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Dear Sirs and Madam

# NEW DEVELOPMENT BANK, AFRICAN DEVELOPMENT BANK AND WORLD BANK: CONCERNS REGARDING LOANS TO ESKOM FOR MEDUPI THERMAL POWER PLANT IN SOUTH AFRICA

1. We write to you on behalf of the Civil Society New Development Bank (NDB) Forum, the <u>African Climate Reality Project</u> and the <u>Fair Finance Coalition Southern Africa</u>.

<sup>&</sup>lt;sup>1</sup> The NDB Forum consists of individuals and the following organisations: Oxfam South Africa; Institute for Global Dialogue (IGD); Centre for Environmental Rights (CER); Centre for Applied Legal Studies (CALS); Institute for

- The Civil Society NDB Forum (the Forum), co-chaired by Oxfam South Africa and African Monitor, is a network formed in 2018 during the time of Civil BRICS when South Africa hosted the 10th BRICS Summit in Johannesburg. The Forum seeks to engage the New Development Bank and its Africa Regional Center (ARC) on its role in South Africa and the region, in coordination with BRICS civil society.
- 3. The African Climate Reality Project (ACRP) works with Climate Reality Leaders, governments, NGOs, and scientists across Africa to create tools and resources to mobilize communities to find solutions to the climate crisis and call on world leaders for more ambitious climate action. Under the coalition led Zero Emissions Omissions Campaign and as the former climate and energy representative on the Bank's civil society committee, ACRP and partners have been engaging the African Development Bank to put in place a fossil fuel finance exclusion policy<sup>2</sup> and commit to 2022 as a target date for Paris alignment.
- 4. The Fair Finance Coalition Southern Africa (FFCSA) is a civil society coalition working towards ensuring that Development Finance Institutions invest in a socially and environmentally responsible manner in South Africa and Africa. The coalition focuses on issues of climate change and transparency.

## **Background**

- 5. The Forum, ACRP and FFCSA write to you in relation to the loans that were granted by the New Development Bank (NDB), the African Development Bank (AfDB) and the World Bank, to Eskom Holdings SOC Ltd ("Eskom") for its Medupi coal-fired power plant ("Medupi") in the Limpopo province of South Africa.
- 6. We seek to understand the role of these banks in ensuring proper, ongoing and rigorous oversight and monitoring of the installation of the flue-gas desulfurization (FGD) technology for which financing by all three banks has been provided for Medupi.
- 7. In November 2009, the AfDB approved a loan amount of 1.2 billion USD for Medupi. This amount was for the supply and installation of six boilers and turbo-generators in the project. This is the biggest project that the AfDB has financed in South Africa, and also the biggest loan ever approved by the AfDB. The AfDB points out that "Eskom is central to the realization of the Bank's New Deal on Energy for Africa strategy" and that "the ongoing financial, technical and capacity support for the utility company aligns with the Bank's High 5 priorities." The loan is co-financed by the World Bank. In 2016, the AfDB granted Eskom a further almost 1 billion USD loan boost to fund its expansion programme, which included the Medupi and Kusile new build programme.

Justice and Reconciliation (IJR); Centre for Human Rights (CHR); African Forum and Network on Debt and Development (AFRODAD); Ngoasheng; Global Action for Africa's Development (GLAFAD); Environmental Justice Network of Fellowship of Christian Councils in Southern Africa (FOCCISA); Survivors of Lesotho Dam (SOLD); and Injni EdTech Acceleration.

<sup>&</sup>lt;sup>2</sup> The coalition led Zero Emissions | Omissions campaign petition on change.org: https://www.change.org/p/we-call-on-the-african-development-bank-afdb-group-to-adopt-100-renewable-energy-strategy-following-cop26

- 8. In 2010, the World Bank granted a <u>USD 3.75 billion loan</u> to Eskom for the Eskom Power Investment Support Project, which included the construction of Medupi. The loan contained a 'legal covenant' that Eskom must install flue-gas desulfurization (FGD) technology at Medupi by 2025 to curb emissions of sulphur dioxide (SO<sub>2</sub>). This is in addition to its co-financing of the abovementioned AfDB loan. We note that in July 2021, the World Bank approved the extension of the FGD implementation deadline from 30 June 2025 to 30 June 2027.
- 9. Almost a decade later, Eskom was granted yet another loan for Medupi. The NDB website indicates that on 31 March 2019, the NDB approved a loan amount of 480 million USD to Eskom for the Environmental Protection Project for Medupi. The Project, which "is designed to support South Africa's commitment to reducing environmental pollution in the energy sector", includes the design and construction of six FGD units in order to achieve SO<sub>2</sub> emission reduction of Medupi.
- 10. In our correspondence, we wish to bring attention to Eskom's continuous failure to meet pollution standards in South Africa, particularly in relation to its Medupi Power Plant. We also seek additional information in relation to the implementation of the projects which the NDB, AfDB and World Bank have funded. In particular, we seek to understand whether the three banks are aware of Eskom's continued failure to meet pollution standards, despite the granting of the respective loans (now totaling **6.43 billion USD**) and if so, what steps have been taken by the banks to address the delay in the implementation of the projects.
- 11. This letter addresses the loans provided to Eskom by the AfDB. Similar letters addressed to the NDB and the World Bank are annexed hereto as "Annexure A" and "Annexure B" for your interest.

## Eskom's continuous failure to meet pollution standards in South Africa

- 12. According to Eskom, at full capacity the Medupi Power Plant will be the fourth largest coal-fired plant in the world.<sup>3</sup> This is an undesirable reputation to hold in the era of the climate crisis, to say the least, aside from the impacts of its air pollution outlined below.
- 13. Through various rounds of applications to the National Air Quality Officer (NAQO), Eskom has been permitted to delay its compliance with the Minimum Emission Standards (MES) under South Africa's air quality legislation<sup>4</sup> since these standards were first published in 2010. As reflected in its title, the MES exist to control and reduce the emission of harmful pollutants which may have a significant detrimental impact on the environment, including health, social, and economic conditions, among other impacts.
- 14. In October 2021, the NAQO <u>rejected</u> Eskom's applications for alternative weaker limits and a further postponement of the compliance timeframes in relation to the MES for five of its coal-fired power stations, on the basis that its applications did not meet the requirements of the current legal framework (Government Notice 1207 of 31 October 2018). This included the

<sup>&</sup>lt;sup>3</sup> https://www.eskom.co.za/eskom-divisions/gx/coal-fired-power-stations/medupi-projects/.

<sup>&</sup>lt;sup>4</sup> National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

Medupi Power Plant, specifically in relation to the stricter MES limit for SO<sub>2</sub> that came into effect from 1 April 2020 – a limit of 1000 milligrams per normal cubic metre (mg/Nm³).

- 15. Eskom's Medupi Power Plant is situated in the Waterberg-Bojanala Priority Area (WPA), which was declared as such in 2012 by the South African government on the basis that "ambient air quality within the Waterberg District Municipality ... may exceed ambient air quality standards in the near future". Despite this existing priority designation measured on health-based ambient air quality standards, among other specific criteria such applications must satisfy, Eskom applied for both an alternative weaker limit for the SO<sub>2</sub> MES limit to March 2030, as well as a postponement of compliance with the SO<sub>2</sub> MES limit from 2030 onwards.
- 16. The NAQO reasoned that it would be illegal to grant the alternative limit or the postponement of compliance with the SO<sub>2</sub> MES limit as Eskom had failed to comply with the explicit application requirements, including demonstration of previous investments for the reduction of SO<sub>2</sub> emissions in the same power stations as required by the regulatory framework.
- 17. Instead, the NAQO directed Medupi Power Plant to comply with the existing plant SO<sub>2</sub> emission limit of 3500 mg/Nm³ in its atmospheric emission licence, until 31 March 2025. This limit for the next 3 years is markedly higher than the SO<sub>2</sub> MES "new plant" limit of 1000 mg/Nm³ with which all existing plants according to the List of Activities were required to comply by April 2020. Eskom has known about these standards since before 2010, and these standards existed at the time of the World Bank's loan to Medupi. Furthermore, this is both notable and concerning, as Medupi will continue to operate without the primary abatement technology for SO<sub>2</sub> flue-gas desulphurization (FGD) for a further 3-year period, at least.
- 18. We understand that Eskom has since appealed a number of the NAQO's decisions to the Minister of Environment, Forestry and Fisheries although we have not yet been granted access to the appeals (despite requests), and thus cannot confirm to what extent Eskom is challenging the NAQO's refusals to grant postponement and alternative limits in respect of Medupi. The appeal is pending, and is now to be held in abeyance as the Minister of Forestry, Fisheries and Environment has set up a National Environmental Consultative and Advisory Forum in terms of section 3A of the National Environmental Management Act, 1998, which will advise on matters arising from applications for the suspension of or postponement of compliance with the minimum emission standards (MES)<sup>6</sup> and conduct an extensive consultative process with key interested and affected parties to assess and present all significant relevant research and analysis in a public forum for review and interrogation, and to report to the Minister on the outcome.<sup>7</sup>
- 19. Based on a study\_by Lauri Myllyvirta, the lead researcher at the Centre for Research on Energy and Clean Air at the University of Helsinki in Finland, which assumes that Medupi Power Plant runs at full capacity, without the FGD, it is estimated that this would cause approximately 90 deaths per year.<sup>8</sup> Alarmingly, this would equate to an estimated 270 deaths to March 2025. A

<sup>&</sup>lt;sup>5</sup> Declaration of the Waterberg National Priority Area, GG No. 35435, Government Notice 495, 15 June 2012.

<sup>&</sup>lt;sup>6</sup> Government Gazette 46355, Notice No. 2076, 12 May 2022.

<sup>&</sup>lt;sup>7</sup> Government Gazette 46746, Notice No. 2394, 18 August 2022.

<sup>&</sup>lt;sup>8</sup> Medupi's killer fumes: The story of a power station's missing air scrubbers, dated 03 March 2020.

study from November last year published by the state-owned Council for Scientific and Industrial Research (CSIR) reported more than 5000 deaths per year due to poor air quality standards in South Africa's coal belt.<sup>9</sup>

- 20. This pressing issue must also be considered in its global context highlighted in another recent piece of expert analysis by the same author, which found that Eskom emits more SO<sub>2</sub> than the entire power sector of the European Union and United States, or the US and China, combined. The report concludes that "as a result, the company has now become the worst SO<sub>2</sub> emitting power company in the world". Furthermore, South Africa's MES limits particularly the 2015 standards are weak compared to other developing countries. Although comparisons and ratios are approximate due to differences between jurisdictions, <sup>10</sup> the more lenient SO<sub>2</sub> MES limit of 3500 mg/Nm<sup>3</sup>, that Medupi is required to comply with until 31 March 2025, is approximately 17.5 times weaker than the limit in China and almost six times weaker than the limit in India.
- 21. In November 2021, the Centre for Environmental Rights launched a constitutional challenge against the South African government's plans to develop 1500 megawatts (MW) of new coal-fired electricity generation. Known as the #CancelCoal case, the applicants argue that the government's plans to develop new coal plants threaten constitutional rights as the pollution from coal-fired power poses unjustifiable harms and risks of harm to human health, the environment, and our climate.
- 22. Although this case deals with the construction of new coal-fired power plants, community residents living with air pollution from the Medupi and Matimba power plants have gone on affidavit to attest to the health and environmental problems that they are faced with on a daily basis as a result of the emissions from the existing power plants in the area. The air pollution, impacts on health, water and social impacts are described in detail in the case.
- 23. In its alternative limit application, Eskom stated that it has committed to installing FGD technology to reduce SO<sub>2</sub> emissions at Medupi. It previously committed to the installation of FGD at Medupi 6 years after completion of each unit, thus between 2021 and 2026. A July 2022 presentation by Andre de Ruyter, Eskom's Group Chief Executive, anticipates that the installation of FGD will only start in 2025 and be completed in 2029.<sup>11</sup>
- 24. Eskom recently indicated that it will approach the market in the "2nd half of 2022 to obtain proposals for the implementation of appropriate technology solutions to meet the technical requirements for SO<sub>2</sub> reduction at Medupi. Eskom does not intend to prescribe a technology solution (dry, semi-dry or WFGD) to the market and as such the specific water requirements of the solution have not been determined. In its planning for Medupi, Eskom has considered the water

<sup>&</sup>lt;sup>9</sup> The Cost of Coal in South Africa: <u>Dirty Skies, Sick Kids</u>, Daily Maverick, 4 November, 2021.

<sup>&</sup>lt;sup>10</sup> These differences include: a) the reference oxygen content (for example, the MES reference value is 10% oxygen; the EU and China reference value is 6% oxygen); b) the averaging period (for example, the MES is based on daily averages; shorter averaging periods may apply in other jurisdictions; and c) applicable boiler size, as a comparative example, looking at our PM and SO<sub>2</sub> MES for solid fuel (coal) combustion installations.

<sup>&</sup>lt;sup>11</sup> Powerpoint Presentation, *The MES and Eskom's 2035 JET Strategy*, Andre de Ruyter, July 2022.

requirements for [wet] FGD as a worst case scenario."<sup>12</sup> It is unclear what these 'appropriate technology solutions' could be, and whether these would achieve the revised SO<sub>2</sub> MES limit of 1000 mg/Nm3, at the very least, and by when. Civil society groups have long maintained that – given the water supply constraints in the area – dry FGD (as opposed to wet FGD) would be the more appropriate, less water-intensive abatement technology option.<sup>13</sup>

#### The AfDB loan

- 25. We are aware of the AfDB's Independent Review Mechanism (now called the Independent Recourse Mechanism IRM) which conducts annual monitoring of the Management Remedial Action Plan of the Medupi project.
- 26. The <u>Fourth Monitoring Report</u> of the AfDB's IRM dated July 2020 noted three critical outstanding and interlinked issues which required further attention by Eskom to ensure that Medupi complies with AfDB's relevant policies and procedures. These three issues were: compliance with air quality minimum emission standards and spikes in emissions; the timely installation of the FGD equipment to abate the SO<sub>2</sub> emissions; and the timely securing of sufficient water to operate the last three FGD units. <sup>14</sup>
- 27. Further, an AfDB news release on the Fourth Monitoring Report, notes that complaints about the Medupi project were registered in October 2010. Several complainants requested an investigation into possible violations of AfDB policies related to the project. This included the impacts of pollution on local communities and inadequate public consultations with affected people and communities.
- 28. In its <u>response</u> to these complaints, and with reference to the complaint about the health impacts from pollution and SO<sub>2</sub> emissions, the AfDB management referred to the Environmental and Social Impact Assessment report for Medupi, which states that the proposed plant as designed is for ready Flue Gas Desulfurization (FGD) technology which is capable of reduction efficiencies in the range of 50% to 98%." This response was as far back as 2011.
- 29. In 2022, the Independent Recourse Mechanism published its <u>Fifth Monitoring Report</u> on the Status of Implementation of the Updated Management Action Plan (MAP) for the Medupi Power Project in South Africa (dated September 2021). The IRM found that:
  - 29.1. Implementation of actions relating to two issues in the Updated MAP are still pending and had not been completed by the Medupi Project's closure date on 30 June 2021.

<sup>&</sup>lt;sup>12</sup> From Eskom's response to the Centre for Environmental Rights pursuant to its request for information in terms of the Promotion of Access to Information Act.

<sup>&</sup>lt;sup>13</sup> See Centre for Environmental Rights' <u>Comments on the Final Environmental Impact Report and Waste Management Licence Variation Application for the Proposed Retrofitting of a Flue Gas Desulphurisation System at Medupi Power Station, Lephalale, Limpopo Province, dated 15 June 2018.</u>

<sup>&</sup>lt;sup>14</sup> The Fourth IRM Monitoring Report is based on the findings of the field visit to South Africa by the IRM Monitoring Team from 23 November to 1 December 2019.

These are: i) Risk to public health due to emissions; and ii) compliance with the Integrated Water Resources Management Policy;

- 29.2. It was found that the Medupi Project has continued to meet the current national minimum air quality emission standards, but a concern remains the potential for non-compliance with stringent minimum emissions standards that will come into force on 1 April 2025. Eskom has applied for postponement to compliance timeframes from 1 April 2025 to 2030 and a decision from authorities is still awaited (own emphasis); and
- 29.3. It was found further that the retrofitting of the six generating units with FGD units is now scheduled to be done between 2026-2027, based on the current information. In addition, the report stated that, Eskom is in the process of planning a risk mitigation strategy that will transfer completely the risks associated with efficiency of the technology to be used for retrofitting the six units to their Engineering, Procurement and Construction contractor.
- 30. Importantly, the 2022 Fifth Monitoring Report notes that:

"Even though the implementation of the Updated MAP cannot be considered complete, the IRM considers that under the existing circumstances wherein the project has now officially closed, and the Bank no longer has a contractual relationship with the entity (Eskom), it would be both prudent and practical to functionally 'suspend' the case at this stage and not continue with the monitoring of the two pending action items until 2026.

The IRM has been monitoring this Project for more than 7 years now, and the two pending actions will be implemented in the next 5 years (with possibility of delays due to unforeseen circumstances such as the impacts on the COVID-19 pandemic). In addition, the Project has already been closed and therefore, there is little leverage on the part the Bank to influence the borrower to implement the pending actions. These facts have led the IRM to make the decision to suspend the annual monitoring until at least 2026." 15

31. In relation to the first issue of the risk to public health due to emissions, the Report states that:

"the Bank Management will ensure that Eskom will prepare and submit to the Bank a remedial and contingency plan with options and alternatives for reducing Sulphur dioxide (SO2) from 1 April 2025 until the FGD units are installed and made operational in all the six generating units."

32. An <u>article published on 22 June 2022</u> notes that the AfDB anticipates that Medupi may close early due to climate change concerns and that the project will not show a financial benefit over its lifetime. In that article, the AfDB also noted that the "Choice of megaprojects with such long lives needs very careful consideration to avoid the challenges now faced by this project in terms of cost and time overruns as well as climate change related environmental concerns."

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<sup>&</sup>lt;sup>15</sup> AfDB IRM Fifth Monitoring Report, at 6-7.

- 33. In light of the above, we request the AFDB to respond to the following:
  - 33.1. What are the conditions on which the loan was granted and has Eskom breached any of those conditions? If so, what are the consequences of that breach?
  - 33.2. What are the duties of the AfDB's Board of Directors in relation to any failure by the AfDB to ensure compliance by Eskom with the AfDB's policies?
  - 33.3. Do think that the IRM monitoring process has been effective in holding Eskom accountable for delays in implementing the project's Management Action Plan and assessing any non-compliance with the AfDB's policies?
  - 33.4. What other steps, if any, will the AfDB take in order to hold Eskom accountable for delays in implementation or for non-compliance with the AfDB's policies?
  - 33.5. What does the "remedial and contingency plan" prepared by Eskom entail, and would there be any consideration of compensation to communities for negative health impacts in this plan, given the concerns that the IRM has shown regarding public health?
  - 33.6. What effect, if any, does the NAQO's latest decision on Eskom's application for postponement have on the monitoring process by the AfDB? Will the suspension of the monitoring be lifted?; and
  - 33.7. Does the AfDB regard its financing of the Medupi project as meeting the broader objectives of the Bank, in the context of the urgent need for financial institutions to divest from fossil fuels in order to avoid climate related financial and other risks, as well as given the AfDB's view regarding the project's limited financial benefit?

# **Conclusion**

- 34. In paragraph 19 above, we referred to research which indicates that should the Medupi Power Plant run at full capacity, without the FGD, it is estimated that this would cause approximately 90 deaths per year. In light of Eskom's latest submissions in its alternative limits application, we understand that the installation of FGD at Medupi may only start in 2025 and be completed by 2029. Eskom's delays in its implementation of the FGD technology at Medupi will therefore result in 630 deaths by 2029, an unconscionable situation to say the least, and one which should be of immense concern to you.
- 35. In this regard, we seek to understand the role of the three banks in ensuring proper, ongoing and rigorous oversight and monitoring of the installation of the FGD technology for which a massive amount of financing by all the banks has been provided. It is urgent that we understand how your banks plan to take responsibility for ensuring that Eskom complies with terms of the Medupi project which the AfDB has financed.

- 36. We note that the AfDB is committed to transparency and to ensuring meaningful consultation with civil society actors. We therefore hope that our letter provides useful and important information while allowing an opportunity for the Banks to engage constructively and effectively with civil society and community organisations on the issues and questions raised herein.
- 37. Please provide us with a detailed response by no later than close of business on 30 October 2022.

Yours faithfully

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