 MW gas procured in the emergency risk mitigation procurement round, the 3000 MW Eskom gas plant and the 3300 MW coal plant to accompany the EMSEZ); and given the feasibility for government to transition its electricity sector without these unnecessary and costly projects.

120. As stated in the draft NDC comments by Meridian Economics, "*Committing to this acceleration [of electricity sector transition] will put the country in pole position amongst emerging coal dependent economies to secure large scale climate finance to manage the unavoidable transition costs of moving away from legacy coal dependency*."[98]

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[94] https://www.polity.org.za/article/south-africa-the-12th-biggest-source-of-greenhouse-gases-yes-but-thats-not-the-only-measure-that-matters-2021-04-19#:~:text=The%20Union%20of%20Concerned%20Scientists%20estimates%20that%20South%20Africa%20emitted,Australia%20third%20(16.9%20tonnes).

[95] https://cer.org.za/programmes/mining/litigation/mabola-protected-environment.

96 https://www.greenclimate.fund/projects/criteria

97 Draft NDC Update at page 27.

[98] P1, https://meridianeconomics.co.za/wp-content/uploads/2021/04/NDC-Submission_Meridian-Economics.pdf.

iii. Investment reporting to promote transparency and accountability is crucial

121. We have referred above to the significant pool of funding that South Africa intends to secure from multilateral and bilateral sources by 2025 and 2030, which will be distributed between mitigation and adaptation measures.

122. We submit that given the nature of this climate finance, including the fact that the public has a direct interest in its effective allocation to help mitigate the impacts of climate change, while contributing to South Africa's transition to a climate resilient society, an accessible public platform should be established. This public platform should communicate information on South Africa's climate finance and support agreements, including:

    122.1. the source and type of funding;

    122.2. conditions attached to the funding, including repayment periods in the event that its structured debt;

    122.3. details about the allocation of funding, including the recipient project and/or managing entity; and

    122.4. where funding has been allocated, the status of the project and its impacts.

123. It will be important for this platform to be updated on a regular basis. This consolidated reporting mechanism will not only promote transparency and accountability, but it will serve as a useful budget co-ordination and information-sharing tool between responsible organs of state, as well as an implementation, monitoring, and evaluation tool to assess the impact of investments.

CONCLUSION

124. In conclusion, while the intention of the Department is to reflect a more ambitious NDC, the draft update - for the reasons set out above - does not go far enough to ensure an NDC that is aligned with government's international and domestic law obligations.

125. We make the following recommendations for South Africa's draft NDC update:

    125.1. that South Africa's emission reduction targets be amended to reflect a much more ambitious, fair share target range for the 1.5°C pathway – we recommend making the target 286-364 MtCO2 (excluding LULUCF) for 2030;

    125.2. the adoption of clear and specific, long-term emission reduction commitments beyond 2030 including a clear commitment to zero fossil fuels in electricity generation by at least 2040 and a zero fossil fuel economy by 2050;

    125.3. Cross-sectoral alignment and ambitious mitigation and adaptation plans from the various Departments, including DMRE and Transport, which should feed into this NDC update; and

    125.4. Government policy, legislation, and administrative decisions must align with the NCCAS and regular Monitoring & Evaluation and Implementation Framework updates, in terms of the NCCAS, must be available to the public.

126. We note that the Department is in the process of scheduling consultations with a number of stakeholders on the draft NDC update, and that it has already hosted engagements with particular interest groups such as Business Unity South Africa (BUSA). We await the dates and details for all the intended civil society consultations and request an additional opportunity to meet with the Department to discuss the Life After Coal Campaign organisations' submissions.

Yours faithfully
CENTRE FOR ENVIRONMENTAL RIGHTS

per:

Nicole Loser
Attorney and Programme Head: Pollution & Climate Change
Direct email: nloser@cer.org.za