

INGA 3: A COST TOO HIGH FOR SOUTH AFRICA

International Rivers and WoMin African Alliance¹

In 2013, South Africa agreed to purchase power from the proposed Inga 3 dam in the Democratic Republic of Congo (DRC). But nearly 10 years on, and with the treaty set to expire in 2023, Inga 3 has made no meaningful progress and its prospects have dimmed following high-profile exits by the World Bank and one of the project developers. If South Africa is to address chronic challenges in energy security, the government and Eskom should take the opportunity afforded by the delays that Inga has already faced to discontinue its support for the project.

This is one of the main conclusions of a new report conducted by TMP Systems,² a UK-based firm that specializes in assessing the social, environmental, and investment risks to companies and investors. Their study finds that Inga 3 would effectively cost South Africa tens of millions of dollars per year. This analysis shows that the project is simply not viable economically, and as such it is exceedingly unlikely to be built. The study recommends that South Africa instead invest in domestic solar and wind generation, which would save millions of dollars while serving as a vehicle for job creation.

This policy brief draws out key findings from the report, as well as additional expert and some feminist analysis, to consider the risks and costs that South Africa is exposed to through Inga 3. It shows that these costs will only grow if South Africa fails to act: it will either be saddled with an expensive and damaging source of energy at some uncertain point in the future, or it will be left with a giant hole in its energy plans, stifling development and the growth of renewable energy.

Background

When President Zuma announced in 2013 that he had signed a treaty with the then-Congolese President Kabila to import 2500 megawatts of power from the proposed Inga 3 dam, many believed that the long-dormant project would finally materialize. Even after Zuma's departure, South Africa factored Inga into its 2019 Integrated Resource Plan (IRP) that set the country's energy trajectory for the next decade, and later that year the energy minister doubled down on the country's commitment by pledging to purchase an additional 2500 MW.

Yet nearly a decade later, there has been no discernable progress. In 2016, the World Bank canceled its involvement, and the African Development Bank effectively froze its funding. Just last year, the world's second largest construction company, ACS, withdrew from the project consortium. And these are just the latest in a longer series of false starts on Inga 3: In 2004, the DRC government reneged on an earlier deal to sell Inga's power to South Africa. Most recently, the DRC has been in advanced discussions with Australian mining firm, Fortescue Metals Group, to develop the Inga site and potentially cut South Africa out altogether.

Despite Inga 3's significance to South Africa's energy plans, the government has not undertaken a feasibility study to show that the project is financially viable or its purported benefits are attainable. This is startling given that South Africa has experienced prolonged load-shedding and would be required to finance the transmission lines from the DRC border to South Africa. The World Bank estimates that this will cost South Africa over \$2 billion (about R28 billion) to build and another \$60 million (about R839 million) per year to maintain. Eskom is already in crisis, with debts of at least R450 billion in 2020. Problems with Inga would risk creating a major liability for the South African public and compromise the country's future energy security.

1. International Rivers is an NGO dedicated to the global struggle to protect rivers and the rights of communities that depend on them. See: www.internationalrivers.org. WoMin is a Pan-African ecofeminist alliance that works to support women's organising and to build a movement aimed at challenging the destructive large-scale extraction of natural resources and to propose developmental alternatives that respond to the needs of the majority of African women. See: www.womin.africa

2. TMP Systems conducts data-driven social and environmental risk analysis for companies, investors, and nonprofit organizations. They are best known for pioneering Landscape, an innovative platform funded by the UK's DfID to inform investors of the risks that social and environmentally-driven conflict can cause to project bottom lines. The Landscape tool is available on the Bloomberg Terminal for investors. The analysis of Inga benefits from this data and approach.

Key Findings and Conclusions

- **Importing power from Inga 3 would cost Eskom over R10 billion more per year as compared to wind and solar.** This would likely fall onto the shoulders of ordinary South Africans, through increased tariffs or government subsidies. This is set against a backdrop of electricity prices for South African consumers that have increased by 177% in the past decade, with a further 15.6% increase already expected in mid-2021. Vulnerable and poorer households would see their household costs increase, and women would be particularly and disproportionately impacted.
- **Inga's power would be significantly more expensive than power currently produced within South Africa. By the time Inga begins delivering electricity, the power produced would cost nearly double the price of solar and nearly triple the price of wind.** The investment required to develop Inga would hamstring efforts that could bring additional power online more quickly and cheaply. It would also entail a major opportunity cost for investment in job-intensive productive sectors such as wind and solar.
- **Inga 3 will likely be heavily delayed, if it is built at all, and would not begin producing power until 2032.** This would significantly undermine the value of the project and push up the cost of the electricity it would produce. The study estimates that the dam's environmental, social and governance (ESG) factors alone would lead to a 3-year delay, and finds that further delays around transmission infrastructure due to both ESG risks and construction delays are also likely.
- **As much as 500 MW of Inga's power would be lost along the length of the transmission line before it even reaches South Africa.** At over 3,000 kilometres, Inga 3 would require the world's longest and most expensive transmission line, which would have the added complexity of requiring permission to traverse Zimbabwe and Zambia. A transmission line of such length has never been attempted before because the complexity, costs, and transmission losses make such an undertaking impractical.
- **The Inga 3 dam and its transmission line would have significant negative social impacts, and adversely impact between 210,000 and 333,000 people within South Africa.** The transmission lines in South Africa would run through areas with high social risks, where people are particularly vulnerable to the sort of disruption caused by major construction projects, with women being disproportionately affected. The displacement of people to marginal lands to make way for the transmission lines could impact farmer livelihoods, many of whom are peasant women, and deepen poverty and inequality.
- **Inga 3 would create virtually no new jobs in South Africa. Comparable investments in wind and solar, however, could create approximately 8,096 full-time jobs for South Africans.** Women-led, localised off-grid renewable projects could be even more beneficial for communities' access to electricity and development. An added benefit of wind and solar is that these resources can be developed incrementally and deployed quickly, lessening upfront costs and not requiring long lead-times to begin producing power.
- **The project's severe economic risks and significant drawbacks to South Africa should make the pursuit of Inga 3 a non-starter for policy-makers.** The financial projections for Inga are so dire that TMP notes "the figures show that delays could have a catastrophic impact on the financial case for Inga 3."
- **South Africa's continued reliance on Inga 3 in its energy plans represents a grave risk to the country's energy security.** Given the increasing likelihood that the project will not be built, South Africa could face a severe energy deficit if it does not remove Inga from its plans and take proactive steps to meet the country's future energy needs. The study finds that South Africa's solar and wind potential offer clear advantages over importing expensive power from Inga, including on cost, energy security, and broader societal benefits.

Recommendations

To the South African government, including the ministries of finance and energy, and parliamentary oversight committees:

- Take steps to withdraw from the Inga 3 treaty with the DRC, with a view toward a renewed national energy plan that can deliver energy security, increased certainty for energy and economic planners, and bring electricity in at a much lower cost to South Africans.
- A feasibility study of Inga 3 must be urgently developed and made public, making transparent the assumptions under which South Africa continues to back the project. This study should inform a revision of the Integrated Resource Plan for the energy sector.
- This feasibility study must factor in environmental, social and governance (ESG) risks and impacts. It must also include a robust assessment of energy alternatives that factors in their respective financial, environmental and social costs as well as the distribution of these costs, recognizing that different groups, particularly women, who value socio-economic goods such as land, safety and energy differently because of the gender division of labour which assigns them primary responsibility for household food, water, electricity and the generalised work of care for families.
- The IRP should be revised to better support off-grid, mini-grid and community-led energy projects, especially where they support women. It is vital that the benefits of energy development are shared equitably to support job creation, livelihoods, sustainable industrialisation, social and public services, etc.
- Develop a clear set of requirements and support structures for community participation on decisions to implement projects, including community right to consent, to ensure that spending on socio-economic development initiatives is targeted, effective and approved by local communities in the short and long-term.
- Provide better and more accurate data, especially on energy demand, toward sparking rapid but flexible energy rollout while avoiding unnecessary new energy developments that may become stranded assets.

To NEDLAC, opposition parties, and labour unions:

- Advocate for an immediate and transparent feasibility assessment that fully considers who, if anyone, benefits from Inga 3 going ahead, and explores possible vested interests.
- Build on TMP's analysis by further establishing the superiority of alternatives over Inga for the purposes of job creation, energy access for all, and wider development.
- Produce sub-national estimates on job losses if Inga proceeds at the expense of wind and solar and analysis of the economic and employment impacts of future energy deficits.
- Lead calls for more robust energy demand forecasting, including in light of the impacts of COVID-19 on energy demand projections.

To civil society:

- Utilise findings from the study to motivate government, financiers, companies and other actors to reconsider the implementation of the Inga project.
- Push for South Africa to conduct a robust and transparent feasibility study of Inga 3 and a subsequent review of the IRP electricity sector plan.
- Work with communities and developers to build a pipeline of high quality energy projects that support the rights, interests, and welfare of South Africans via a just transition.
- Continue to examine and expose the harmful impacts of big dams such as Inga in a time of climate and ecological crisis, and contrast these with technologies like solar and wind which are more environmentally and socially responsible.
- Show how the impacts and risks for Inga 3 are unevenly distributed by pursuing a feminist lens that focuses on the costs to and impacts on women.