



Comments on South Africa's draft Nationally Determined Contribution Update under the Paris Agreement

Prepared by the <u>African Climate and Development Initiative</u> (ACDI) at the University of Cape Town, submitted to the Department of Environment, Forestry and Fisheries, 30th of April 2021

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Introduction

The African Climate and Development Initiative (ACDI) at the University of Cape Town (UCT) congratulates the Department of Forestry, Fisheries and the Environment (DFFE) on the preparation and release of South Africa's draft NDC Update and welcomes the opportunity to provide comments.

We understand that NDCs build on national legislation and climate policies. We would like to encourage the coordinating Department to elevate the NDC Update to the highest political levels to create intergovernmental coherence and accountability for the sectoral policies that build this NDC. It would be advisable to spin the narrative of ambitious emissions reductions in support of socio-economic development, job creation and the eradication of poverty and inequalities. There is important evidence in support of higher ambition and more resilient measures and their co-benefits, which could be extracted more clearly. Decarbonisation is not a threat to the economy, it's an opportunity and an obligation to future generations as per their constitutional rights (RSA 1996).

The following comments on South Africa's NDC Update should be considered in the finalisation of the NDC Update from ACDI's perspective.

Adaptation

The update is a notable improvement to the A-NDC of 2015. The work the Department has done in developing the NCCAS and in starting to implement some of the priority actions in the NCCAS have clearly enabled this advance. The following comments will strengthen the Adaptation component of the NDC.

General comments and suggestions

- It seems that the NDC is selectively mapping from the NCCAS onto the main dimensions of Annex to decision 9/CMA.1. This omits a lot of additional action that is listed within the NCCAS. We suggest a summary of the key actions in the NCCAS be included before the table mapping actions onto Annex to decision 9/CMA.1.
- For the adaptation investment need column, there is no information on the proportion of the total need that is conditional and unconditional; nor is there any indication of which actions would be unconditional and conditional.
- The estimated costs are very wide ranging and not detailed enough; it would be good to provide an explanation of how these costs were estimated for each goal, and include a technical appendix that provides more detail.
- There is no mention of how "just transition" and the SDGs / reducing inequality plays
 out in the adaptation space; it would be worthwhile to be explicit about how
 adaptation action will be designed and implemented to take equity into account. This
 could include for example, identifying the explicit linkages between climate change
 adaptation investments and employment or how building adaptive capacity for





- particularly exposed populations can reduce the negative effects of climate change on vulnerable populations.
- In terms of the priority adaptation actions listed, it would be useful for specific targets or milestones to be identified and quantified.
- There is little to no mention in the NDC of the interaction between mitigation and adaptation responses in terms of their co-benefits and trade-offs. For example, on Page 18 (d) it seems the Department has decided that this is not within the scope of the NDC. This is unfortunate and a major missed opportunity. There are major opportunities for co-benefits and these should be mentioned as part of the NDC. South Africa is one of the most biodiverse countries in the world and the use of ecosystem-based adaptation options in disaster risk management and agriculture can have substantial mitigation co-benefits in terms of carbon storage.
- Linkages between adaptation and mitigation and benefits thereof could be fleshed out in more detail, especially in labour intensive sectors such as agriculture with critical linkages to water and energy supply

Comments on specific goals

Goal 1

- While the climate change bill is mentioned (that is that provisions in the bill will be implemented) there is no target for finalisation of the bill. We suggest that a date for promulgation is included in the efforts column.
- The Department should consider making reporting to TCFD mandatory for private sector companies over a certain size. The TCFD requires companies to report on physical climate risk, and their adaptation responses to these risks. It seems an easy but important way to better involve the private sector adaptation action. For example New Zealand has recently made such reporting compulsory:
 https://www.cdsb.net/mandatory-tcfd-reporting

Goals 2 and 3

• The private sector is not mentioned in the effort section despite the fact that impacts and risks of climate change are and will continue to affect them. It is therefore important to include information on how the private sector will be engaged in helping understand the impacts on South Africa of 1.5 and 2°C global warming. Perhaps processes like NEDLAC is where this work could take place, and where the Department could work with the private sector to mobilise private sector resources to help understand future impacts of climate change in South Africa, and to undertake climate change needs and response assessments. The mobilisation effort can include a strategy to increase government-private sector collaboration for mobilisation of both local and international finance from multilateral organisations such as the GCF, GEF (Global Environment Facility) and the Adaptation Fund. These same comments can equally apply to civil society.





• Goal 2 and Goal 3 (point 5 for effort): Specific mention is needed about bringing a "whole-of-government approach" to understanding climate change impacts and implementing adaptation interventions. In particular, it would be useful to list intersectoral communication across government ministries as an action under the effort items for Goal 3. Working across sectors to implement adaptation can enhance cobenefits and avoid trade-offs or maladaptation. For example, selecting adaptation options that conserve biodiversity and enhance water security or that increase food security and create jobs. The water-energy-food nexus is one example of these cross-sectoral linkages. Addressing this requires engagement across sectors. See also point on co-benefits and trade-offs below.

Goal 4

- Currently there is no information included in the effort section. Some information could be provided here to demonstrate how South Africa intends to mobilize finance (e.g. proposals to the Green Climate Fund and the World Bank)? Perhaps the private sector could be drawn in here as a way to raise adaptation funding?
- Mobilise funding for adaptation implementation through multilateral funding
 mechanisms, seems to be lacking in detail. The assumptions, methods are a
 repetition of a previous goal on estimating costs, rather than some kind of description
 of how the finance would be mobilised. The "Efforts" column is missing any detail on
 specific actions that are planned to raise the finance.

Goal 5

- Tracking of adaptation efforts could identify the climate project / action and monitoring and evaluation being undertaken by the government. This would bring in more information on non-state actions, which should be part of the recognition of the overall adaptation effort.
- Please provide more technical detail on how the adaptation budgets are categorised (what counts as adaptation finance/funding in this calculation)? - ACDI has just completed a mapping of climate change (adaptation and mitigation) projects in South Africa, including (where available, amount of finance) which could be used to supplement the core programme spending reported here.
- There is information in the effort section, but this seems to be backwards looking (2015-2020). What quantification of adaptation and resilience efforts will be done going forward? The suggestion here would be to broaden the quantification to more than tracking spending, but also bringing in monitoring and evaluation efforts to assess if the adaptation actions are having benefits for reducing climate risk.

Comments about references

 There are a few missing references in the bibliography: the cost estimation methodology (CSIR, 2020) is not listed in the bibliography; this is a crucial supporting document. Likewise the reference to jobs is missing (NBA, 2018).





Include online links to cited works wherever possible: as most people will read this
document digitally, it would be helpful to include urls to all documents in the
bibliography, as well as other listed initiatives (e.g. the Green Book, NCCIS, NCCRP,
NCCAS, etc).

Mitigation

Actual emissions from 2010 to 2020 and projection from 2020 to 2030

The updated targets of the NDC show a much needed progress in the ambition, which could still be increased. It is difficult to accurately assess the adequacy of these targets without knowledge of how actual emissions have evolved over the last decade (2010-2020). An indication of this should be included in the NDC as well as a projection of emissions following a business as usual scenario over the coming decade (2021-2030). This assessment of whether the NDC Update represents South Africa's highest possible ambition considering common but differentiated responsibilities. Given the major changes in economic growth rates, cost of electricity and drop in electricity demand over the last decade, significant changes in the baseline can be expected which need to be factored into the assessment. We would appreciate it if this information is made publicly available as part of the NDC Update consultation process.

Updated 2025 and 2030 targets, GDP growth rates and a fair share

- The updated 2025 and 2030 emissions trajectory ranges of 398-510 Mt and 398-440 Mt, represent 17% and 28% reductions respectively from the ranges communicated in South Africa's NDC in 2015. These are notable revisions to the upper bound of the emissions trajectory range. However, slides shown during the consultations illustrate that at a GDP growth rate of 2.4% used as the reference case, with no implementation of climate policy, by 2025 emissions are likely to fall between 460 and 480 Mt, with full implementation of the IRP taking emissions down to roughly 425 Mt and implementation of the IRP and other policies and measures (PAMs) such as the Green Transport Strategy, energy efficiency measures and the National Waste Management Strategy bringing down emissions to roughly 405 Mt by 2025. While the tightening of the range in 2030 demonstrates a more ambitious approach, the same slides demonstrate full implementation of the IRP and other PAMs are likely to reduce emissions to around 350 Mt or lower by 2030.
- The above numbers help to provide a reference point for the updated targets and demonstrate that both the upper and lower bound of the range in both 2025 and 2030, could be revised down. In line with these findings we recommend that 460 Mt should be considered as a target for the upper bound of the range in 2025 and 350 Mt for the lower bound of the range in 2030.
- It is worth noting that the 2.4% GDP growth rate for the reference case is relatively optimistic particularly in the short to medium term with the Treasury forecasting 1.5%.





- A growth rate lower than 2.4% which is very feasible would bring down emissions further, making the case for even more ambitious targets.
- When assessing whether South Africa's targets in 2030 are in line with a Fair Share, will the updated 2030 target is in line with a fair contribution to keeping warming below 2°C according to the CERC calculator, not even the lower bound is compatible with 1.5°C as assessed by either the CERC or Climate Action Tracker, with the latter indicating a 1.5°C fair share in 2030 would need to be between 188-348 Mt.
- On page 24 of the draft document there appears to be an error citing a 22% reduction to the 2025 target, whereas in other parts of the document this figure stands at 17% reduction, this should be corrected.

Alignment with the LEDS 2050 and the net zero target

- South Africa submitted its Low emissions Development Strategy (LEDS) 2050 to the UNFCCC in 2020. The Strategy outlines the aspirational goal for South Africa to transition to a net-zero economy by 2050. A cornerstone of this contribution is the NDC cycle and the need for each subsequent NDC to give effect to the no backslide principle outlined by the Agreement to deliver progressively more ambitious mitigation commitments. For this to happen, alignment between the NDCs and the LEDS 2050 is imperative to, in the short and medium-term, put South Africa on a trajectory compatible with the long-term goal of net zero emissions. In the current NDC Update there is no indication of how it aligns with the LEDS 2050 or a net zero target.
- The difficulty of the decarbonisation challenge according to each sector should be factored into the timeframes communicated in the NDC Update. The NDC Update breaks down the decarbonisation challenge into three decades. The 2020s as the decade that will prioritise decarbonisation of the power sector, the 2030s that will deepen the decarbonisation of the power sector and decarbonise the transport sector through low emissions vehicles, and the 2040s and beyond that will seek to decarbonise the hard-to-abate sectors. Given that the decarbonisation challenge becomes increasingly difficult, the 2020s should aim to utilise relatively low hanging fruits as quickly as possible at scale in order to give more time to the effort to decarbonise the harder to abate sectors. Relying on the Integrated Resource Plan (IRP) 2019, National Energy Efficiency Strategy, Green Transport Strategy and Carbon Tax in their current forms are not capable of delivering the scale and speed of change that is required despite a compelling techno-economic case for such action as recent analysis has shown. The responsible line departments need to address these concerns with their policies.
- Analysis that links the NDCs with a net-zero goal would assist in addressing these
 concerns and should be treated as a priority by the Department. This could include
 exploring least cost highest ambition power sector pathways (which the IRP does not
 represent as demonstrated by McCall et al., 2019), high ambition energy efficiency
 scenarios, how the GTS will be implemented and enhanced, and a carbon tax that is
 progressively increased to drive action in line with a long-term net zero pathway.





• Delaying active emissions reductions will increase the burden of emissions for future generations and compromise their quality of life. If the NDC Update does not plan for the highest level ambition in emission reductions and resilience, the government may violate constitutional rights "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." (p. 25, RSA 1996).

The NDC Update and its contribution to a Just Transition

- The NDC Update mentions the Just Transition process coordinated by the NPC, but provides little detail on how the Just Transition will be realised and the role that the NDC Update could play. The Update also lacks clarifying how international funding could for the just transition process. Considerable work has been done to investigate elements of the Just Transition such as with the National Employment Vulnerability Assessments, and the Sector Job Resilience Plans. It would be worthwhile if the NDC Update is more concretely and specifically able to identify how it will play a role in contributing to the just transition and the international support required.
- Similarly, "Equitable access to sustainable development" is critical to the
 implementation and legitimacy of the NDC as well as it's alignment with other critical
 national goals such as reducing poverty and inequality, and should be elaborated on.
 This section should be put upfront in the text as it is critical to South Africa's national
 development targets. The proposed actions to increase ambition and resilience
 should then be presented in ways how they support national priorities in economic
 development, job creation and eradication of poverty and inequality.
- The more ambitious the emissions reductions in the NDC, the more likely the government will be able to access climate finance to facilitate just transitions and reap the socio-economic and environmental benefits from renewable energy technologies at scale.
- According to UCT research the upper limit the emissions target for 2030 could decrease downward by 28% (from 614 Mt to 440 Mt without any harm to economic growth (cit Marquard in UCT 2021)
- Further research has shown that higher ambition in emissions reduction through renewable energy roll out brings significant socio-economic benefits: including health benefits, substantial job creation and income opportunities, which should be considered in revising the levels of ambition (145 000 jobs through renewable energy and decarbonisation by 2050 according to IASS 2019).





Details of the policy response and the status of its legislative and regulatory basis

- A more granular description of the policy response that underlies the NDC Update is required to demonstrate the implementability of the NDC Update and whether the policy response is fit for purpose. Specify which actions in each policy instrument will need to be carried out by whom with what budget to implement the NDC Update.
- It is notable that the Climate Change Bill, Sectoral Emissions Targets (SETs), and Carbon Budgets receive little attention in the NDC Update nor are they factored into the modelling. This is surprising given that they are to provide the legislative and regulatory basis for emissions reductions, which is still relatively weak. Sustained delays with all of these processes compromised and will continue to compromise the legislative and regulatory basis of mitigation action.
- The potential mitigation contribution of the SETs and carbon budgets should be reflected in the modelling at such a time that it is possible to assess whether the targets could be revised down further. The Climate Change Bill, Carbon Budgets and SETs need to be finalised.
- The progress and challenges of the finalisation of these documents and the role they
 will play in implementing the NDC Update should be included in a transparent
 manner in the consultation process of the NDC Update. This should include a status
 update on the mitigation system and its readiness to allocate, track and report on the
 progress of the SETs and Carbon Budgets which it was meant to be doing since 1
 January 2021.
- Emissions from energy efficiency measures, embedded generation, green building measures remain unspecified and can help to increase ambition if incentivised accordingly. There are a number of initiatives in urban planning and housing which can help to increase ambition.
- The National Treasury's Cities Support Programme built substantial evidence on building sustainable South African cities which was not acknowledged in South Africa's NDC Update
- Innovation in Electric Vehicles has progressed globally. Yet there is no comprehensive South African Strategy on how to roll out a electric mobility in a sustainable way

Availability of the technical reports for stakeholder submissions

 In order to conduct a more granular assessment of the NDC Update and its technical basis, the technical reports for adaptation and mitigation need to be made available to all stakeholders to inform the stakeholder submissions that are due by the end of April 2021. Without these, stakeholders cannot be expected to make accurate assessments.





- ACDI requests that all written stakeholder submissions are made publicly available so that the final NDC Update can be assessed in light of all the comments received.
- Many reports were referenced in the text, but did not appear in the reference list at the end.

Concluding remarks

The ACDI welcomes the Department's effort to develop a robust NDC Update, despite intergovernmental constraints. The South African government has put critical policies in place to enable just transitions (such as the IRP, the REIPPPP and the National Development Plan). Yet, the implementation of these plans continues to be jeopardised by incoherent actions from individual departments. Furthermore, by not pursuing least cost policies such as is the case in the IRP, line departments are failing to deliver on the developmental objectives that would be delivered through a least cost, low carbon options. Other line departments need to take up this responsibility.

The consultation process should be used to engage other Departments, especially in the Energy and Industries, where contradictory measures jeopardise the implementation of this NDC Update. DEFF might want to consider developing a risk strategy on how to mitigate implementation risks emerging from competing policies.

Access to the supporting information will enable a more evidence based public discussion to ensure South Africa submits a robust NDC Update that is based on the best available data, is implementable and represents the highest ambition.

Decarbonisation and resilience should be framed as a gain - not a constraint - to human and socio-economic development in South Africa.





References

- Climate Action Tracker. 2020. South Africa country page. https://climateactiontracker.org/countries/south-africa/
- Department of Environment, Forestry and Fisheries, 2021. South Africa's First Nationally Determined Contribution under the Paris Agreement (2021 update).
- Department of Mineral Resources and Energy (DMRE). (2019). South Africa's Integrated Resource Plan 2019.
- IASS/UfU/IET/CSIR. 2020. Making the Paris Agreement a success for the planet and the people of South Africa. Unlocking the co-benefi ts of decarbonising South Africa's power sector. COBENEFITS Policy Report. Potsdam/Pretoria. www.cobenefi ts.info
- McCall et al., 2019. Least-cost integrated resource planning and cost-optimal climate change mitigation policy: Alternatives for the South African electricity system. Energy Research Centre, University of Cape Town.
- Marquard, Andrew & Swingler, Heleen (2021) Earth Day: Cheaper renewable energy a game changer in SA's emissions targets, UCT News, https://www.news.uct.ac.za/article/-2021-04-22-earth-day-renewable-energy-a-game-changer-in-sas-emissions-targets
- RSA (1996) Constitution of the Republic of South Africa. https://www.gov.za/sites/default/files/images/a108-96.pdf
- UNFCCC. (2015). Paris Agreement. https://unfccc.int/sites/default/files/english paris agreement.pdf