

# POLICY BRIEF

## POLICY RECOMMENDATION ON DRAFT NATIONAL VISION 2050

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July 2025

### Executive Summary:

Tanzania is developing its 25-year national vision (2025-2050) to guide its future trajectory. A draft vision has been produced for stakeholder consultation. This document provides an analysis of energy and climate change-being addressed within the draft-national vision, identified gaps and recommendations for inclusions. For increased clarity, the document has been separated into two sections with the first part focusing on energy aspects and the second part on climate change.

Climate services provide tailored climate information and products that enable individuals, communities, and organizations to make informed decisions. This document provides policy recommendations for integrating climate services into Tanzania's National Vision 2050 to achieve climate-resilient development.

Also, the proposed recommendations address critical energy concerns, including affordability, reliability, security, and sustainability together with promoting socio-economic development

## 1 Energy Context

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### 1.1 Analysis of the Inclusion of Energy Aspects in the Draft National Vision 2050

Within the draft National Vision 2050, energy aspects are considered within the pillars, drivers, and transformative sectors. Among the pillars, Section 3.3.4 focuses on attaining a high-quality living standard, emphasizing the improvement of connectivity to reliable and affordable energy. This is through the aspiration of realizing a resilient network of energy infrastructure, transitioning to clean and renewable energy sources, promoting environmental sustainability, reducing carbon emissions, and enhancing energy security for all sectors of society.

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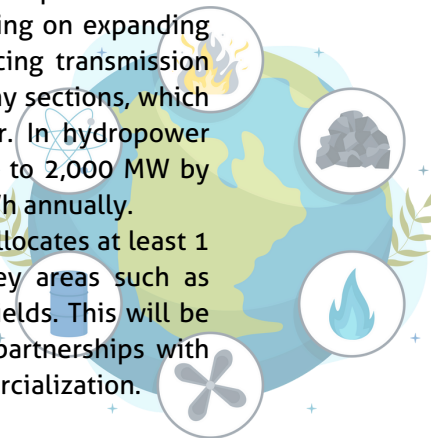
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Furthermore, the draft vision recognizes the impact of climate change and human intervention on water sources (hydropower), which account for 37%-45% of the energy mix. It places measures for the conservation of healthy wetlands and water resources in Section 4.3.2. Furthermore, Section 4.3.5 highlights the expected climate changes and impacts, aspiring to attain a sustainable and resilient future that embraces a clean energy mix, low carbon alternatives, carbon sequestration, and institutional carbon trading mechanisms to reduce greenhouse gas emissions. It also includes a disaster risk preparedness framework for the protection of people, property, and infrastructure, including energy infrastructure.

The realization of the vision is spurred by several drivers, with investment in renewable energy technology identified as a key leverage for advancing multiple sectors, enhancing service delivery, boosting production, and increasing accessibility. To enable the realization of Vision 2050, Section 5.4 aspires to robustly invest in developing and using emerging technologies, including energy, to promote socio-economic development. Additionally, Section 5.5 aspires to establish a sustainable research and development financing mechanism that allocates at least 1% of GDP, featuring incentives to encourage private sector investment in key areas, including clean energy.

Within the transformative sectors pivotal for realizing the vision 2050 among them is within the transformative sectors crucial for realizing Vision 2050, manufacturing stands out. The government plans to invest heavily in reliable energy sources, aiming to increase energy consumption per capita from 120 kWh to 600 kWh. This will be supported by robust investments in clean energy, focusing on expanding hydropower, solar, wind, and geothermal sources. Additional initiatives include reducing transmission losses and enhancing transport infrastructure. This strategy aligns with the blue economy sections, which emphasize offshore energy sources like liquefied natural gas (LNG) and hydropower. In hydropower expansion, with an installed capacity of 561 MW, the government aims to increase up to 2,000 MW by 2035, including the Mwalimu Nyerere hydropower project, which will generate 2,100 GWh annually.

In Section 5.5. (B), the vision analyzed that sustainable R&D financing mechanism that allocates at least 1 per cent of GDP, featuring incentives to encourage private sector investment in key areas such as agriculture, biotechnology, clean energy, and emerging technologies in ICT and other fields. This will be smoothly implemented if the government increases funding for research initiatives, partnerships with academic and industry stakeholders, and the promotion of innovative technology commercialization.



### 1.2 Identified Gaps in the Draft National Vision 2050 in Addressing Energy

1. The vision highlights only the target for expanding hydropower, without specifying targets for other renewable energy sources. While it mentions plans for expanding hydropower, solar, wind, and geothermal, it does not provide specific targets for each. The goal of reaching 2000 MW is mentioned without detailing the contribution of each source.
2. The aspect of energy efficiency has not been highlighted in any part of the vision. In recognition of its importance, the government of Tanzania has recently launched the national energy efficiency strategy, where among the identified benefits are reduction and optimisation of energy consumption/use that not only enable cost saving, decrease demand in power plants, reduce greenhouse gas emissions and mitigate climate change. Energy efficiency also enhances energy security by lowering dependence on imported fuels and improving the resilience of the energy system. Additionally, it supports economic growth by creating jobs in energy services and technology sectors.

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3. The vision does not address the need to realize smart energy grid infrastructure in its management, utilization and operationalization. The realization of smart grids enables improving efficiency, enhancing reliability, integrating renewable energy, saving costs, engaging customers, and ensuring security. By using digital technologies to monitor and manage electricity flows in real time, SMART grids reduce energy waste and optimize the distribution network. They quickly identify and respond to issues like outages, facilitating the integration of renewable sources like solar and wind. This helps balance supply and demand more effectively, lowering electricity rates and reducing the need for costly new infrastructure.

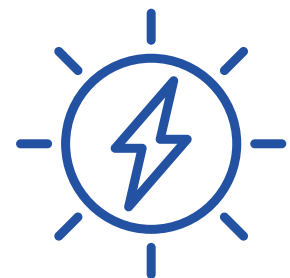
4. The vision does not provide the integration of energy smart technologies into other sectors like agriculture and fisheries such as the promotion of solar-powered irrigation etc.

### 1.3 Recommendations for inclusion in the Draft National Vision 2050 in Addressing Energy

The following are the recommendations for inclusion within the National Vision 2050

1. Inclusion of target for the different sources to be used in generation. The Power System Master Plan 2020 set targets for energy generation, with renewable sources, excluding hydropower, receiving minimal emphasis, while coal and gas were prioritized. The Power System Master Plan 2020 is currently under review. Additionally, the upcoming Africa Energy Summit is expected to launch the Tanzania National Energy Compact 2025-2030, which will likely address these targets and promote a more balanced energy mix.
2. The inclusion of inspiration for an economy-wide adoption of energy efficiency within Section 4.3.2.
3. Inclusion of aspiration within the transformative sector in manufacturing for promotion of off-grid solutions, decentralized productive use of energy and non-electricity uses for driving socio-economic development.
4. Inclusion within Section 3.3.4, aspiration C) to include the realization of a resilient smart network of energy infrastructure, transitioning to clean and renewable energy sources, promoting environmental sustainability, reducing carbon emissions, and enhancing energy security for all sectors of society.

## 2 Climate Change Context



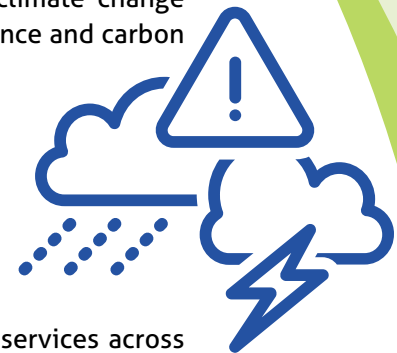
### 2.1 Analysis of the Inclusion of Climate Change Aspects in the Draft National Vision 2050

Climate change has greatly impacted the communities and nations at large with expectations of increasing in intensity and frequency. Climate change poses significant risks to sustainable development by exacerbating existing challenges such as poverty, food insecurity, water scarcity, and natural disasters. In recognition of its importance coupled with other environmental concerns, pillar number 03 is dedicated to environmental integrity and climate change resilience. Whereby it addresses aspects of biodiversity integrity, healthy wetlands and water resources, pollution-managed environment and climate change resilience.

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Within this pillar, the aim is to achieve development that safeguards environmental and ecological integrity while enhancing low-carbon and socio-economic resilience in the face of a changing climate. Focusing on climate change, the nation aspires to realize a sustainable and resilient future, becoming a climate-ready nation with a disaster risk preparedness framework to effectively mitigate, respond to, and recover from natural and human-made disasters. This vision includes creating a climate-resilient society that embraces climate-smart practices and targeted resilience-building measures, mainstreaming and localizing environmental management inclusive of climate action across all levels of government. Additionally, the nation aims to lead in climate change response, supported by robust climate governance and capitalization on climate finance and carbon trading opportunities.



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### 2.2 Identified Gaps in the Draft National Vision 2050 in Addressing Climate Change

The draft has not paid special to improvement and increased utilization of Climate services across different sectors. Climate service in simple terms is defined as the provision and use of climate data, information, and knowledge to assist decision-making. Climate services support various sectors, including agriculture, water, health, disaster risk reduction, climate-smart practices and energy, by providing essential climate information that enhances data-driven, science-based policymaking and climate risk management. It extends far beyond disaster preparedness and climate-smart practices by enhancing productivity, safety, and sustainability across multiple domains, demonstrating their broad applicability and importance example use of climate service to optimize energy production against expected demand based on expected weather conditions. In recognition of its importance, coupled with its limited utilization it is imperative to have dedicated aspiration for its improvement, promotion and utilization.

The vision has not been appreciated nor considered the contribution brought about by traditional knowledge and practice. The combination of this knowledge and scientific knowledge creates a hybrid that is relevant for the local community together with preserving our culture.

### 2.3 Recommendations for inclusion in the Draft National Vision 2050 in Addressing Energy

1. Addition of an aspiration envisioning the realization of a nation that utilizes and is informed by co-produced and downscaled climate services for making informed decisions and plans economy-wide. The attainment of co-produced and downscaled climate service shall address the major challenge which makes current climate service being seeing un-reliable and in-actionable. Furthermore, within the drivers of science and technology consider the inclusion of improvement in meteorological infrastructure for better data collection and distribution leading to improvement in climate service.
2. Within drivers under research and development addition of an aspiration to recognize and integrate traditional knowledge and practices with scientific knowledge. This hybrid approach is relevant to local communities and helps preserve cultural heritage.