## DARUBINI

# Advancing Responsible Oil and Gas Management: The Tanzania Liquified Natural Gas Project



Issue 5 August 2024



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#### Introduction

Tanzania is on the brink of finalizing a Liquefied Natural Gas (LNG) export deal with international multistakeholder companies. This, in an era that is marked by escalating concerns over climate change, environmental degradation, and the imperative to transition towards sustainable energy sources.

The global energy landscape is undergoing a profound transformation (Hussein, 2023). The transition from fossil fuels, including coal and oil, to clean energy sources such as wind, solar, and hydropower has drawn significant attention to Tanzania's natural gas reserves. Natural gas is considered a transitional energy source due to its relatively low carbon emissions (The Citizen, 2023).

Since the world grapples with reducing greenhouse gas emissions and mitigating its impacts, the responsible development and utilization of Tanzania's LNG reserves have emerged as a critical focal point in the guest for a sustainable and environmentally conscious future energy (Nakanagwi, 2021).

The Likong'o Liquefied Natural Gas Project is a natural gas discovery in an offshore basin in the Indian Ocean, with an estimated 57 trillion cubic feet of gas intended for export (Tanzania Invest, 2023). The Tanzania Petroleum Development Corporation (TPDC) collaborating is international companies, includina Equinor, ExxonMobil, and Shell, to invest USD 42 billion in the project (Tanzania Invest, 2023).

This briefing examines the Tanzanian LNG project, discussing its environmental linkages, economic and political dimensions, and social sustainability. It also highlights community engagement and concerns, finally presenting recommendations and proposing a just framework for the project's implementation.

## Balancing LNG and Renewable Energy for a Sustainable Future

Tanzania remains heavily dependent on fossil fuels, making the transition to renewable energy sources a top priority to guarantee sustainable energy resources for the future.

Despite exporting fossil fuels such as coal to global markets, there is growing recognition of the need to minimize reliance on these energy sources. For instance, the National Power System Master Plan (PSMP) from 2020 sets forth the ambitious targets for

diversifying Tanzania's energy mix by 2044 (Ministry of Energy, 2020). However, it also highlights the crucial role of foreign investment in renewable energy systems (RES).

Tanzania's LNG reserves constitute a vast reservoir of clean-burning natural gas, providing a valuable opportunity to diversify its energy mix and advance its journey towards a responsible energy transition (Stanbic, 2020). As of 2023, Tanzania's national electricity production grid-installed capacity was 1,899.05 megawatts (MW) based on the following mix: 1,193.82 MW (63%) is generated from natural gas, 601.60 MW (32%) from hydropower, 83.93 MW (4%) from fuel, and 10.5 MW (less than 1%) is from biomass (Tanzania Invest, 2024).

A SWOT analysis comparing LNG and renewable energy sources, highlights that LNG benefits from an optimal geographical location and acts as a transitional fuel. However, it faces significant challenges due to methane emissions and high financial costs linked to infrastructure investments and operational costs such as liquefaction and re-gasification and maintenance. In contrast, RES are clean and sustainable, though they face intermittency issues, meaning there are variability issues for some sources like solar and wind energy and high initial installation costs. RES also has low operational energy costs and significant environmental conservation benefits (Al-Haidus, 2022).

Notwithstanding, LNG offers additional opportunities, such as attracting foreign investments and enhancing local industrial linkages. It shows that both energy sources have advantages and face challenges: LNG is challenged by legal and regulatory issues, and RES must overcome infrastructure integration difficulties (Al-Haidus, 2022).

While LNG offers a transitional solution with lower carbon emissions than coal, there are more ecologically sustainable long-term options. However, by integrating LNG as a stepping stone and investing in RES, Tanzania could work towards a more reliable, environmentally friendly, cost-effective energy future (Rayna Skiver. 2022). The strategy should focus on gradually increasing the adoption of RES to harness their clean and sustainable benefits despite their intermittency and high initial costs. Therefore, Tanzania's energy dilemma necessitates a coherent national strategy to transition towards cleaner energy sources.

## LNG Project Operationalization: Is it A **Decision Constraint?**

The discovery of LNG began in 2010, and the project has since progressed through several phases.

From 2010 to 2015. Phase I involved the discovery of substantial natural gas reserves, setting the stage for subsequent developments. During phase II, from 2016 to 2020, initial steps towards project realisation were taken. including announcement of project construction plans and the commencement of compensation efforts. However, phase III, covering 2021 to 2025, intended to be the phase of operationalization of the project, has encountered setbacks such as delays and cautionary warnings (The East African, 2024), underscoring the project's intricacies and external pressures.

The operationalization of Tanzania's LNG project faces significant decision constraints. Despite substantial progress from 2010 to 2020, current narratives as reported on social media, predicts that the project's final investment decision will be made only in 2025 (Stanbic, 2022). However, this outlook raises concerns about its validity because the government is still entering into the Host Government Agreement (HGA) and Production Sharing Agreement (PSA). Although the preliminary agreement for the HGA has been completed, negotiations are still running on the amendments intended to ensure that both the government and investors benefit fairly from the deal (Offshore Engineer, 2024). The delay indicates the project's complex and evolving nature.

"The LNG project is yet to come in our lifetime with over a decade of failed promises towards this foreign investment. We have seen no gain from this investment besides the compensation that removed our dried leaf rooftops, and we replaced them with iron sheets."



**Engagement with Tanzanian Members of Parliament** 

## **Recommendations: Addressing the LNG Complexities Towards** Responsible Oil and Gas Management.

#### For the Government

- Tanzania needs to prioritize shifting to renewable energy sources as a primary priority. Investing now in RES, such as solar, wind, and biomass, can help diversify the energy mix and provide long-term sustainable energy solutions.
- The LNG project's HGA and PSA must be hastened as soon as possible as a stepping stone in transforming towards more RES. Ensuring fair and mutually beneficial terms in these agreements will attract investments and bolster the project's success, advancing Tanzania's broader energy transition objectives.
- In parallel, it is recommended that educational initiatives aimed at raising community awareness about the importance of transitioning towards clean and sustainable energy sources be strengthened.

#### **For Companies**

- Collaborate with the government to implement strategies for environmental conservation and manage potential environmental impacts from the construction and operation of the LNG project.
- Provide training and job opportunities for the local community to benefit from the project meaningfully.

#### **For Communities**

- .Communities should actively participate in decision-making meetings and educational programs to broaden their understanding of energy transition issues regarding Liquefied Natural Gas Projects.
- Effective participation in capacity-building programs to elevate direct and indirect employment skills.

### **Community Perspectives Concerning the LNG Project**

The socio-political context in Tanzania has significantly complicated the project's initiation despite its potential to drive economic growth and welfare. The social prolonged negotiations and delays in the investment decision have fueled feelings of being overlooked or disregarded in the affected communities, leading to disempowerment.

In the Lindi region, the anticipation and concerns surrounding the LNG project are deeply rooted in perspectives of the host community, particularly those residing in Likong'o village, who have been resettled to make way for the project's development. Comprising mainly of fishermen, subsistence farmers, and small business owners, this community's sentiments reflect a mix of hope and frustration.

Although the government and foreign investors have facilitated their relocation through free prior informed consent mechanisms to mitigate potential conflicts, there's a clear sense of discontent among some members. The prolonged wait for the LNG project has led to a sense of disillusionment among the host community members, who feel that over a decade of promises has yielded little tangible benefit apart from compensation for relocation.

One community member expressed disappointment over the perceived lack of acknowledgment of the LNG project by the President during a public event, highlighting a sense of neglect or unmet expectations, she said:

"The LNG project has been promised to us, yet the grounds. Surprisingly, the head of state on her visit, did not mention anything on the LNG project so we are waiting".

Another member, directly affected by the project, expressed a strong desire to see it completed within their lifetime, highlighting the personal stakes and hopes connected to the project's success. A third member of the community remarked emotionally that the only visible change had been the replacement of traditional dried leaf rooftops with iron sheets, symbolizing a shift in their way of life without the promised economic transformation

The impact of the anticipated LNG project on subsistence farming has been profound, with farmers facing challenges due to relocation and loss of fertile agricultural and fishing grounds.

The shift in agriculture from coconut-based to less suitable crops like sesame and corn has exacerbated socio-economic hardships, particularly affecting elderly farmers who may not live to see new coconut trees bear fruit.

Also, in parliament, concerns and frustrations over the project's progress are expressed:

"We have raised concerns about the government's commitment to the LNG project in Lindi. Moving forward, we will demand that Tanzania Petroleum Development Corporation and the Ministry of Energy behind the scenes.

Despite the challenges mentioned above. Some of the CSOs in Lindi maintain optimism about the LNG project's potential benefits. They view LNG as a transitional fuel that could facilitate Tanzania's journey towards cleaner energy sources, albeit acknowledging its environmental drawbacks. CSOs advocate for a gradual energy transition towards a carbon-free economy, envisioning industrial linkages between the LNG and agriculture sectors that could benefit the local community. Therefore, advocating for responsible oil management necessitates adopting just transition framework.

The stated voices illuminate the complex dynamics, where anticipation for economic opportunities coexists with concerns over delays and perceived neglect. As the project's timeline unfolds, addressing these sentiments and ensuring meaningful engagement with the host community will foster trust, social cohesion, and, ultimately, the project's long-term success.



**Engagement with community members** 

## The Just Energy Transition Framework

Civil Society Organisations (CSOs) such HakiRasilimali (HR) have been actively engaging with Members of Parliament (MPs) in Tanzania to advocate for responsible management of the oil & gas to the LNG project. HakiRasilimali shared their research findings titled "Navigating Tanzania's LNG Perspective; Towards Responsible Energy Transition and Sustainable Alternatives" to inform MPs about the project's multifaceted environmental, social, and economic impacts. Figure 1 shows the Just Energy transition framework's pillars for responsible gas governance, which is highly oil and recommended by this briefing towards advancing responsible and just LNG Project management in Tanzania. The four aspects of the framework are:

The recognition aspect implies that the LNG Proiect host communities deserve alobal recognition for contributing to the LNG project. While investors and the Government of Tanzania (GoT) have compensated the host communities, establishing policies and regulations is essential to safeguard their benefits. The host community must be defined by its proximity to the project and not by the individuals seeking to benefit. Furthermore, any transplantation or rent-seeking from other parts of the population should be avoided to ensure that the actual beneficiaries of the LNG project are the local communities of Lindi hosting the project.

The resolutive aspect necessitates that investors and the GoT restore the community to its previous status before the LNG project. To facilitate sustainable development in the host communities, a focus should be on building local capacity, increasing awareness, and creating linkages in domestic industries.

The distributive aspect emphasizes the need for fair distribution of both the benefits and ills of the LNG project. "Ills" refer to the costs or negative impacts associated with the project. Therefore, Tanzania must promptly complete the LNG negotiations ensuring that the benefits of the project are shared equally and fairly.

The procedural aspect is explained in terms of contracts entered for the project implementations. It is closely linked to oil prices, which can fluctuate globally and cause instability. Consideration must be taken regarding short- and long-term contracts for LNG at reduced prices, especially in East Asian markets. Long-term contracts should also include clauses for price review to protect against significant changes in market conditions.

A hybrid pricing arrangement that involves aportion of the price being linked to oil and another to a gas or LNG benchmark should be established. This will help ensure equitable distribution of economic benefits to the people of Tanzania.



Figure 1: Just Energy Transition Framework Pillars

In summary, while the LNG project in Tanzania has potential economic benefits, its realization faces significant challenges due to socio-political complexity, community expectations environmental concerns. Effective advocacy and governance will be critical to overcoming these challenges, ensuring transparency, equitable benefit sharing, and sustainable development for host communities. By addressing these issues through the presented Just Energy Transition Framework, Tanzania can better manage the LNG project to promote long-term socio-economic growth while mitigating negative impacts on local communities and the environment.



- 1.US cautions Tanzania on LNG project Delays (The
- 2. The future of LNG in Tanzania: A bright outlook? (The Citizen)
- 3. Tanzania shops for advisors on a \$30 gas project (The EastAfrican)
- 4. Equinor, Shell and Exxon agree on LNG project with Tanzania (Reuters)
- 5. Weak oversight threatens Tanzania's LNG potential (<u>The Chanzo</u>)
- 6. Why the conclusion of LNG will now take longer (The Citizen)
- 7. Tanzania LNG Project Delays as Government Seeks to Change Terms (Oedigital.com)
- 8. Expert Urge Caution As Tanzania Prepare Project-Specific Law on LNG (The Chanzo)
- 9. Stakeholders question silence implementing the liquefied natural gas (LNG) project, calling on the government to speed up the process (The Chanzo)
- 10. Residents seek education on the multi-billiondollar LNG project (The Citizen)
- the government signs Preliminary Agreement of the Host Government Agreement (HGA) for the LNG project (PURA)









