The National Treasury

REPUBLIC OF KENYA

Kenya's Sovereign Sustainability-Linked Financing (SLF) Framework

FOR SUSTAINABILITY-LINKED FINANCING INSTRUMENTS FOCUSED ON CLIMATE AND ACCESS TO ENERGY TARGETS

JUNE 2026

Abbreviations and Acronyms

AFD	Agence Française de Développement
AfDB	African Development Bank
AFOLU	Agriculture, Forestry, and Other Land Use
AFR100	African Forest Landscape Restoration Initiative
APLMA	Asia Pacific Loan Market Association
BAU	Business as Usual
BETA	Bottom-Up Economic Transformation Agenda
CMA	Capital Markets Authority
DANIDA	Danish International Development Agency
DeKUT	Dedan Kimathi University of Technology
ECAPOV	Europe and Central Asia Poverty Database
EMDE	Emerging Market and Developing Economy
ESA	European Space Agency
ESMAP	Energy Sector Management Assistance Program
EU	European Union
FAB	Feasibility and AmBitiousness
FAO	Food and Agriculture Organization
LSMS	Living Standards Measurement Study
LSTA	Loan Syndications and Trading Association
LTLED	National Long-Term Low Emission Development Strategy
LULUCF	Land Use, Land-use Change, and Forestry
MNAPOV	Middle East and North Africa Poverty Database
MRV	Monitoring, Reporting and Verification
MSME	Micro, Small and Medium Enterprise
MTF	Multi-Tier Framework
MTP	Medium-Term Plan
NAP	National Adaptation Plan
NCCAP	National Climate Change Action Plan
NCCRS	National Climate Change Response Strategy
NDC	Nationally Determined Contribution
NEMA	National Environmental Management Authority
NFMS	National Forest Monitoring system
NT	National Treasury
NTFP	Non-Timber Forest Products

FLLoCA	Financing Locally-Led Climate Action Program
FRL	Forest Reference Level
GDP	Gross Domestic Product
GED	Global Electrification Database
GEF	Global Environment Facility
GESIP	Green Economy Strategy and Implementation Plan
GFW	Global Forest Watch
GHG	Greenhouse Gas
GoK	Government of Kenya
ICMA	International Capital Markets Association
IEA	International Energy Agency
IMPRESS	Improving Measurements for Payments to Reduce Emissions and Strengthen Sinks
IRENA	International Renewable Energy Agency
IUCN	International Union for Conservation of Nature
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KES	Kenyan Shilling
KESHP	Kenya Environmental Sanitation and Hygiene Policy
KEWASIP	Kenya Watershed Services Improvement Project
OPEC	Organization of the Petroleum Exporting Countries
PDMO	Public Debt Management Office
RCMRD	Regional Centre for Mapping of Resources for Development
REACH	Relative Evaluation and BenCHmarking
REDD+	Reducing Emissions from Deforestation and Forest Degradation '+' additional forest-related activities
REER	Real Effective Exchange Rate
REREC	Rural Electrification and Renewable Energy Corporation
SDG	Sustainable Development Goal
SEDLAC	Socio-Economic Database for Latin America and the Caribbean
SEforALL	Sustainable Energy for All
SHS	Solar Home Systems
SIDA	Swedish International Development Cooperation Agency
SLB	Sustainability-Linked Bond
SLBP	Sustainability-Linked Bond Principles
SLEEK	System for Land-based Emissions Estimation in Kenya
SLF	Sustainability-Linked Financing
SLFI	Sustainability-Linked Financial Instrument
SLL	Sustainability-Linked Loan

KFS	Kenya Forest Service
KfW	KfW Development Bank
KNBS	Kenya National Bureau of Statistics
KNES	Kenya National Electrification Strategy
KOSAP	Kenya Off-Grid Solar Access Project
KPI	Key Performance Indicator
KPLC	Kenya Power and Lighting Company
KRA	Key Results Areas
KSA	Kenya Space Agency
KWS	Kenya Wildlife Services
LMA	Loan Market Association
LMCP	Last Mile Connectivity Project
SLLP	Sustainability-Linked Loan Principles
SPO	Second Party Opinion
SPT	Sustainability Performance Target
TA	Technical Assistance
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSD	United Nations Statistics Division
WHO	World Health Organization

Table of Contents

List of Tables

List of Figures

Executive Summary

The Government of Kenya (GoK) has developed its inaugural Sustainability-Linked Financing Framework (SLF Framework) to mobilize financing aligned with national sustainable development priorities. The Framework ties the terms of debt instruments to Kenya's performance on key environmental and social targets, reinforcing measurable results.

Under this Framework, the GoK will be able to issue Sustainability-Linked Financing Instruments (SLFIs)—including both bonds and loans—whose financial characteristics will be explicitly tied to the achievement of defined sustainability objectives. Initially, the Framework focuses on two Key Performance Indicators (KPIs), each associated with two Sustainability Performance Targets (SPTs) (See **Chapters 4** and **5**).

KPI	Reference Year & Baseline	SPTs	Relevance
KPI 1: Accumulated Natural Forest Loss in Hectares (ha)	**2024** | **3.48 million** hectares forest stock	SPT 1.1: Limit accumulated natural forest cover loss to less than **44,000** hectares by **2030**, using **2024** as the baseline. (**Commitment**) SPT 1.2: Limit accumulated natural forest cover loss to less than **38,000** hectares by **2030**, using **2024** as the baseline. (**Overperformance**)	Alignment with Kenya's NDC's mitigation goal and zero deforestation targets. SDG Alignment:
KPI 2: Percentage of Rural Population with Access to Electricity (%)	**2023** | **67.9%** of rural population with access to electricity	SPT 2.1: Increase access to electricity for the rural population to **81.8%** by 2030, compared to the **67.9%** baseline in 2023. (**Commitment**) SPT 2.2: Increase access to electricity for the rural population to **above 94.4%** by 2030, compared to the **67.9%** baseline in 2023. (**Overperformance**)	Alignment with Kenya's Vision 2030 universal access goals, and the Kenya National Electrification Strategy (KNES). SDG Alignment:

Figure 1. Kenya's Sustainability Commitments: KPIs and SPTs

This forward-looking Framework reflects Kenya's recognition of the severe impacts of climate change on its people, ecosystems, and economy, and of the urgent need to accelerate progress toward a sustainable and inclusive development. As presented in **Chapter 2**, it is fully aligned with Kenya's existing national and international sustainable commitments, including the country's Nationally Determined Contribution (NDC), Kenya Vision 2030, and the National Climate Change Action Plan (NCCAP) 2023–2027, among others. The Framework also aligns with international best practices and key principles, including the International Capital Market Association's (ICMA) Sustainability-Linked

Bond Principles (SLBPs) and the Sustainability-Linked Loan Principles (SLLPs) developed by APLMA, LSTA, and LMA (see **Chapter 3**).

A defining feature of the SLF Framework is its symmetric dual-trigger mechanism, under which the interest rate of each SLFI will adjust based on Kenya's performance against the SPTs (see **Chapter 6**):

- If Kenya fails to meet the targets, a step-up mechanism increases the coupon.
- If Kenya outperforms the targets, a step-down mechanism reduces the coupon.

This financial structure not only strengthens Kenya's credit profile but also reinforces the Government's institutionalization efforts and capabilities to incentivize strong performance on the sustainability targets. The implementation of the Framework will be coordinated across several national agencies, with support from international development partners, as shown in **Figure 2**.

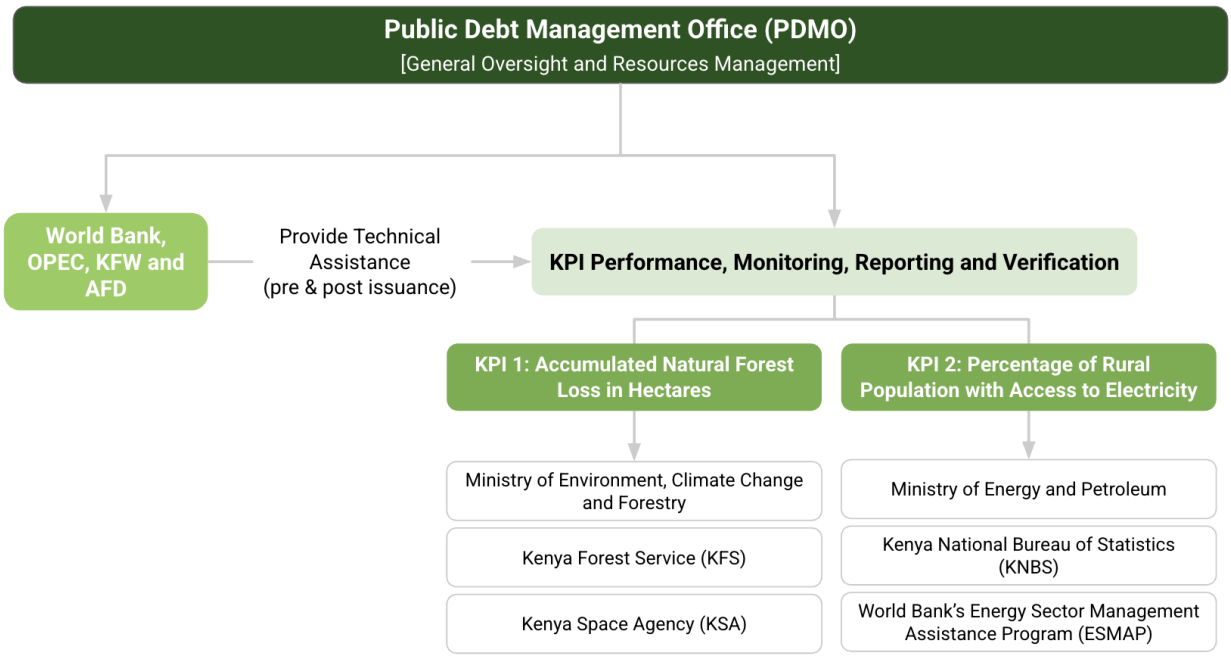


Figure 2. Institutional Architecture of Kenya's SLF Framework

Lastly, this SLF Framework reinforces the Government's commitment to transparency and accountability, as it includes a robust Monitoring, Reporting and Verification (MRV) system for each KPI (See **Chapters 4** and **5**). Based on these MRV systems, the GoK will develop and publish annual reports showcasing its progress in achieving the established

SPTs. These annual reports will be accompanied with external verification reports (see **Chapters 7** and **8**).

This SLF Framework represents a landmark in Kenya's efforts to transition toward a sustainable, inclusive, and climate resilient economy. Through strong institutional coordination, measurable commitments, and transparent reporting, Kenya's SLF Framework positions Kenya within a growing group of African countries implementing innovative sovereign finance.

1. Objectives of this Sustainability-Linked Financing Framework

The Government of Kenya (GoK) has developed this Sustainability-Linked Financing Framework (SLF Framework) as a strategic tool to align its financial mobilization with sustainable development goals. As a country highly vulnerable to climate change, yet rich in natural resources and human capital, Kenya recognizes the need for financing mechanisms that promote environmental resilience, social progress, and economic stability. This SLF Framework integrates sustainability performance into the Government's financial strategy. Therefore, this framework will enhance Kenya's ability to attract investment while reinforcing its commitment to long-term and measurable sustainable development.

Unlike traditional green, social, or sustainability bonds and loans, which restrict the use of proceeds to specific projects, sustainability-linked instruments provide Kenya with greater flexibility, while ensuring accountability through robust Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs). This flexibility is particularly critical for an Emerging Market and Developing Economy (EMDE) like Kenya, where diverse and evolving development needs require adaptable financing solutions. By tying Kenya's financing costs to its performance on relevant and material KPIs, this framework reinforces the government's commitment to measurable environmental, and socioeconomic progress.

Kenya's SLF Framework follows international best practices and key guiding principles such as the International Capital Market Association's (ICMA) Sustainability-Linked Bond Principles (SLBPs)[1]; as well as the Asia Pacific Loan Market Association (APLMA), the Loan Syndications and Trading Association (LSTA), and the Loan Market Association's (LMA) Sustainability-Linked Loan Principles (SLLPs).[2] It also builds upon the country's existing sustainable finance efforts, and aligns with Kenya's National Climate Change Action Plan (NCCAP) 2023-2027[3], its Nationally Determined Contributions (NDCs)[4],

[1] ICMA (2024). *Sustainability-Linked Bond Principles.* Available online.

[2] LSTA, APLMA, LMA (2025). *Sustainability Linked Loan Principles (SLLP).* Available online.

[3] Ministry of Environment, Climate Change and Forestry (2023*). National Climate Change Action Plan 2023-2027.* Available online.

[4] Ministry of Environment, Climate Change and Forestry (2025). *Kenya's Second Nationally Determined Contribution (2031–2035)*. Available online.

Kenya's National Adaptation Plan (NAP)[5], Kenya Vision 2030[6], and the Fourth Medium Term Plan 2023-2027 (MTP IV)[7], reinforcing the government's long-term sustainability commitments.

This SLF Framework serves as the foundation for all future Sustainability-Linked Financing Instruments (SLFIs) that the GoK may issue, including both bonds and loans. In its initial edition, the SLF Framework outlines Kenya's sustainable strategic priorities and establishes goals for two KPIs: limit accumulated natural forest loss in hectares with respect to a baseline year (KPI 1); and increase the percentage of rural population with access to electricity with respect to a reference year (KPI 2). Over time, the SLF Framework may be updated to incorporate additional KPIs and SPTs to align with evolving sustainability priorities and best market practices.

Additionally, the SLF Framework establishes a financial mechanism based on a symmetric dual-trigger approach, where the interest rate (coupon) of each transaction under the Framework adjusts according to Kenya's performance against predefined SPTs. Under the base case, if Kenya fails to meet the SPTs, the coupon increases (step-up mechanism); if Kenya surpasses its targets, the coupon decreases (step-down mechanism); and if Kenya meets its targets without exceeding the overperformance thresholds, the coupon remains unchanged. The use of a dual structure is aligned with market practices observed in SLFIs issued by other sovereign countries[8,9], and it provides clear, balanced incentives for the GoK, investors and lenders. Furthermore, the dual structure can strengthen Kenya's credit profile while incentivizing strong performance on sustainability targets.

By setting clear targets for each KPI and linking them to financial incentives through a dual-trigger mechanism, the SLF Framework enhances Kenya's ability to attract investment while driving sustainable development. This performance-based structure ensures that progress toward these goals directly impacts borrowing terms, reinforcing accountability and long-term resilience. By embedding sustainability targets into otherwise traditional debt financing instruments (bonds and loans), and tying the

[5] Ministry of Environment and Natural Resources (2016). *Kenya National Adaptation Plan 2015-2030.* Available online.

[6] Kenya Vision 2030 (n.d.). *About Vision 2030.* Available online.

[7] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth"*. Available online.

[8] República de Uruguay (2022). *Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework. For Sustainability-Linked Bonds Focused On Climate And Nature-Based Targets*. Available online.

[9] Public Debt Management Office of the Kingdom of Thailand (2023). *Kingdom of Thailand Sustainability-Linked Financing Framework.* Available online.

country's financing cost to its performance on such targets, Kenya is positioning itself as a leader in sustainable finance in East Africa.

Finally, Kenya's SLF Framework is anchored in a strong commitment to transparency, accountability, and robust Monitoring, Reporting and Verification (MRV) systems. To uphold this commitment, Kenya will publish annual progress reports detailing the advancement towards the SPTs, engage independent third-party verifiers to assess performance against the targets, and ensure alignment with international best practices in sustainability reporting. By prioritizing transparency, Kenya reinforces the credibility of its SLF Framework, ensuring that stakeholders—including investors, development partners, and the public—can track the country's progress toward its commitments.

2. Kenya's Blueprint for Sustainable Development

Kenya is highly vulnerable to the impacts of climate change due to a combination of political, geographic, and social factors. Increasing vulnerability poses significant risks to the country's social, economic, and environmental systems. Droughts, floods, and extreme weather events threaten key sectors, including water resources, agriculture, health, forestry, and coastal zones. Urban and rural infrastructure, particularly in vulnerable communities, faces heightened risks from heavy rainfall, soil erosion, and sea level rise. Environmental degradation, biodiversity loss, and water scarcity present major challenges, particularly for the tourism sector, which is a relevant source of income for the country. Additionally, rising temperatures and shifting precipitation patterns are expected to have far-reaching consequences for ecosystems, food security, and water management.[10,11]

Climate change impacts on Kenya's environment, ecosystems and society, imply major repercussions on the country's economic resilience and sustainable economic growth. Extreme events such as droughts and floods present severe effects on the Kenyan economy: the droughts of 2023 represented losses of over USD 650 million, and the floods in 2024 caused direct losses of over USD 1.46 billion.[12] In addition, these extreme events also represent social issues: as a result of the 2018 floods, around 230,000 people were displaced, and 700 schools and 8,500 hectares of crops were destroyed.[13]

Kenya has made significant accomplishments in economic growth and development over the last decades, including attainment of lower middle-income status in 2014.[14] In addition, approximately 90% of Kenya's national electricity grid supply now comes from renewable energy sources.[15] Kenya boasts the largest economy in East Africa, driven by public investment, smallholder agriculture, and private industrial investment. As a regional transport and financial hub, the country has maintained strong Gross Domestic Product (GDP) growth, supported by infrastructure projects, investment, and sound

[10] The World Bank Group (2021). *Climate Risk Profile: Kenya (2021).* Available online.

[11] IPCC (2023). *Sixth Assessment Report. Chapter 9. Africa.* Available online.

[12] Ministry of Environment, Climate Change and Forestry (2025). *Kenya's Second Nationally Determined Contribution (2031–2035).* Available online.

[13] Ministry of Environment, Climate Change and Forestry (2025). Kenya's Second Nationally Determined Contribution (2031–2035). Available online.

[14] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.

[15] Ministry of Environment, Climate Change and Forestry (2025). *Kenya's Second Nationally Determined Contribution (2031–2035).* Available online.

economic policies.[16] In 2023, Kenya's GDP expanded to 5.6%, up from 4.9% in 2022.[17] Despite this positive trajectory, Kenya continues to face structural and socio-economic challenges, including relatively low national savings and private investment levels, as well as persistent income inequality and poverty[18]. Nevertheless, ongoing reforms and investments create strong opportunities for sustainable and inclusive growth.

In recognition of the environmental and socio-economic challenges the country faces, the GoK has put into place considerable efforts to fight against climate change and achieve equitable and sustainable development. Kenya ratified the Paris Agreement in 2016 and submitted its second NDC for 2031-2035 in 2025, committing to reduce Greenhouse Gas (GHG) emissions by 35% by 2035 relative to a Business-as-Usual (BAU) scenario of 215 MtCO2eq in 2035. Kenya will finance 20% of this mitigation target domestically, with the remaining 80% conditional on international support.[19] As stated in its second NDC, the GoK tends to achieve this goal by implementing mitigation initiatives, such as promoting low carbon, climate resilient and efficient transportation systems, reducing deforestation and forest degradation by rehabilitating and protecting natural forests, and enhancing the implementation of sustainable waste management systems.[20]

Kenya has developed and implemented a policy and legal framework that underpins the government's climate action and sustainable development efforts, and guarantees a higher quality of life to its citizens. The country's long-term vision for socio-economic development is articulated in Kenya Vision 2030, launched in 2008 as a roadmap to transform Kenya into "a globally competitive and prosperous country with a high quality of life by 2030". It plans to transform Kenya into "a newly-industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment".[21] Vision 2030 is based on three pillars: economic, social, and political, each with specific objectives. For example, the objective of the economic pillar is to improve

[16] The National Treasury (2021). *The Kenyan Economy.* Available online.

[17] The World Bank Group (2024). *Kenya's Economy Exhibited Robust Growth in 2023 Despite Persistent Challenges.* Available online.

[18] A*t the household level in 2022, about 3 in 10 households in Kenya were poor, with a poverty gap of 8 per cent. Household poverty was higher in rural areas compared to urban areas with rates of 38 and 26 per cent, respectively, across all age groups.* Kenya National Bureau of Statistics (2022). *The Kenya Poverty Report.* Available online.

[19] Ministry of Environment, Climate Change and Forestry (2025). *Kenya's Second Nationally Determined Contribution (2031–2035).* Available online.

[20] Ministry of Environment, Climate Change and Forestry (20250). *Kenya's Second Nationally Determined Contribution (2031–2035) Kenya's Updated Nationally Determined Contribution (NDC).* Available online.

[21] The National Treasury and Economic Planning (n.d.). *Kenya Vision 2030.* Available online.

the prosperity of all regions of Kenya by maintaining a sustained GDP growth rate of at least 10% from 2012 to 2030.[22]

The Vision is implemented through five-year Medium-Term Plans (MTPs). The Fourth MTP (2023 - 2027), currently in progress, outlines key policies, legal and institutional reforms, as well as priority programs and projects for government implementation during this period. This MTP is also aligned to the Government's Bottom-Up Economic Transformation Agenda (BETA) planning approach, developed in 2022. The BETA aims to drive economic and inclusive growth by reducing the cost of living, eradicating hunger, creating jobs, expanding the tax base, improving foreign exchange balances, and fostering inclusive growth. These goals are pursued through strategic investments in five core pillars: agriculture, micro, small and medium enterprises (MSMEs), housing and settlement, healthcare, and digital and creative economy.[23] MTP IV translates these priorities into concrete policy actions aligned with the Sustainable Development Goals (SDGs) of the United Nations (UN) 2030 Agenda for Sustainable Development.[24] In addition, the Green Economy Strategy and Implementation Plan (2016 – 2030) supports the implementation of Kenya's Vision 2030 and the achievement of sustainable development across five areas: sustainable infrastructure, building resilience, sustainable natural resources management, resource efficiency, and social inclusion and sustainable livelihood.[25]

Furthermore, as part of the Government's acknowledgement of the impacts of climate change on socioeconomic growth, the Climate Change Act (enacted in 2016 and amended in 2023) provides the regulatory framework for Kenya's enhanced response to climate change. This act provides mechanisms and measures to strengthen climate change resilience and low-carbon development, and calls for the creation of National Climate Change Action Plans (NCCAPs). These plans prescribe measures and mechanisms for climate change adaptation and mitigation, and guide the country toward the achievement of low carbon climate resilient sustainable development.[26] Kenya's latest NCCAP (2023-2027) builds on the previous plans and outlines the country's strategy to address climate challenges, focusing on climate finance, community

[22] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.
[23] The World Bank Group (2023). *Kenya Country Climate and Development Report (CCDR)*. Available online.
[24] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.
[25] Government of Kenya (2016). Green Economy Strategy and Implementation Plan 2016 – 2030. Available online.
[26] The Republic of Kenya (2023). The Climate Change Act. Available online.

involvement, and stronger institutions. It aligns with the Government's overall development agenda, and sets out eight priority areas, including scaling renewable energy, improving disaster risk management, and contributing to the restoration, preservation, and sustainable management of forests and ecosystems.[27] Another policy framework to highlight in Kenya's fight against climate change is the NAP 2015 - 2030, which outlines the country's climate trends, vulnerabilities, and institutional frameworks for monitoring and evaluation. It is also the basis for the adaptation component of Kenya's NDC, and its objectives include highlighting the importance of adaptation and resilience building actions, enhancing resilience of vulnerable populations to climate change, integrating climate change adaptation into national and county level, among others.[28]

Other existing policies that support Kenya's sustainable development national commitments, and the achievement of its NDC's mitigation and adaptation goals, include the Kenya Environmental Sanitation and Hygiene Policy (KESHP) 2016 – 2030, which aligns with other national policies and regulations such as the Constitution of Kenya 2010 and the Kenya Vision 2030. The KESHP promotes hygiene and environmental sanitation activities across urban and rural areas, including the provision of sanitation services, and the promotion of hygiene practices.[29] Moreover, as part of Kenya's conservation efforts, the National Landscape and Ecosystem Restoration Strategy 2023-2032 aims to enhance and strengthen national efforts for the restoration of the seven degraded landscapes ecosystems.[30]

At the regional level, the GoK also holds sustainable development and climate action commitments. The 2023 Africa Climate Summit, held in Nairobi and co-hosted by the GoK and the African Union, focused on sustainable climate solutions and economic growth.[31] Key commitments among leaders, organizations and investors, included protecting biodiversity, increasing renewable energy financing to 20% by 2030, and supporting

[27] Ministry of Environment, Climate Change and Forestry (2023). *National Climate Change Action Plan 2023-2027*. Available online.
[28] Ministry of Environment and Natural Resources (2016). *Kenya National Adaptation Plan 2015-2030*. Available online.
[29] Ministry of Health (2016). *Kenya Environmental Sanitation and Hygiene Policy 2016 – 2030*. Available online.
[30] Ministry of Environment, Climate Change and Forestry (2023). National Landscape and Ecosystem Restoration Strategy 2023-2032. Available online.
[31] Ministry of Environment, Climate Change and Forestry (2023). Africa Climate Summit Commitments. Available online.

smallholder farmers and local communities in the green transition.[32] Amidst these commitments and declarations, Kenya launched the "Financing Locally-Led Climate Action Program (FLLoCA)," a USD 297.0 million investment aimed at financing local climate action projects in agriculture, water, and natural resource management, co-financed by KfW with EUR 31 million, with an additional EUR 16 million committed, along with the World Bank, the Danish International Development Agency (DANIDA), and the Swedish International Development Cooperation Agency (SIDA).[33,34]

Kenya's comprehensive climate and sustainable development framework reflects a strong national commitment to building a low-carbon, climate-resilient, and inclusive economy. The country has laid a solid institutional and policy foundation, aligned with global, regional, and national priorities and commitments, to drive transformative change across key sectors. Building on this progress, Kenya is now taking a strategic step forward by pursuing innovative financing instruments such as Sustainability-Linked Bonds (SLBs) and Sustainability-Linked Loans (SLLs). These instruments will allow the country to mobilize capital in alignment with its sustainability goals, strengthen accountability through measurable targets, and channel resources toward impactful climate and development initiatives.

[32] African Union (2023). The African Leaders Nairobi Declaration On Climate Change And Call To Action. Available online.
[33] Ministry of Environment, Climate Change and Forestry (2023). Africa Climate Summit Commitments. Available online.
[34] The National Treasury and Economic Planning (2023). Financing Locally –Led Climate Action (FLLOCA) Program. Terms of Reference for Adaptation and Resilience Building Specialist. Available online.

3. How this Framework was Developed

The GoK, through the Public Debt Management Office (PDMO) in the National Treasury (NT), collaborated with international donors—including KfW, the World Bank, the Organization of the Petroleum Exporting Countries (OPEC), and the Agence Française de Développement (AFD)—as well as specialized consulting firms to develop a robust and transparent SLF Framework. This framework is designed to facilitate Kenya's issuance of SLBs and SLLs while ensuring alignment with international best practices.

To ensure effective coordination across government institutions, the NT established two task forces dedicated to supporting the structuring of the SLF Framework and its future implementation: (1) the SLFI Design and Implementation Task Force[35] and (2) the SLFI Issuance Task Force[36]. These task forces provide a collaborative and structured approach to sustainability-linked financing by facilitating the development and approval of KPIs and SPTs, guiding the structuring and execution of transactions, and overseeing sustainability commitments throughout the financing lifecycle. They convene regularly to track progress and ensure alignment with Kenya's broader sustainability strategy. While the PDMO has led the framework's development, the process relied on active participation from line ministries, which hold full ownership of the KPIs and SPTs, reinforcing institutional commitment and accountability.

The framework's development process was implemented in five key stages:

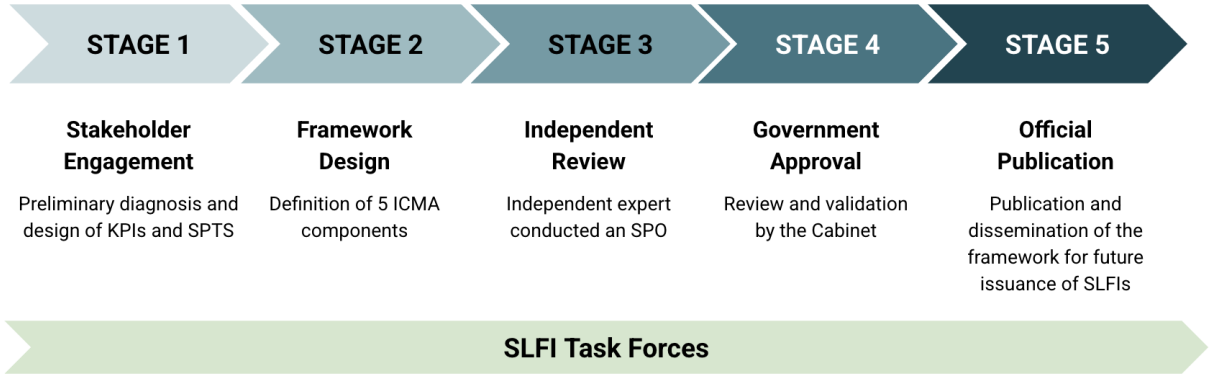


Figure 3. Framework Development Process

[35] Composed of representatives from the NT's PDMO, its Green Economy & Climate Finance Unit, its Legal Unit, Central Bank of Kenya, the State Department of Forestry, Ministry of Energy and Petroleum, Kenya Space Agency (KSA), Ministry of Public Service and Human Capital Development, and the Attorney General's Office.

[36] Includes members from the NT, its Legal Unit, and the Central Bank of Kenya.

Stage 1 - Stakeholder Engagement: The PDMO in the NT led the stakeholder engagement process, ensuring full government ownership of the initiative. International donors and technical partners provided support in specific technical tasks such as the preliminary diagnostic assessment, and the design of methodologies to define KPIs and SPTs.

Stage 2 - Framework Design: Once the KPIs and SPTs were defined and calibrated, the GoK, in collaboration with sustainable finance experts, developed the remaining components necessary to align the SLF Framework with best market practices and the five core components defined in the SLBPs and the SLLPs: (i) selection of KPIs, (ii) calibration of SPTs, (iii) bond characteristics, (iv) reporting, and (v) verification.

Stage 3 - Independent Review: Upon completion of all components, an independent expert conducted a Second Party Opinion (SPO) review to validate the framework's credibility and compliance with international principles and standards (see Chapter 8).

Stage 4 - Government Approval: The Government of Kenya's Cabinet formally approved the framework under Resolution CAB/GEN.3/1/1 Vol. XXV /(70) dated 14th May 2026.

Stage 5 - Official Publication: The framework was officially published, making it ready for implementation.

KfW and the World Bank have played an instrumental role in supporting policy reforms and regulatory initiatives aimed at expanding climate finance in Kenya. KfW engaged a specialized consulting firm to support Kenya's PDMO and other stakeholders in the development of the framework and guiding the SPO review, while the World Bank played a key role in determining relevant and material KPIs and ambitious SPTs.

The KPIs in this framework were constructed using the Relative Evaluation and BenCHmarking (REACH) approach, and the SPTs were defined using the Feasibility and AmBitiousness (FAB) framework, both developed by the World Bank.[37] These methodologies emphasize benchmarking, statistical rigor, and additionality. While the SLBPs and the SLLPs suggest benchmarks as external references, REACH imposes stricter requirements, ensuring transparency, statistical rigor, and justification for additionality to quantify impact effectively. FAB aligns with the principles by emphasizing the use of historical precedents and BAU scenarios to set ambitious yet achievable

[37] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank.* Available online.

targets, consistent with the principles' criteria of benchmarking against issuers' peers, time trends, or science-based scenarios. For more details see **Annex 1**.

Through this structured approach, the Gok ensures that the five core components of the SLBPs and SLLPs are effectively implemented, and the framework is aligned with best practices. Each of these components is further detailed in the following chapters.

1. Selection of KPIs (Chapters 4 and 5);
2. Calibration of SPTs /Chapters 4 and 5);
3. Bond/Loan Characteristics (Chapter 6);
4. Reporting (Chapter 7);
5. Verification (Chapter 8).

As part of Kenya's commitment to sustainable finance, this SLF Framework may be revised or updated periodically to remain aligned with evolving market practices, regulatory developments, and national sustainability priorities. Any substantial modifications will be subject to prior approval by the PDMO, and newly updated versions will be published on the NT website along with an updated SPO to ensure continued credibility and transparency. However, updates will not retroactively apply to previously issued SLFIs unless explicitly stated.

4. KPI 1: Accumulated Natural Forest Loss in Hectares (ha)

The first KPI is defined as the **accumulated natural forest loss in hectares (ha)** with respect to the reference year, controlling for exogenous predictors. The following sections provide detailed information on the relevance and materiality of KPI 1, its definition, the SPTs associated with this indicator, and the implementation measures the government is taking and will take to achieve the targets.

4.1 Rationale Behind KPI 1

Kenya's forests play a crucial role in mitigating climate change, preserving water sources, conserving biodiversity, and maintaining soil quality. They serve as habitats for more than 35,000 wildlife species and safeguard vital water catchment areas, which are essential for the well-being of both the environment and human communities.[38] Furthermore, forests and forest products make an important contribution to Kenya's economy, with the forest industry (formal and informal) directly employing an estimated 750,000 Kenyans and indirectly benefitting at least 4 million more.

Kenya's natural forests are predominantly in decline, with significant tree cover loss driven by human activities and climate-related changes. Over the past decades, dryland forests alone shrank by over 220,000 hectares primarily due to deforestation, while mangrove and coastal forests also suffered severe hectare reductions.[39] Agricultural expansion, urbanization, and poverty are key drivers of forest depletion. For example, wood is widely used for energy, forested areas are also cleared for agriculture, and there is a growing illegal trade in forest products. These activities also heighten the risk of fires in forested regions.[40]

Deforestation has also caused declining soil fertility, significant losses in water resources, and carbon storage[41], which are directly related to biodiversity loss. Biodiversity, primarily found in the country's forests and nature reserves, has also been affected by deforestation, which threatens ecosystems through their transformation and destruction, endangering the wildlife species that inhabit them.[42]

---

[38] Ministry of Environment and Forestry (2020). *The National Forest Reference Level for REDD+*. Available online.

[39] Kenya Forest Service (2025). *Historical Data On Natural Forests*. Not available online.

[40] World Bank Group (2019). *Kenya Country Environmental Analysis*. Available online.

[41] Global Forest Watch. *Kenya*. Available online.

[42] Kenya Forest Service (2023). *Kenya Forest Service Strategic Plan 2023 - 2027*. Available online.

The classification of the country's forests is based on seven strata corresponding to Kenya's broad ecological zones:

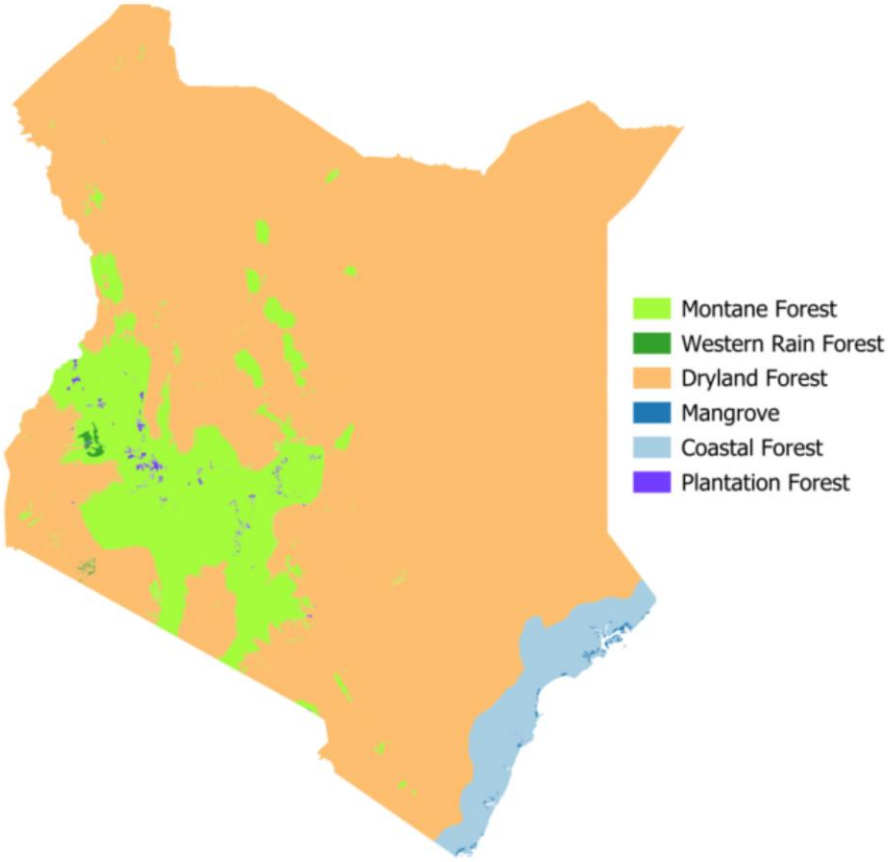


Figure 4. Forest Strata Classes Map[43]

1. **Montane Forests** are located above 1,500 meters and referred to as "water towers" due to their crucial role in supporting water catchments and providing economic benefits. Key forests include Mau Forest, Mount Kenya, the Aberdares, Mount Elgon, and Cherangany. Vegetation varies with climate and altitude. Highland bamboo dominates at higher elevations.
2. **Western Rain Forests** have Guineo-Congolean forest characteristics. They include Kakamega forest, the North and South Nandi Forest and Nyakweri forest. Compared to other forests in Kenya, the trees in this area are considerably larger and taller.

[43] Prepared by the World Bank based on data provided by the Kenya Forest Service.

3. **Coastal Forests** lie within 30 km of the shoreline and include Arabuko-Sokoke, Shimba Hills, and Tana River forests. They are rich in biodiversity and host species like Combretum, Afzelia, and Brachystegia. These forests span both public and private lands and are key ecological zones.
4. **Mangrove Forests** consist of salt-tolerant trees and shrubs adapted to saline, tidal environments. They follow a distinct zonation pattern influenced by salinity and water currents. These ecosystems play a vital ecological role along the coast.
5. **Dryland Forests** are found in arid and semi-arid regions, dominated by Acacia-Commiphora and other drought-tolerant species. They include riverine forests and have unique characteristics like deep root systems. These forests pose challenges for mapping and feature high wood density due to harsh conditions.
6. **Public Plantation Forests** are even-aged monocultures managed by the Kenya Forest Service (KFS) for commercial use. They have clearly defined boundaries and are distinct from natural forests.
7. **Private Plantation Forests** are commercially grown tree plantations located outside gazetted forest areas. They exist across all forest strata and are established for economic purposes.[44]

Both Public and Private Plantation Forests have clearly defined boundaries marked by compartments and sub-compartments, making them distinguishable from natural forests. The trees are primarily grown for commercial use and undergo various silvicultural practices. To define KPI 1 in this SLF Framework, **public and private plantation forests** have been **excluded** from the definition of natural forests.

The forestry sector plays a vital role in achieving Kenya's sustainability objectives as it offers opportunities to address environmental challenges, enhancing water resources, carbon sequestration and supporting biodiversity and livelihoods across the country. By prioritizing the protection of existing forests, the government can create a resilient and sustainable future while also generating economic benefits through job creation and income opportunities for rural communities. Additionally, conservation efforts can help preserve the cultural and spiritual significance of forests for many communities in Kenya. Honoring these traditions will encourage greater community participation in sustainable forestry practices.[45]

[44] Ministry of Environment, Climate Change and Forestry (2024). Kenya's Third National Greenhouse Gas Inventory Document. Available online.
[45] The National Treasury of Kenya (2024). *State Department for Forestry*. Not available online.

The GoK recognizes the significance of this KPI, as it addresses a critical environmental and social challenge for the country. Reducing the cumulative loss of natural forests is both relevant and material to Kenya, as it helps mitigate climate change, protect vital water resources, and reinforce the country's commitment to biodiversity conservation and wildlife protection.

Avoiding deforestation as a global target

Forests are one of the ecosystems with the highest biodiversity. Natural forests are particularly valuable for biodiversity and carbon storage, playing a crucial role in mitigating climate change. Therefore, zero deforestation by 2030 is a global target agreed to by 145 countries - including Kenya - at the COP26 climate summit in 2021.[46] SDG 15, "Life on Land" focuses on protecting, restoring, and promoting the sustainable use of terrestrial ecosystems, managing forests responsibly, combating desertification, reversing land degradation, and halting biodiversity loss.[47] While the UN acknowledges some progress in areas such as sustainable forest management, the expansion of protected areas, and the incorporation of biodiversity values into national frameworks, these advancements have largely been limited.[48] To accelerate progress, the Kunming-Montreal Global Biodiversity Framework adopted by the Convention on Biological Diversity - to which Kenya is a party - offered renewed direction for SDG 15, presenting four outcome-driven goals to be achieved by 2050 and 23 specific targets set for 2030, including sustainable management of forests.[49]

The importance of forests for the economy of Kenya

In addition to playing a crucial role in climate regulation, carbon absorption, and providing habitats for diverse species, Kenya's natural forests are also vital to the country's economy, as they support various sectors. Estimates suggest that the forestry sector contributes between 3-3.6% to Kenya's GDP, but this figure excludes the broader economic impact of household energy, non-timber forest products (NTFPs), and other forest related services.[50] For example, the charcoal industry, valued at over KSh 32 billion (equivalent to USD $247 million), provides livelihoods for nearly 2 million people. Additionally, NTFPs, including bamboo and grass, significantly supplement household

[46] UKCOP26.ORG (2021). *Glasgow Leaders' Declaration on Forests and Land Use.* Available online.
[47] United Nations (2025). *Forests.* Available online.
[48] United Nations Statistics Division (2023). *Life on Land.* Available online.
[49] Conference of the Parties to the Convention on Biological Diversity (2022). *Kunming-Montreal Global Biodiversity Framework*. Available online.
[50] World Bank Group (2019). *Kenya Country Environmental Analysis*. Available online.

incomes and expenditures in Kenya.[51,52]

Kenya's five montane "water towers" supply 75% of the country's freshwater, which are essential for replenishing rivers that supply water for domestic use, agriculture, food security, energy production, and the manufacturing industry.[53] Droughts in the country have had severe socioeconomic impacts and significant economic costs appearing to be increasing in frequency due to climate change, especially in highly arid regions, which include some of the poorest counties.[54] Forests also drive tourism, particularly ecotourism, which balances conservation with economic benefits. Protecting these ecosystems is crucial for Kenya's long-term economic growth and stability.[55]

GHG emissions

Deforestation and forest degradation in Kenya contribute significantly to GHG emissions, mainly due to agricultural expansion linked to rural poverty, population growth, unsustainable forest resource use (including timber harvesting, charcoal production, and grazing in forests), and past governance and institutional failures in the forest sector.[56]

Since 2010, Kenya's Agriculture, Forestry, and Other Land Use (AFOLU) sectors have been the main sources of GHG emissions, driven by agricultural expansion, deforestation, fertilizer use, and livestock growth. The Land Use, Land-use Change, and Forestry (LULUCF) sector, has become a net emitter, partly due to deforestation and forest degradation, with emissions reaching 46,846.3 GgCO2eq in 2022—41% of national emissions—growing at an annual rate of 20%[57], and with deforestation emitting an average of 48 million tonnes of CO_2 annually between 2002 and 2018.[58] Despite reforestation efforts, forest loss has outpaced recovery due to deforestation, land degradation, and unsustainable livestock practices.[59] Climate change further exacerbates deforestation's impacts, threatening biodiversity, water sources, and

[51] Ministry of Environment, Climate Change and Forestry. *The National Forest Policy.* Not available online.
[52] World Bank Group (2019). *Kenya Country Environmental Analysis*. Available online.
[53] UNEP. *Interactive Country Fiches - Kenya*. Available online.
[54] World Bank Group (2023). K*enya Country Climate and Development Report*. Available online.
[55] Ministry of Tourism, Wildlife & Heritage. *Annual Tourism Sector Performance Report*. Available online.
[56] Ministry of Environment, Climate Change and Forestry (2023). *National Climate Change Action Plan (NCCAP) 2023-2027.* Available online.
[57] UNFCCC (2024). *Kenya's First Biennial Transparency Report (BTR).* Available online.
[58] Ministry of Environment, Climate Change and Forestry (2020). *The National Forest Reference Level for REDD+*. Implementation. Available online.
[59] Ministry of Environment, Climate Change and forestry. (2022). *Kenya's Third National Green House Gas Inventory Document.* Available online.

ecosystem services. Addressing these challenges is crucial for reducing emissions and achieving Kenya's 32% GHG reduction target by 2030.[60]

Through recent government efforts, Kenya's forest cover increased from 5.9% in 2018 to 8.83% in 2021[61], with projections showing that reducing deforestation and promoting afforestation could transform forests into a carbon sink, potentially removing up to 41 MtCO2e annually by 2050.[62] To meet climate goals, Kenya aims to restore degraded landscapes, increase forest cover to 10% by 2030, and raise tree cover from 12.13% to 30% by 2032.[63]

To address these challenges, Kenya joined the Reducing Emissions from Deforestation and Forest Degradation Programme (REDD+), following the Cancun Agreements in 2010. As part of the requirements for participating in REDD+, Kenya developed a National REDD+ Strategy [64] and a REDD+ Investment Plan[65] in 2021. Kenya's National REDD+ Strategy includes considerations such as policies, laws, regulations and institutional framework to implement the REDD+ Programme. The Investment Plan provides the implementation framework for the National REDD+ Strategy, including the identification of climate financing readiness, and an implementation schedule with budget estimates.

Biodiversity

Kenya is one of the most biodiverse countries in the world, encompassing different types of forests that require protection. Globally, Kenya is classified in the second group of mega-biodiverse nations due to the richness, abundance, and biogeographical distribution of its flora.[66] The country is home to more than 7,000 plant species and over 35,000 animal species, including numerous endemic, rare, and threatened.[67] Additionally,

[60] UNFCCC (2024). *Kenya's Updated Nationally Determined Contribution (NDC)*. Available online.

[61] Kenya Forest Service (2021). *National Forest Resources Assessment Report 2021, Kenya*. Not available online.

[62] Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya*. Available online.

[63] Kenya Forest Service (2023). *Kenya Forest Service Strategic Plan 2023 - 2027.* Available online.

[64] Ministry of Environment and Forestry (2021). *The National REDD+ Strategy.* Available online.

[65] Ministry of Environment and Forestry (2021). *Investment Plan for the National REDD+ Strategy (2022-2026)*. Not available online.

[66] Ministry of Environment, Climate Change and Forestry (2020). *Sixth National Report to the Convention on Biological Diversity.* Available online.

[67] Ministry of Environment, Climate Change and Forestry (2023). *National Landscape and Ecosystem Restoration Strategy.* Available online.

Kenya has approximately 467 inland lake and wetland habitats, covering around 2.5% of the total land area.[68]

Its biodiversity is primarily found in forests, wildlife parks, and reserves. For example, the western rainforests are recognized as biodiversity hotspots, while the coastal forests serve as hubs for endemic species that are not found in any other ecosystems or regions globally.[69] This rich biodiversity results from various factors that have influenced the region, such as an extensive evolutionary history, fluctuating climatic conditions, and a diverse array of habitats and ecosystems.[70]

Kenya is particularly vulnerable to climate-related impacts such as droughts and floods, this is why protecting forests and reducing deforestation is a key priority for the country.[71] In addition, these natural forests provide essential ecological goods and services that contribute to Kenya's socio-economic development and significantly impact various sectors of the economy, including agriculture, tourism, energy, and manufacturing. Therefore, the conservation of Kenya's natural forests is crucial for preserving biodiversity, which enhances the nation's ecological wealth while supporting both societal well-being and economic sustainability.

The social dimension of forest conservation

Forest-dependent communities in Kenya, including indigenous peoples, rely on forest ecosystems for their livelihoods, cultural identity, and access to food and medicine.[72] However, the absence of alternative income sources continues to drive forest degradation in these regions. Promoting inclusive governance and establishing targeted support mechanisms is essential to ensure the full and effective participation of these communities in forest management.[73] Strengthening their involvement is key to fostering the sustainable use of natural resources while supporting vulnerable populations.

Moreover, deforestation and forest degradation disproportionately affect women, who face systemic barriers to accessing land, financial resources, and decision-making

[68] Ministry of Environment, Climate Change and Forestry (2020). *Sixth National Report to the Convention on Biological Diversity.* Available online.
[69] Ministry of Environment and Forestry (2021). *The National Forest Monitoring System*. Available online.
[70] Ministry of Environment, Climate Change and Forestry (2020). *Sixth National Report to the Convention on Biological Diversity.* Available online.
[71] World Bank Group (2023). *Kenya Country Climate and Development Report*. Available online.
[72] Ministry of Environment and Forestry (2021). *The National REDD+ Strategy.* Available online.
[73] Ministry of Environment and Forestry (2021). *The National REDD+ Strategy.* Available online.

processes related to forest use and agroforestry. Kenya has recognized gender inequality as a critical barrier to sustainable forest management and emphasized the need for inclusive strategies that empower women, youth, and marginalized groups.[74] Addressing deforestation through inclusive approaches can generate positive social and economic impacts, empower communities and promote more equitable access to resources and opportunities.

4.2 Definition of KPI 1

KPI 1 is defined as the **accumulated natural forest loss in hectares (ha)** with respect to the reference year, controlling for exogenous predictors.

Table 1. KPI 1: Accumulated Natural Forest Loss in Hectares (ha)

KPI 1	**Accumulated Natural Forest Loss in Hectares (ha)**
Definition	For the purpose of this KPI, **natural forests** are defined as land spanning more than 0.5 hectares with trees of at least 2 meters and a minimum canopy cover of 15%, excluding planted plantation forests on state, community and private land.[75] The definition comprehends: Montane Forests, Western Rain Forests, Coastal Forests, Mangrove Forests, and Dryland Forests. Public and private plantation forests are **excluded** from this definition.
Reference Year and Baseline	The year 2024 serves as the reference year for this KPI, with the baseline for natural forest loss set at zero. Based on Global Forest Watch (GFW) data, Kenya's tree cover stock in 2024 is estimated at 10.42 million hectares.[76,77] In comparison, the most recent figures from the KFS (2021), report 3 million hectares of forest cover excluding plantations. The Framework uses these values to inform the calibration and establishment of the 2030 targets. For the purpose of this Framework, the estimated forest stock baseline for 2024 is set at 3.48 million hectares.[78] Further details on data calibration can be found in **Annex 2.**

[74] Ministry of Environment and Forestry (2021). *Kenya National Agroforestry Strategy 2021-2030*. Available online.
[75] Kenya Forest Service (2023). *Kenya Forest Service Strategic Plan 2023-2027.* Available online.
[76] Global Forest Watch (2024). *Tree Cover Loss in Kenya.* Available online.
[77] According to GFW, Kenya had a total tree cover of 11.01 million in 2000 with accumulated losses of 577,685 hectares until 2024.
[78] Wang, de Smit et al., (2025, forthcoming). *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group

Calculation Methodology	The KPI is based on the **World Bank's REACH & FAB Framework.** The REACH Framework evaluates performance relative to a benchmark model to identify a KPI that reflects the issuer's direct influence. This method employs a statistical model that incorporates historical predictors of deforestation in Kenya to establish a benchmarked natural forest loss for that year. This benchmark accounts for external factors beyond the issuer's control that may impact deforestation. By comparing the actual deforestation to the benchmark, the model isolates the effect of government policy, indicating whether Kenya has avoided or exceeded expected forest loss. This provides a clearer measure of impact attributable to domestic actions. To establish the historical relationship between forest loss and variables related to environmental factors, macroeconomic dynamics and existing policies, the World Bank used a combination of the following data sources: (1) 2021 data from the KFS: The Improving Measurements for Payments to Reduce Emissions and Strengthen Sinks (IMPRESS) dataset, designed to provide a spatially referenced, probability-based, and geographically balanced sampling framework for estimating land use and forest cover change in Kenya under the REDD+ program.[79] (2) Tree cover loss data from the GFW Database, which tracks loss since 2000 based on canopy height (>5m) and area (>0.09 ha) across different canopy density thresholds.[80] See Annex 2 for details on the data calibration. Looking forward the following **formula** is used to calculate this KPI: **KPI 1 = Accumulated natural forest loss.** Observed natural forest loss will be monitored and quantified by the KFS using datasets from remote-sensing techniques. The results will be subject to independent verification. The SPTs are defined as a maximum allowable cumulative forest loss level that represent a significant reduction relative to the REACH natural forest loss benchmark for Kenya. The definition and calculation of this KPI enable benchmarking against regional and global averages using datasets comparable to those provided by the GFW and the Food and Agriculture Organization (FAO). Additionally, it allows for tracking trends over time, including past and future performance.
SDG Alignment	**SDG 13 Climate Action - Target 13.2:** "Integrate climate change measures into national policies, strategies and planning."

[79] Kenya Forest Service (2025). *Historical Data On Natural Forests.* Not available online.
[80] Global Forest Watch (2024). *Tree Cover Loss in Kenya.* Available online.

	SDG 15 Life on Land - Target 15.2: "Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally." **SDG 15 Life on Land - Target 15.b:** "Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation."

4.3 Monitoring, Reporting and Verification

A key feature of Kenya's National Forest Policy (2014, 2023) is the establishment of a National Forest Monitoring System (NFMS).[81,82] Kenya's NFMS plays a central role in supporting the country's participation in REDD+ under the United Nations Framework Convention on Climate Change (UNFCCC). Kenya began engaging in REDD+ in 2009 through the Forest Carbon Partnership Facility, which catalyzed the development of the NFMS and related readiness activities. With support from the UN-REDD Program, FAO, and other multilateral partners, Kenya has progressively strengthened its forest monitoring architecture, culminating in the publication of the first NFMS in 2019.[83]

Monitoring of KPI 1 will be carried out using Kenya's established NFMS, led by the KFS, who applies the Ensemble Sample-Based Area Estimation (ESBAE) method, a statistically robust approach developed with technical support from FAO.[84] ESBAE has been used to assess natural forest change in Kenya for the periods 2013–2017 and 2018–2021, and it forms the basis for Kenya's biennial National Greenhouse Gas Inventory submissions to the UNFCCC. The 2018–2021 assessment was also used to calibrate the data informing the SPTs under this Framework.

KFS will continue to use the same ESBAE method and forest definitions throughout the life of the Framework, ensuring continuity and comparability over time. This means that KPI 1 will be monitored using the same approach that informed both the baseline and the target setting. Although the WB and the Kenya Space Agency (KSA) are supporting technical upgrades (such as enhanced satellite imagery and improved analytical capacity), these improvements will not change the underlying methodology. Instead, they

[81] Ministry of Environment, Water and Natural Resources (2014). *Forest Policy, 2014.* Available online.
[82] Ministry of Environment, Climate Change and Forestry (2023). *National Forest Policy.* Available online.
[83] FAO (2025). *Enhancing sustainable forest management and climate action through the national forest monitoring system in Kenya: A collaborative approach to forest conservation.* Available online.
[84] FAO (2023). *Ensemble Sample-Based Area Estimation-An Overview*. Available online.

will strengthen the accuracy and reliability of the NFMS while preserving methodological consistency.

KPI 1 progress will be measured and reported biennially (every two years), in alignment with prevailing sector best practices. An interim update will also be provided between biennial cycles to capture significant developments in actions, policies, or regulatory frameworks related to deforestation prevention and natural forest conservation. However, such updates would be limited by data availability and may be narrative or qualitative in nature. In this context, the KFS will be responsible for providing forestry-related KPI 1 data to the PDMO in the NT for reporting purposes.

In reporting years, the GoK will ensure independent verification of KPI 1 by a qualified and specialized independent body. To facilitate the verification process, KFS will share the necessary databases, methodologies, and the forest mapping results with the selected verifying entity by June 30th of the year after the reporting period.

4.4 Calibration of SPTs for KPI 1

The SPTs for KPI 1 focus on limiting the cumulative loss of forest cover with respect to the 2024 baseline.

Based on the World Bank's FAB matrix, which assesses the ambition of the SPT by projecting a BAU scenario with no policy changes, and feasibility by analyzing whether peer countries have historically achieved similar targets,[85] three SPT trigger events were established that result from observing the achievement of the KPI.[86] This scenario analysis uses the World Bank Forest Loss Benchmark for Kenya to estimate deforestation rates without new policies or external shocks.

BAU Scenario projections suggest that the annual deforestation in Kenya will continue to be around 8,311 ha per year by 2030, totaling approximately 49,871 ha by then. Deforestation values within a 50% confidence level of the BAU are considered to have low ambition (from 47,169 – 52,542 ha). Reductions below the 50% confidence interval (47,169 ha) are considered ambitious, and reductions below the 90% confidence interval are considered highly ambitious (see **Figure 5**).[87]

[85] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank.* Available online.
[86] ICMA. (2024). *Sustainability-Linked Bond Principles.* Available online.
[87] Values are preliminary based on World Bank Team's Modelling.

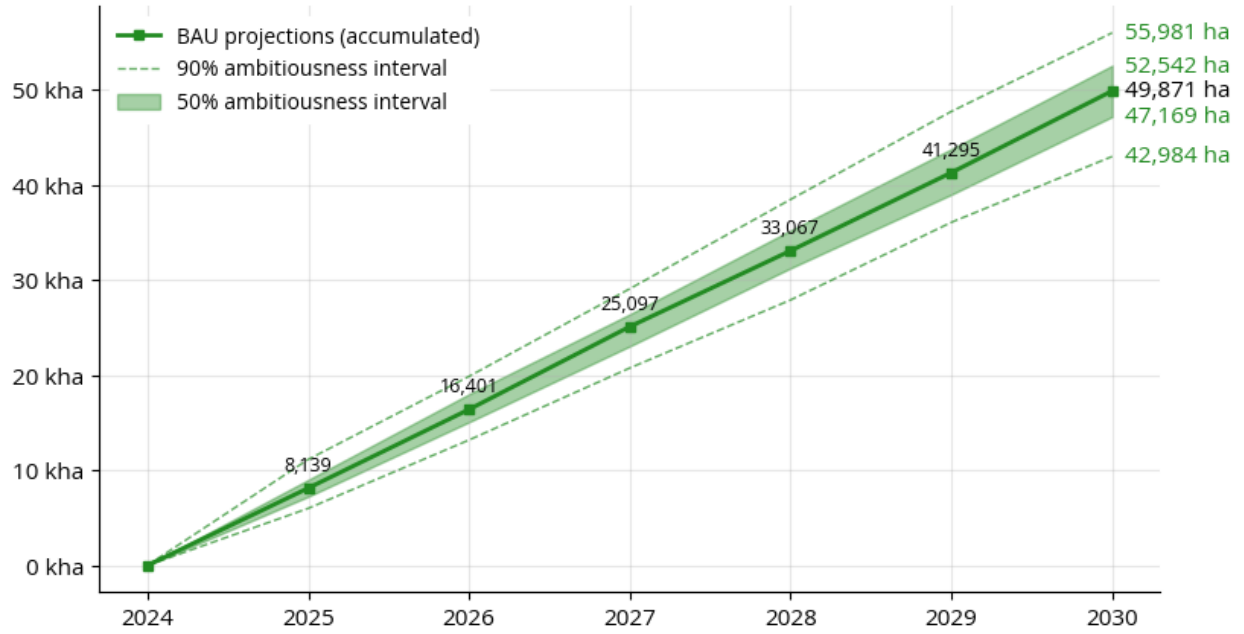


Figure 5. BAU Assessment - Accumulated Annual Deforestation Rates[88]

To generate BAU forecasts for deforestation, the REACH model incorporates forest-type-specific exogenous predictors, acknowledging that different forest ecosystems face different pressures. For **High forests** (Montane and Western Rain), the main predictors include global lumber prices, which correlate strongly with historical tree cover loss, and policy interventions by the government since 2021, which are modeled to reduce deforestation. In **Dry forests** (Dryland), the model also includes pressure from global livestock prices, alongside rural population growth, which drives wood fuel demand and land conversion. For **Moist forests** (Coastal and Mangrove), the model identifies cash crop prices, the Real Effective Exchange Rate (REER) — a proxy for Kenya's trade competitiveness — and population growth, which tends to overall increase deforestation in these zones. Each forest-type model also incorporates recent deforestation trends. This differentiated approach improves the precision of Kenya's BAU projections by reflecting the distinct economic and demographic drivers of land use change in each ecological zone.

[88] Wang, de Smit et al., (2025, forthcoming). *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group

Additionally, a **Peer Analysis**[89] that compares countries with similar deforestation rates relative to forest cover in 2000, was made modeling data from 28 countries[90] for the period 2024-2030 (see **Figure 6. Peer Analysis**).[91]

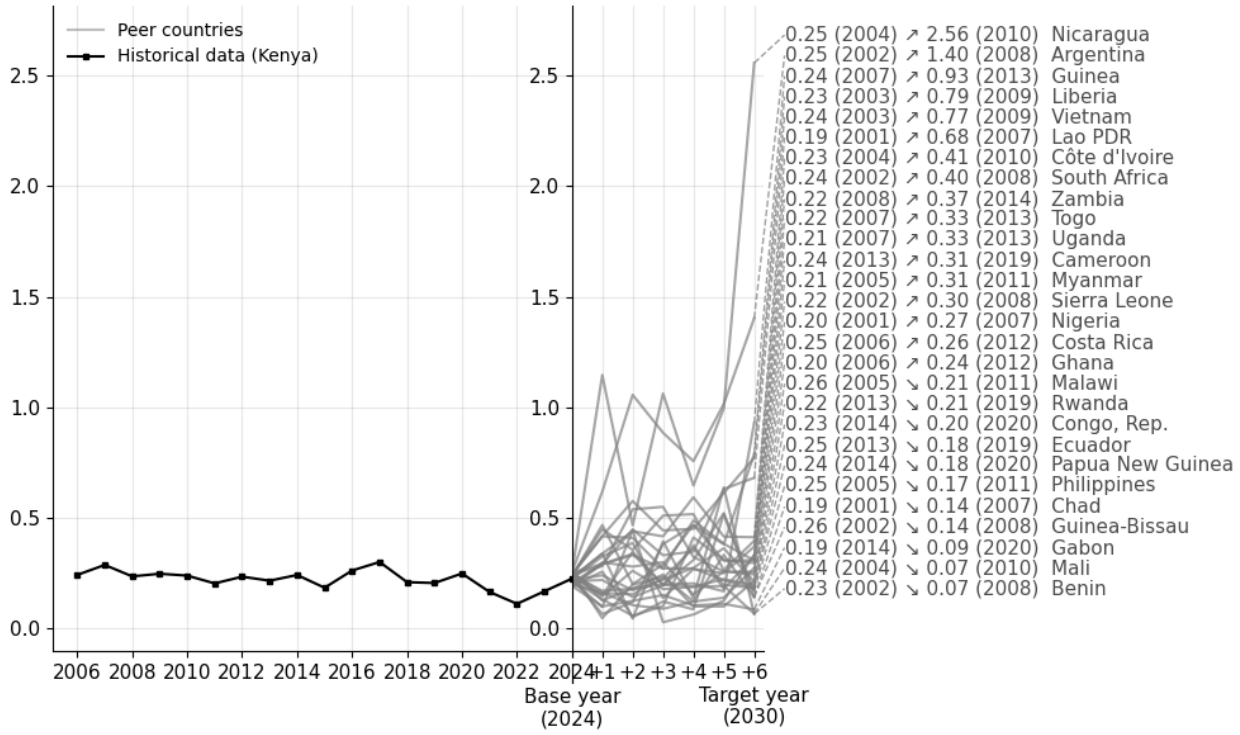


Figure 6. Peer Analysis[92]

The analysis showed an average accumulated deforestation for the peers of 58,849 ha. Reductions within 50% of this value are deemed very highly feasible (44,215 ha), while those below are considered highly feasible. Reductions below the 90% interval (less than 32,943 ha) lack historical precedent and are considered less feasible (see **Figure 7**).

[89] Peer countries were identified as those with similar levels of annual forest loss relative to Kenya in 2000 forest cover, and their progress was tracked over a six-year period to establish a feasibility range based on historical precedents.

[90] Peer countries: Nicaragua, Argentina, Guinea, Liberia, Vietnam, Lao PDR, Côte d'Ivoire, South Africa, Zambia, Togo, Uganda, Cameroon, Myanmar, Sierra Leone, Nigeria, Costa Rica, Ghana, Malawi, Rwanda, Republic of Congo, Ecuador, Papua New Guinea, Philippines, Chad, Guinea-Bissau, Gabon, Mali, Benin.

[91] For details about peer selection, including comparable peers and benchmarkable peers, see Wang, de Smit et al. (2025, forthcoming) *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group.

[92] Wang, de Smit et al., (2025, forthcoming). *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group

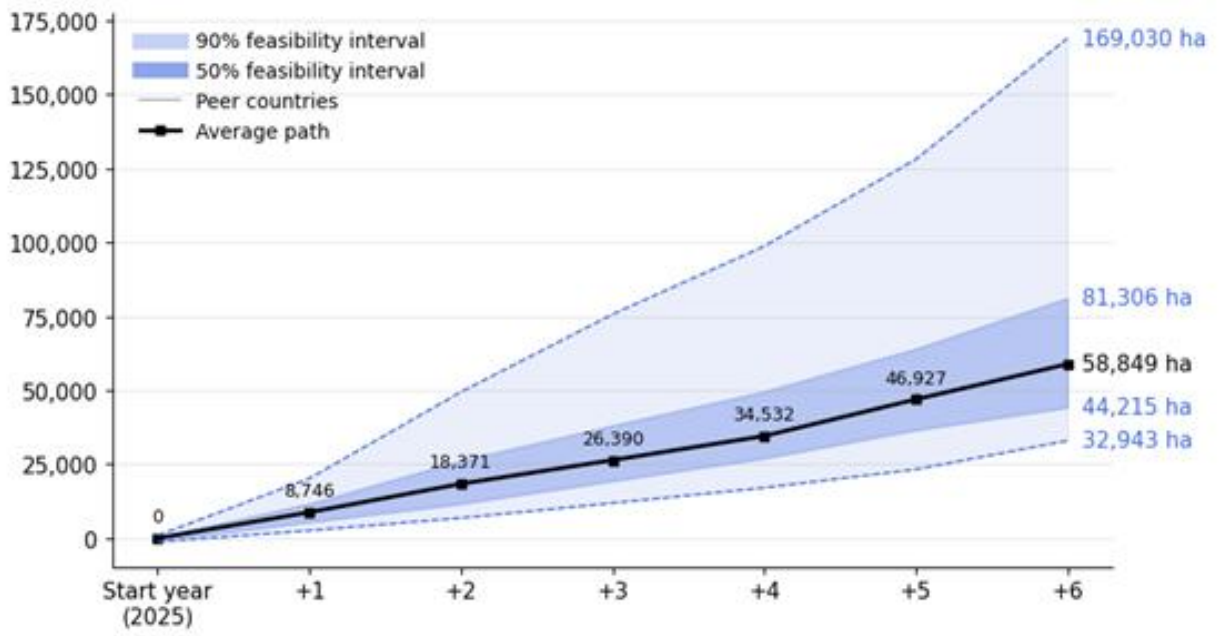


Figure 7. Peer Analysis - Accumulated Annual Deforestation Rates[93]

As a result of this assessment, the following SPT triggers were identified, all with the same observation date (December 31st, 2030):

Table 2. SPT 1.1 and SPT 1.2

KPI 1: Accumulated Natural Forest Loss in Hectares (ha)		**Feasibility**	**Ambition**
SPT 1.1	**Commitment**: Limit the cumulative loss of natural forest cover to less than 44,000 hectares by 2030.[94]	**High**	**High**
SPT 1.2	**Overperformance:** Limit the cumulative loss of natural forest cover to less than 38,000 hectares by 2030. [95]	**High**	**Very High**

Based on the highly ambitious and highly feasible intervals, a dual trigger approach is proposed for this KPI, to balance ambitiousness with historical feasibility to set meaningful and realistic targets. As there are two trigger events associated with this SPT, a coupon adjustment mechanism could be implemented on a tiered basis (see **Figure 8**).

[93] Wang, de Smit et al., (2025, forthcoming). *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group
[94] The Framework uses the estimated baseline of 3.48 million hectares for 2024.
[95] The Framework uses the estimated baseline of 3.48 million hectares for 2024.

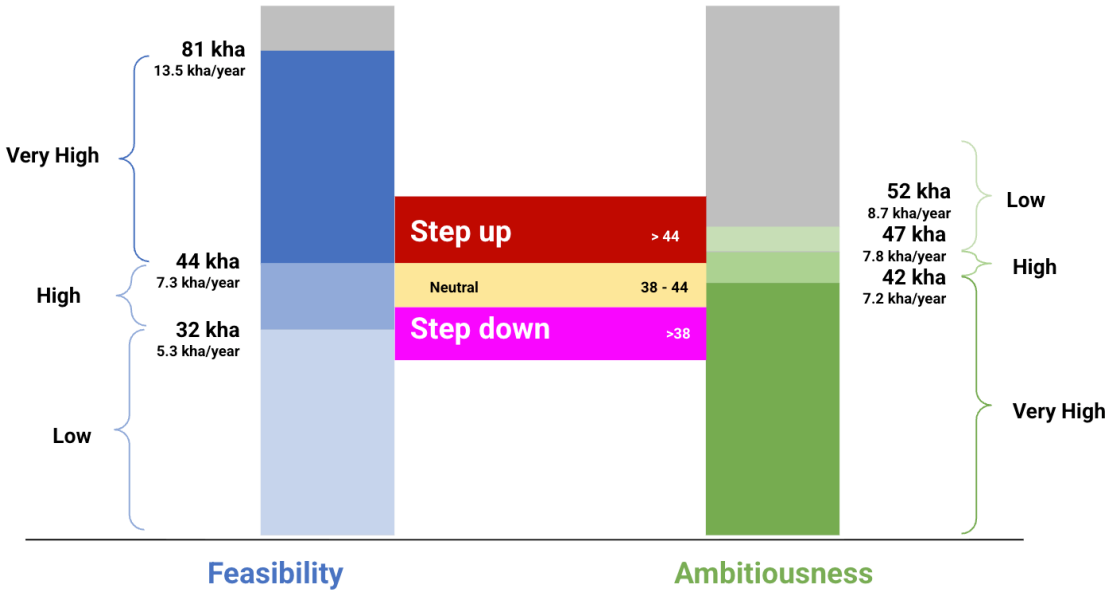


Figure 8. Tiered Adjustment Mechanism for KPI 1

The first trigger, **SPT 1.1**, is a commitment target that is feasible and ambitious, aligned with the Government's policies and with Kenya's peer countries historical performance. If the GoK fails to meet the target stipulated in SPT 1.1 (limit the cumulative forest cover loss to less than 44,000 hectares by 2030), a penalty in the form of a coupon step up will be applied. If the GoK achieves SPT 1.1 and the forest cover loss falls between 38,000 ha and 44,000 ha by 2030, using 2024 as the reference year (i.e., between SPT 1.1 and SPT 1.2), the coupon will remain unchanged.

The second trigger, **SPT 1.2**, is an overperformance target which allows to differentiate a range that represents **very high ambitiousness**, representing a higher challenge for the Government and a greater performance and additionality of public policies in further limiting cumulative forest cover loss. Therefore, if the GoK can limit cumulative forest cover loss to less than 38,000 hectares by 2030, using 2024 as the reference year, a reward mechanism will be triggered, resulting in a coupon step-down.

4.5 Policy Framework and Implementing Actions

Both SPTs for KPI 1 align with key legislation and policy actions set by the GoK. Therefore, both SPT 1.1 and SPT 1.2 are considered coherent with national and international commitments.

In the first place, the **Constitution of Kenya** mandates the state to achieve and maintain a minimum tree cover of 10% of the country's total land area.[96] The **Forest Conservation and Management Act (2016)** establishes regulations for forest management and conservation, emphasizing the importance of protecting indigenous forests. This includes avoiding deforestation.[97] The **Wildlife Conservation and Management Act (2013)** ensures the protection, conservation, and management of wildlife in Kenya, with a strong emphasis on environmental preservation and the sustainable use of natural resources through public participation. Additionally, the law establishes the Kenya Wildlife Service (KWS).[98]

The GoK has also committed to international conventions and incorporated objectives into its national policies to expand forest cover and monitor annual GHG emissions related to this sector, aiming to minimize its environmental impact. For example, Kenya has made commitments under the **Paris Agreement and the African Forest Landscape Restoration Initiative (AFR100)** to restore degraded landscapes and increase forest cover from the current 8.83% to 10% by 2030.[99]

In addition, the GoK has formulated various policy actions and interventions that combine both deforestation reduction efforts and afforestation initiatives, as well as social safeguards and sustainable development principles. These include:

- The **2023-2027 MTP IV** outlines various key projects including Forest Protection and Management - of which forest protection is a key part. In regards to avoiding deforestation, it mentions protection of existing 2.16 million ha of gazetted forests; fencing 4,500 km of natural public forest areas; maintenance of 5,240 km fire breaks and 8,236 km of forest roads; implementation of silvicultural operations (pruning and thinning) in 10,000 ha; registration of community forests in ASALs; and rehabilitation of 200 ha of degraded water towers. The project also aims to enhance the functionality of aquatic and terrestrial ecosystems through the conservation of lakes, river basins, coastal ecosystems, and wetlands.[100]
- The **NCCAP 2023–2027** foresees the protection, conservation and sustainable management of forests and other ecosystems that play an essential role in Kenya's economy. For example, the GoK plans to reduce deforestation by rehabilitating and protecting an additional 100,000 ha of natural forests (including

[96] Government of Kenya (2010). *The Constitution of Kenya.* Available online.
[97] Republic of Kenya (2016). *Forest Conservation and Management Act 2016.* Available online.
[98] Republic of Kenya (2013). *Wildlife Conservation and Management Act 2013.* Available online.
[99] African Forest Landscape Restoration Initiative. *AFR100 Kenya.* Available online.
[100] Republic of Kenya (2023). *Fourth Medium Term Plan 2023-2027*. Available online.

mangroves) by 2028 through community participation in forest management, limiting access to forests, improved enforcement and monitoring, and developing alternative technologies to reduce demand for biomass (e.g., clean cooking, efficient charcoal production, briquetting).[101]

- The **Ecotourism Development Master Plan 2024-2029**. Describes the strategy for responsible development of ecotourism and recreational facilities in State forests in Kenya.[102]
- The **National Forest Policy (2023)** outlines the framework for sustainable forest management including protecting forests. The revised Policy seeks to safeguard the ecological integrity of forests and the livelihood security of the present and future generations, based on sustainable management of forests and the continuous flow of ecosystem services.[103] To do so, the Policy will strengthen the participation and engagement of local communities in the management and conservation of forests. Moreover, the Policy's 13 guiding principles include: all public forests shall be managed to serve a common good interest, all forest ecosystems will be managed for the benefit of the people of Kenya, and the indigenous knowledge and associated intellectual property rights found within forest biodiversity will be protected.[104]
- The **Kenya Forest Service Strategic Plan (2023 - 2027)** outlines measures for the conservation and protection of forests to enhance climate change resilience by building capacities, improving forest governance, and conserving mangrove ecosystems. This plan aims to increase the national forest cover from 8.83% to a higher percentage by 2030.[105]
- Kenya has also developed a **REDD+ Strategy** that describes Kenya's proposed approach for implementing the REDD+ programme. This strategy outlines a comprehensive framework for reducing emissions caused by deforestation and forest degradation through forest conservation and sustainable management.[106] Kenya's REDD+ Strategy includes a Safeguard Information System, which is a national approach of safeguards and an interpretation and national application of the UNFCCC Cancun Safeguards. These include promoting a transparent and effective national forest governance structure, the respect for the knowledge and rights of indigenous peoples and local communities, the participation of relevant

[101] Ministry of Environment, Climate Change and Forestry (2023). *National Climate Change Action Plan (NCCAP) 2023-2027*. Available online.

[102] Kenya Forest Service (2024). *Ecotourism Development Master Plan 2024-2029*. Not available online.

[103] Republic of Kenya (2023). *National Forest Policy 2023.* Available online.

[104] Republic of Kenya (2023). National Forest Policy 2023. Available online.

[105] Kenya Forest Service (2023). *Kenya Forest Strategic Plan (2023 - 2027).* Available online.

[106] Ministry of Environment and Forestry (2021). *National REDD+ Strategy.* Available online.

stakeholders including indigenous peoples and local communities, among others. Moreover, the implementation of Kenya's National REDD+ Strategy will be monitored by a National REDD+ Supervisory Board, which will encompass diverse ley stakeholders such as representatives from Independent Commissions (e.g. Kenya National Commission on Human Rights and the National Gender and Equality Commission), representatives of the Indigenous People and Local Communities, the Private Sector, and Civil Society.[107]

- In 2021, Kenya implemented the **National Forest Monitoring System (NFMS)**, developed in line with REDD+ initiatives, to monitor forest dynamics. This system incorporates methodologies for assessing carbon stocks, tracking changes in forest area and cover, and evaluating associated non-carbon benefits such as biodiversity conservation and water catchment protection.[108] Additionally, through the National Landscape and Ecosystem Restoration Strategy, the Kenyan government has introduced initiatives aimed at rehabilitating and restoring wetlands and water tower forests.[109]
- The **Green Economy Strategy and Implementation Plan (GESIP) 2016-2030**. It is a national, cross-sectoral strategy and implementation plan aimed at supporting low-carbon development. It seeks to guide Kenya's transition to sustainability through five key areas: green infrastructure, resilience, resource management, efficiency, and social inclusion.[110]
- The **National Forest Programme 2016-2030**. Designed to guide the sustainable management and development of Kenya's forest sector for the next 15 years, aligning with Kenya Vision 2030 and national development goals.[111]
- The **National Landscape and Ecosystem Restoration Strategy 2023-2032**. Comprehensive plan designed to restore 10.6 million hectares of degraded landscapes and ecosystems across Kenya by 2032. It seeks to increase the country's tree cover by focusing on different interventions through sustainable land-use practices.[112]

107 Ministry of Environment and Forestry (2021). National REDD+ Strategy. Available online.

108 Ministry of Environment and Forestry (2021). *The National Forest Monitoring System Version 1.* Available online.

109 Ministry of Environment, Climate Change and Forestry (2023). *National Landscape and Ecosystem Restoration Strategy 2023-2032.* Available online.

110 Government of Kenya (2016). *Green Economy Strategy and Implementation Plan 2016 – 2030.* Available online.

111 Republic of Kenya (2016). *National Forestry Programme 2016-2030*. Available online.

112 Ministry of Environment, Climate Change and Forestry (2023). *National Landscape and Ecosystem Restoration Strategy 2023-2032*. Available online.

Although Kenya has mobilized significant resources to combat deforestation, strategic plans and policies acknowledge that current financing levels remain insufficient in light of the country's ambitious national targets. The government has recognized the urgent need for sustainable financing mechanisms, public-private partnerships, and increased international support to close existing gaps and ensure the effective implementation of forest interventions.

5. KPI 2: Rural Access to Electricity

The second KPI is defined as the **percentage of rural population with access to electricity (%)** with respect to the reference year, controlling for exogenous predictors. The following section provides detailed information on the relevance and materiality of KPI 2, its definition, the SPTs associated with this indicator, and the implementation measures the government is taking and will take to achieve the targets.

5.1 Rationale Behind KPI 2

Increasing rural access to electricity represents a relevant, core and material issue for the GoK. Access to electricity is considered among the Government's priority issues, as well as a necessity for the fulfillment of the economic and social rights of the Kenyans and the overall improvement of their standard of living. Kenya has made a significant progress in guaranteeing access to electricity to all its citizens, but rural electrification remains a material issue, with only 67.90% of the rural population having access compared to 95.97% in urban areas, according to World Bank data.[113]

The importance of accessing electricity

Electricity has become crucial for human and economic development, as it plays a key role in basic and daily activities such as lighting, refrigeration and running basic appliances.[114] In addition, access to electricity is essential for all economic sectors, from businesses and medicine, to agriculture and communications.[115] The agriculture and forestry sector in Kenya is by far the largest economic sector and contributes to 21.6% of Kenya's GDP.[116] The sector employs more than 40% of the total population and about 60% of the rural populace.[117] As a principal economic sector, improving and increasing access to electricity can have a positive impact on agricultural practices: it can enable farmers to access modern irrigation systems, cold chain storage, and agro-processing

[113] World Bank Group Data. (n.d.). *Access to electricity, rural (% of rural population) - Kenya. Accessed July 3rd, 2025.* Available online.
[114] World Bank Group. (n.d.). *Databank. Metadata Glossary. Accessed December 8th, 2024*. Available online.
[115] United Nations. (n.d.). *Ensure access to affordable, reliable, sustainable and modern energy*. Available online.
[116] Kenya National Bureau of Statistics (2024). *Gross County Product 2024.* Available online.
[117] Kenya National Bureau of Statistics (2024). *Kenya Census of Agriculture: 2024 Pilot Survey.* Available online.

facilities, which will have positive production results such as increase yields, reduce post-harvest losses, and improve food security.[118]

Moreover, electrification contributes to economic and social development as it powers health facilities, facilitates clean fuels and technologies for cooking, and enables public goods such as street lighting. Regarding enabling clean cooking technologies, it presents an opportunity for technological innovation, for forest restoration, and health and cost-saving benefits. Women and children are disproportionately affected using raw biomass for cooking, as they are exposed to hazards such as toxic smoke.[119] Therefore, access to electricity improves the standard of living for millions of Kenyans and positively impacts the country's economy. Lastly, it is a significant social and economic indicator that also indicates a country's energy poverty status.[120]

The rural electricity access gap

Sub-Saharan Africa has seen visible progress in the common effort for increasing electricity access: electricity access rate in this region has increased from 26% to 51% over the last two decades. Kenya has also shown tangible results of its national efforts to increase access to electricity in the last 20 years increasing the access rate by almost 60% between 2000 and 2022.[121] Moreover, Kenya's electricity connections have grown 4.61% yearly.[122] However, there is still an electricity gap to breach, especially as access to electricity is not equal between rural and urban areas. Sub-Saharan Africa has an 81% urban electrification rate, whereas the rural electrification rate is 34%.[123] Unequal access to electricity is also a present problem for Kenya, a country whose 70% of its population lives in rural areas.[124] According to data from the World Bank, 67.9% of Kenya's rural population has access to electricity in contrast to 95.97% of urban population with access

[118] FAO. (n.d.). *Kenya at a glance: FAO in Kenya. Food and Agriculture Organization of the United Nations. Retrieved November 28, 2024.* Available online.

[119] Ministry of Environment, Climate Change and Forestry (2023). *National Climate Change Action Plan 2023-2027.* Available online.

[120] World Bank Group. (n.d.). *Databank. Metadata Glossary. Accessed December 8th, 2024*. Available online.

[121] Tracking SDG7 - The Energy Progress Report. (n.d.). *Country Reports - Kenya. Accessed January 10th, 2025.* Available online.

[122] USAID (2024). *Kenya Electricity Access Market Assessment 2024*. Not available online.

[123] Sustainable Energy for All. (2024). *Deep Dive Analysis: Tracking SDG7: The Energy Progress Report 2024.* Available online.

[124] IEA, IRENA, UNSD, World Bank, WHO. 2023. *Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. © World Bank. License: Creative Commons Attribution—NonCommercial 3.0 IGO (CC BY-NC 3.0 IGO).* Available online.

to electricity.[125] This reflects a relevant matter for the GoK, as there are more than 13 million Kenyans living in rural areas without access to electricity and whose economic and social rights are likely to not be fulfilled.[126]

Nevertheless, the GoK has made significant progress on electrification and off-grid solutions, including solar home systems (SHS) and mini-grids, which have the potential of increasing connections. Kenya has the largest market for off-grid solutions worldwide, which has resulted in an expansion of rural electrification, but SHS companies still face key national challenges that are heightened in low-income and sparsely populated northern and northeastern counties.[127] Kenya's population density in certain areas intensifies distribution challenges the energy sector companies face, this is because a significant number of customers live in remote and hard-to-reach areas, also known as the last-mile problem in which the costs of connecting households living in rural areas and/or relatively far from transformers is increased.

Alignment with national policies and commitments

The GoK has expressed its commitment to closing the electricity access gap through the formulation of national policies and regulations. Article 43 in Kenya's Constitution states the economic and social rights every person of Kenya has, such as the right to the highest attainable standard of health, the right to accessible and adequate housing, and to reasonable standards of sanitation, among others.[128] These economic and social rights cannot be fulfilled without access to energy, and as stated in the Constitution, it is the State's responsibility to achieve the "progressive realization of the rights guaranteed under Article 43".[129]

Another legislative action to highlight is the Energy Act of 2019, which consolidates laws related to energy, and provides National and County Government functions in relation to energy, including the promotion of renewable energy, the regulation, production, supply and use of electricity, and other functions.[130] The Energy Act of 2019 includes the establishment of the Rural Electrification and Renewable Energy Corporation (REREC)

[125] IEA, IRENA, UNSD, World Bank, WHO. (n.d.*). Access to electricity- Kenya. Accessed July 4, 2025.* Available online.
[126] Tracking SDG7 - The Energy Progress Report. (n.d.). *Country Reports - Kenya. Accessed December 8th, 2024.* Available online.
[127] USAID (2024). *Kenya Electricity Access Market Assessment 2024*. Not available online.
[128] National Council for Law Reporting (2010). *The Constitution of Kenya, 2010.* Available online.
[129] National Council for Law Reporting (2010). *The Constitution of Kenya, 2010*. Available online.
[130] Republic of Kenya (2019). *Kenya Gazette Supplement Acts, 2019. The Energy Act, 2019*. Available online.

whose functions include the supervision of the implementation of the Rural Electrification Programme.[131]

In addition, as stated in Kenya Vision 2030, the GoK holds the main goal of providing a high quality of life to citizens by 2030,[132] and electricity is recognized as a critical factor for achieving a high quality of life. As part of Vision 2030, the GoK aims to connect all public facilities and ensure that all Kenyans have access to electricity by 2030.[133] In relation to this national goal, the commitments acquired in the Africa Climate Summit include the promotion of clean cooking technologies and initiatives; as well as provide necessary reforms to raise the share of renewable energy financing by at least 20% by 2030.[134]

Lastly, in 2018 the GoK developed the Kenya National Electrification Strategy (KNES) – which is currently being updated – to achieve electricity access for all households and businesses in Kenya, in alignment with the Vision 2030 agenda. The KNES presents a roadmap focused on six key themes to expand electrification, including the definition of roles, responsibilities and financial requirements, as well as the prioritization of projects.[135]

5.2 Definition of KPI 2

KPI 2 is defined as the **percentage of rural population with access to electricity (%)** with respect to the reference year, controlling for exogenous predictors.

Table 3. KPI 2: Rural Access to Electricity

KPI 2	**Percentage of Rural Population with Access to Electricity (%)**
Definition	Access to electricity is defined as "having electricity for desired services", based on the World Bank's Energy Sector Management Assistance Program (ESMAP) Multi-Tier Framework (MTF) (see **Annex 3**), which is a globally recognized approach that measures access to electricity in a more granular way rather than a binary approach (e.g. "connected or not connected").[136] Developed and applied by the World Bank, the Multi-

[131] Republic of Kenya (2019). *Kenya Gazette Supplement Acts, 2019. The Energy Act, 2019*. Available online.
[132] Kenya Vision 2030 (n.d.). *The Vision.* Available online.
[133] REREC (n.d.). *Our Work. Electrification of Public Facilities.* Available online.
[134] African Union (2023). *The African Leaders Nairobi Declaration On Climate Change And Call To Action.* Available online.
[135] World Bank (2018). *Kenya National Electrification Strategy: Key Highlights 2018*. Available online.
[136] ESMAP. (n.d.). *Multi-Tier Framework Website.* Available online.

	Tier Framework is also applied by international initiatives such as the Tracking SDG7 and Sustainable Energy for All (SEforALL).[137] The Multi-Tier Framework defines electricity access based on seven attributes of energy (capacity, availability, reliability, quality, affordability, formality, and health and safety) across six tiers of access, with minimum requirements by tier of electricity access.[138,139] Tier 0 refers to no access to electricity (not available or available for less than four hours per day), while Tier 5 refers to the highest level of access (at least 23 hours of electricity per day). **KPI 2 is defined as those systems which meet the requirement of Tier 1 and above** in this Framework.[140] The Multi-Tier Framework approach provides a structured method for setting realistic universal access targets, considering a country's initial conditions and the timeline for achieving full access. When preparing their KNES, the GoK analyzed the following supply solutions to achieve universal access to electricity: (1) grid expansion, (2) grid intensification and densification, (3) mini-grids, and (4) standalone solar photovoltaic systems. Based on this analysis, it was decided that where grid extension and mini-grid services are not viable, off-grid standalone energy systems such as solar photovoltaic systems will be employed, thus recognizing minimal service (Tier 1, as defined by the Multi-Tier Framework) as the baseline that the KNES will recognize for standalone energy service.[141] Therefore, Tier 1 was chosen as the foundation for this KPI because it aligns with the Government's strategy and considers the provision of essential energy services such as lighting, phone charging, and limited appliance use—critical for enhancing living standards. Furthermore, the MTF acknowledges that even basic electricity access can significantly improve education, communication, and economic opportunities. Tier 1 also serves as a crucial stepping stone, addressing immediate needs while paving the way for advancements toward higher tiers of energy access.[142] The approach applied to define KPI 2 ensures verifiability and the ability to benchmark the data since both the GED and the Multi-Tier Framework are sourced from national survey data. In addition, KPI 2 can be crossed-checked by consulting Tracking SDG7 annual progress reports. Tracking SDG7: The Energy Progress Report is a joint report from the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Statistics Division (UNSD), the World Bank, and the World Health Organization (WHO). The annual report tracks progress on the five targets of SDG7, including ensuring universal energy access, doubling progress on energy

[137] Sustainable Energy for All (2024). *Deep Dive Analysis: Tracking SDG7: The Energy Progress Report 2024.* Available online.
[138] Multi-Tier Framework. (n.d.*). Electricity. Accessed December 8th, 2024*. Available online.
[139] IEA, IRENA, UNSD, World Bank, WHO. (2024*). Tracking SDG 7: The Energy Progress Report*. Available online.
[140] Multi-Tier Framework. (n.d.). *Electricity. Accessed December 8th, 2024.* Available online.
[141] Government of Kenya (2018). *National Electrification Strategy: Key Highlights.* Available online.
[142] SEforALL. (2025). *Beyond Connections: Energy Access Redefined*. Available online.

	efficiency and increasing the share of renewable energy.[143] Those progress reports have been developed and published yearly since 2018.[144]
Reference Year and Baseline	In 2023, the percentage of rural population with access to electricity was 67.9%. 2023 is used as the reference year because the most recent data available from the World Bank's Global Electrification Database (GED) for Kenya is from 2023.[145]
Calculation Methodology	The World Bank determined the baseline for KPI 2 using the World Bank's GED, which is the database used for the Tracking SDG7 Progress Reports. The GED compiles nationally representative household survey data and census data from 1990 and onwards.[146] The database also incorporates data from the Socio-Economic Database for Latin America and the Caribbean (SEDLAC), Middle East and North Africa Poverty Database (MNAPOV) and the Europe and Central Asia Poverty Database (ECAPOV). The GED also relies on the Multi-Tier Framework approach to define electricity access as those with Tier 1 access and above. Looking forward, the following **formula** will be used to calculate progress on this KPI: **KPI 2 = [rural population with access to electricity] / [total rural population].** The rural population with access to electricity will be monitored and quantified by the Ministry of Energy and Petroleum using individual surveys. These surveys will be conducted by specialized survey firms with support from the World Bank and will collect data directly from households to assess electricity access, including grid connections and off-grid solutions such as solar home systems.
SDG Alignment	**SDG 7** "Ensure access to affordable, reliable, sustainable and modern energy". ● **Target 7.1:** "Ensure universal access to affordable, reliable and modern energy services". ● **Target 7.b: "**Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries".

5.3 Monitoring, Reporting and Verification

Although the data used for modeling KPI 2 and setting the baseline comes from the World Bank's GED, moving forward, the data to monitor and report KPI 2 will be obtained through a national digital MRV system that is being established to track electricity access across Kenya. This system is being developed in partnership with the World Bank through its Mission 300 initiative, which aims to connect 300 million people in Africa to electricity by

[143] Sustainable Energy for All. (2024). Deep Dive Analysis: Tracking SDG7: The Energy Progress Report 2024. Available online.

[144] See Tracking SDG7: The Energy Progress Report (n.d.). Downloads. Available online.

[145] IEA, IRENA, UNSD, World Bank, WHO. (n.d.*). Access to electricity- Kenya. Accessed July 4, 2025.* Available online.

[146] IEA, IRENA, UNSD, World Bank, WHO. (2024). *Tracking SDG 7: The Energy Progress Report.* Available online.

2030.[147] In Eastern and Southern Africa, Mission 300 is implemented through the Accelerating Sustainable and Clean Energy Access Transformation (ASCENT) program.[148] Under ASCENT in Kenya, a digital MRV platform is being designed to capture verified electricity-connection data and geospatial information from grid, mini-grid and standalone solar providers, enabling the Government to monitor rural electricity access in near real time.

The digital MRV platform is being designed to apply the same definitions and measurement principles used in the World Bank's GED and the SDG 7 Multi-Tier Framework (MTF). This alignment ensures full methodological consistency between the 2023 baseline, which is based on GED data, and all subsequent monitoring carried out under the Framework. Electricity access will therefore continue to be measured according to Tier 1 or higher levels of service, covering both on-grid and off-grid solutions.

Once operational, the national digital MRV system will serve as the primary data source for KPI 2. It will provide a more frequent, granular and reliable picture of rural electricity access than traditional survey methods, while maintaining comparability with international standards.

KPI 2 will be measured and reported biennially (every two years), based on data aggregated from the digital MRV system.. An interim update will also be provided between biennial cycles to capture significant developments in actions, policies, regulations, or changes in the regulatory framework to expand electricity access in rural areas. However, such updates would be limited by data availability and may be narrative or qualitative in nature. In this context, the Ministry of Energy and Petroleum will be responsible for compiling the results and providing them to the PDMO in the NT for reporting purposes.

In reporting years, the GoK will ensure that KPI 2 is independently verified by a qualified and specialized verification body. To facilitate this process, the Ministry of Energy and Petroleum will provide the selected verification entity with all necessary documentation, including the relevant databases, applied methodologies, and the complete results of the reporting year's results. These materials will be submitted no later than June 30th of the

[147] World Bank Group (2025). *Mission 300 is Powering Africa: Connecting 300 million People to Electricity*. Available online.
[148] World Bank Group (2024). *Accelerating Sustainable and Clean Energy Access Transformation (ASCENT) in Eastern & Southern Africa*. Available online.

year following the reporting year to allow sufficient time for rigorous and transparent verification.

5.4 Calibration of SPTs for KPI 2

For KPI 2, the GoK has established two SPTs based on the application of the World Bank's FAB matrix whereby ambitiousness is assessed by projecting a BAU scenario, and feasibility by analyzing whether peer countries have historically achieved similar goals.[149]

BAU Scenario Analysis: BAU projections show an upwards trend in rural electricity access in Kenya, with an expectation to meet 76.7% by 2030 (see **Figure 9**). An increase of electricity rates above the 50% confidence interval (between 81.8% and 87.2%) are considered as highly ambitious, while achieving access rates of above 87.2% are considered as very highly ambitious.[150]

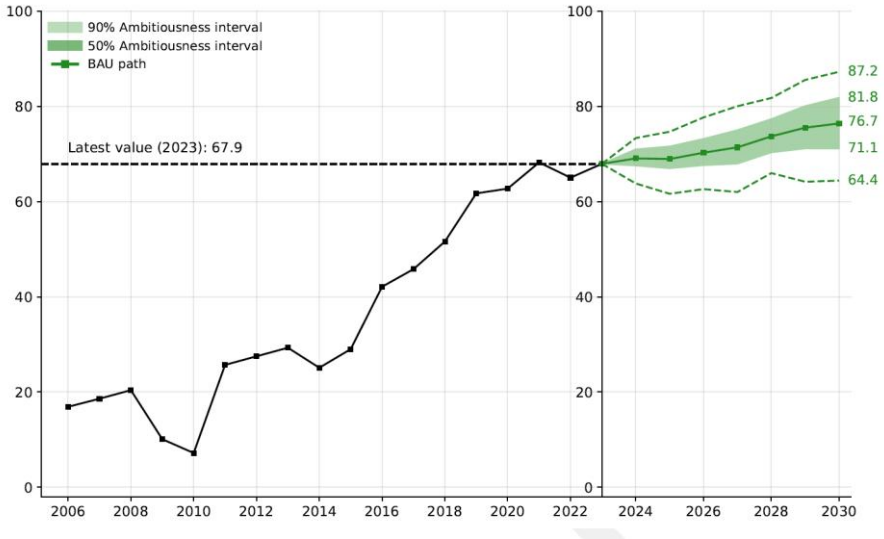


Figure 9. Business as Usual Projections of Electricity Rates

Peer analysis: The feasibility of the SPTs was assessed based on the historical performance of rural electricity access in countries from similar income groups or regions with similar access to rural electricity rates relative to Kenya. Data from 17

[149] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon?* Policy Research Working Paper 10558. World Bank. Available online.

[150] Wang et. al, (2025, forthcoming). *Rural Electrification and Performance Metrics for Kenya's Sustainability-Linked Financing Framework.* Policy Research Working Papers. World Bank Group

countries[151] was modeled for seven years, where it was found that most countries had a clear upward trend (see **Figure 10**).[152]

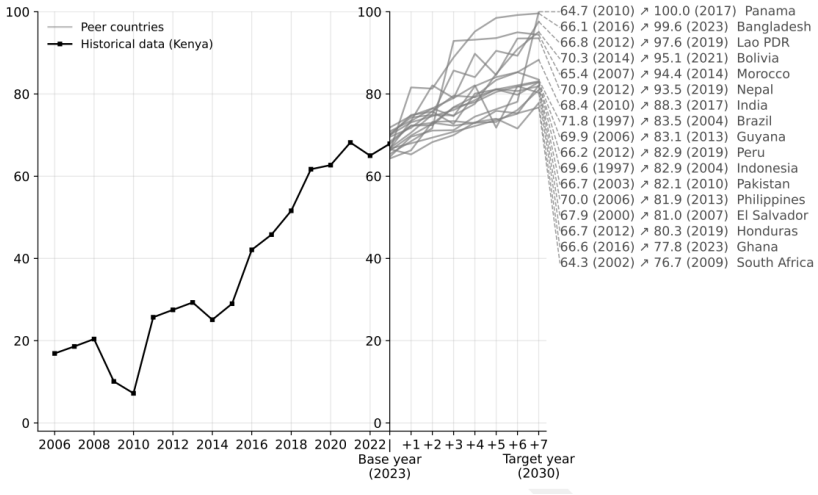


Figure 10. Peer Analysis

Based on generalized peer trajectories, a target within the 50% confidence interval (81.9% - 94.4%) is considered very highly feasible, while a target within the 90% confidence interval (94.4% - 99.7%) remains highly feasible. By contrast, values exceeding 99.7% are likely less feasible (see **Figure 11**). This assessment reflects the persistent last-mile distribution challenges in Kenya, where a substantial share of the population resides in remote and hard-to-reach areas.[153]

[151] Peer countries: Panama, Bangladesh, Lao PDR, Bolivia, Morocco, Nepal, India, Brazil, Guyana, Peru, Indonesia, Pakistan, Philippines, El Salvador, Honduras, Ghana, South Africa. To qualify as a benchmarkable peer, the country needs to have been close to the 67.9% of Kenya's current rural electrification rate, with a tolerance band between ±8%.

[152] Wang et. al, (2025, forthcoming). *Rural Electrification and Performance Metrics for Kenya's Sustainability-Linked Financing Framework.* Policy Research Working Papers. World Bank Group

[153] Wang et. al, (2025, forthcoming). *Rural Electrification and Performance Metrics for Kenya's Sustainability-Linked Financing Framework.* Policy Research Working Papers. World Bank Group

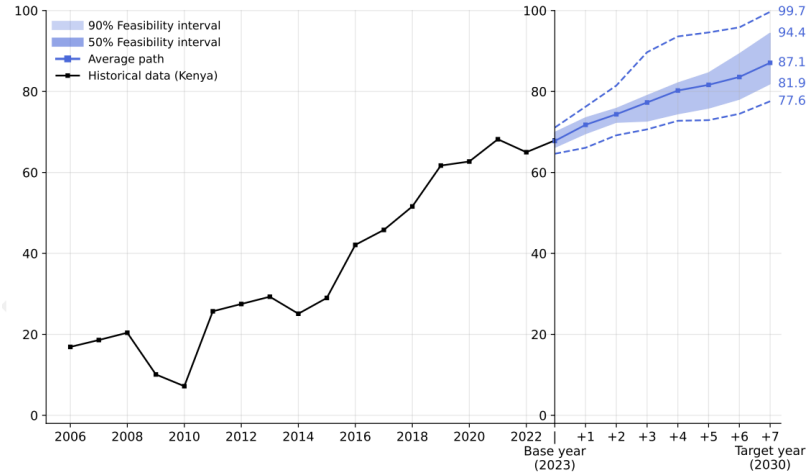


Figure 11. Kenya's Historical Precedence of Rural Electricity Rate

As a result of this assessment, the following SPT triggers were identified, all with the same observation date (December 31st, 2030):

Table 4. SPT 2.1 and SPT 2.2

KPI 2: Percentage of Rural Population with Access to Electricity (%)		**Feasibility**	**Ambition**
SPT 2.1	**Commitment**: Increase access to electricity for the rural population to 81.8% by 2030, compared to the 67.9% baseline in 2023.	**Very High**	**High**
SPT 2.2	**Overperformance:** Increase access to electricity for the rural population to above 94.4% by 2030, compared to the 67.9% baseline in 2023.	**High**	**Very High**

Based on the highly ambitious and highly feasible intervals, a dual trigger approach is also proposed for this KPI, in order to balance ambitiousness with historical feasibility to set meaningful and realistic access to electricity targets. As there are two trigger events associated with this SPT, a coupon adjustment mechanism could be implemented on a tiered basis (see **Figure 12**).

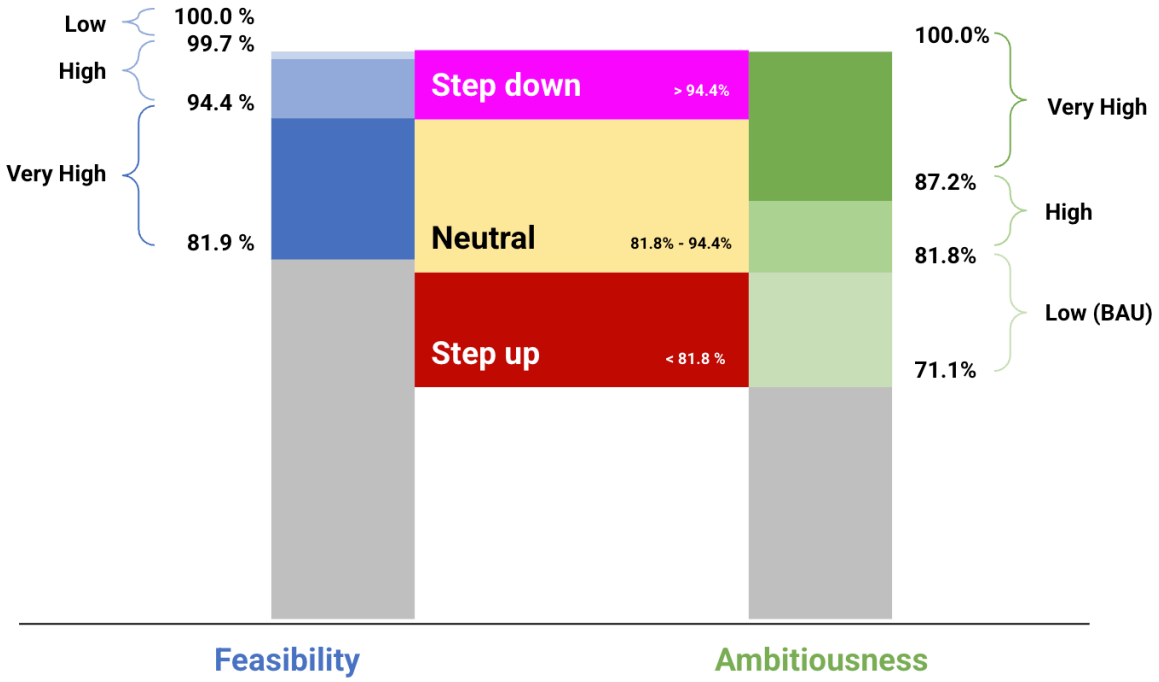


Figure 12. Tiered Adjustment Mechanism for KPI 2

The **baseline and reference year** for both SPT triggers is 2023, which has 67.9% of the rural population with access to electricity. The 2023 baseline was chosen because it is the most recently available data from the Tracking SDG 7 Country Report for Kenya.[154]

The **first trigger, SPT 2.1**, is a commitment target as it is highly feasible and ambitious, aligned with the Government's policies and with Kenya's peer countries historical performance. If the GoK fails to meet the target stipulated in SPT 2.1 (access to electricity reaches 81.8% by 2030), a penalty will be applied in the form of a coupon step-up. If the GoK achieves SPT 2.1 and the access to electricity for rural populations falls between 81.8% and 94.4% by 2030 (i.e., between SPT 2.1 and SPT 2.2), the coupon will remain unchanged.

The **second trigger, SPT 2.2,** allows to differentiate a range that represents **very high ambitiousness**, representing a greater performance and additionality of public policies in achieving a higher percentage of rural electricity access. Therefore, if the GoK surpasses SPT 2.2 (access to electricity for rural populations exceeds 94.4% by 2030), a reward mechanism will be triggered, resulting in a coupon step-down.

[154] IEA, IRENA, UNSD, World Bank, WHO. (n.d.). *Access to electricity- Kenya. Accessed July 4, 2025.* Available online.

All SPTs are aligned with the current Government's commitment to increase the proportion of rural population with access to electricity. However, it is important to note that the GoK has publicly stated its goal of providing power to all Kenyans by 2030[155], embedding this objective within its broader development strategy, Vision 2030, which identifies electrification as a key driver of economic growth. This goal is operationalized through national programs such as the IV Medium Term Plan[156], the Last Mile Connectivity Project[157] for grid expansion, and the Kenya Off-Grid Solar Access Project (KOSAP)[158] for remote areas.

Despite these efforts, Kenya has faced challenges in achieving electrification goals in recent years. The 2018 KNES set a target of achieving universal electricity access by 2022, but this goal was not met primarily due to funding shortfalls, infrastructure constraints, and the high costs of connecting remote and sparsely populated areas.[159]

As a result, the SPTs for KPI 2 were adjusted to reflect more realistic and achievable objectives, lowering the target from 100% electricity access by 2030. These SPTs were developed using the World Bank's FAB matrix which integrates Kenya's historical performance, the trajectories of peer countries, and external factors such as macroeconomic trends and demographic dynamics.[160] This approach ensures that the SPTs are aligned with Kenya's capacity to deliver sustained progress in rural access to electricity.

Although the SPTs are lower than the 100% universal electricity access commitment, all three thresholds are designed to be ambitious within the practical constraints faced by the GoK. The three SPTs reflect a graduated performance structure: **SPT 2.1** sets a feasible but ambitious goal aligned with existing policies and **SPT 2.2** represents an enhanced level of ambition. This tiered structure acknowledges varying degrees of feasibility while still incentivizing progress well beyond baseline expectations.

---

155 Kenya News Agency (2024). *Govt accelerates plan to provide power to all Kenyans by 2030.* Available online.

156 State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.

157 Global Infrastructure Hub. (n.d.). *Last Mile Connectivity Program – Kenya*. Available online.

158 Kenya Off-Grid Solar Access Project Facility Management Unit (KOSAP FMU). (n.d.). *Kenya Off-Grid Solar Access Project*. Available online.

159 World Bank (2019). *Kenya: Off-grid Solar Access Project for Underserved Counties (P160009).* Available online.

160 Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon?* Policy Research Working Paper 10558. World Bank. Available online.

Despite being below the 100% access benchmark these SPTs remain ambitious considering geographical and historical challenges. Sub-Saharan Africa has historically lagged in reducing multidimensional poverty[161], and Kenya, like its peers, has a dispersed and rapidly-growing rural population, creating significant barriers to electricity distribution in remote regions. In addition, as part of the last-mile distribution problem, some remote areas lack the necessary technical staff to support the delivery of goods and services.[162]

5.5 Policy Framework and Implementing Actions

The SPTs for KPI 2 align with key legislation and policy actions set by the GoK, and are considered coherent with national and international commitments.

Over the last decade, Kenya has designed and implemented national policies and legislations with specific measures and goals to improve the energy sector and increase the proportion of rural population that have access to electricity. These policies and legislations include:

- The **Energy Act (2019).** Consolidates regulations related to the promotion of renewable energy, including the exploration, recovery and commercial utilization of geothermal energy. The act also outlines an energy policy and integrated energy plan.[163] REREC was established under the Energy Act 2019, and within its functions is to supervise the implementation of Kenya's Rural Electrification Programme. REREC's mission is to "provide sustainable energy solutions for all through renewable energy and rural electrification for social economic transformation".[164] To fulfil its mission, REREC implements different rural electrification projects including the development of a major solar power plant, the Garissa Solar Plant which is the largest grid connected solar power plant in East & Central Africa.[165]

- The **Kenya Vision 2030 (2008)**. As part of the Kenya Vision 2030 agenda, the Rural Electrification Programme will be financed with KES 2.7 billion and aims to provide electricity to public facilities including 460 trading centers and 110 secondary schools.[166] Furthermore, the **MTP IV (2023 - 2027)** is aligned with the BETA

[161] UNDP (2016). *Getting to the Last Mile in Least Developed Countries*. Available online.
[162] USAID (2024). *Kenya Electricity Access Market Assessment 2024*. Available online.
[163] The Republic of Kenya (2019). *Kenya Gazette Supplement. The Energy Act, 2019.* Available online.
[164] REREC (n.d.). *About us.* Available online.
[165] REREC (n.d.). Our Work. *The 50 MW Garissa Solar Power Plant*. Available online.
[166] Kenya Vision 2030. (n.d.). *Rural Electrification Programme*. Accessed December 8th, 2024. Available online.

objectives and aims to achieve universal electricity access by 2030 by connecting every household and business to the grid. Among the projects considered in the MTP IV, it includes the construction and upgrading of 54 sub-stations; connecting to electricity 2.3 million additional customers and 30,000 public facilities; the installation of 90,000 transformers and 348 mini grids; the development of Mini and Macro Off-Grid Power Policy; and the review of Energy Policy (2018) and the Energy Act (2019).[167] The MTP IV also considers the execution of other electricity access projects, such as the Last Mile County Internet Connectivity Project Phase IV and V[168], the construction of National Optic Fiber Backbone, projects to construct communications infrastructure and services, among others.[169]

- The **NCCAP 2023-2027 (2023)**. Presents the detailed climate change priority actions, including priorities for the energy sector and the strategic objective of ensuring an electricity system that is resilient to climate change and promotes energy efficiency, to encourage the transition to clean cooking. The actions that support the achievement of such strategic objectives include the promotion of clean and affordable renewable energy sources, enhancing electricity network expansion and electricity access for on-grid and off-grid areas, the construction of climate-proof energy infrastructure, etc. For example, as part of the enhancement of connection to electricity, the expected results by 30th June 2028 are: 75,000 lanterns installed under the Public Lighting Project, and losses in electricity transmission and distribution reduced from 23% to 16.5%.[170]

- The **National Energy Policy 2025–2034 (2025)**. The new policy builds upon the blueprint set by the Energy Policy of 2018 and establishes the strategy for Kenya's energy sector over the next decade. The strategic objectives of the new Energy Policy include the achievement of universal electricity access by 2030; the diversification of the energy matrix prioritizing renewable energies; promoting clean cooking technologies; enhancing energy efficiency; promoting innovation; and supporting just and equitable energy transition.[171]

---

[167] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.

[168] The Ministry of Information, Communications and the Digital Economy (MICDE). *Last Mile County Connectivity Project (LMCCP). Accessed March 24th, 2025.* Available online.

[169] State Department for Economic Planning (2024). *Fourth Medium Term Plan (MTP IV) 2023-2027: "Bottom-Up Economic Transformation Agenda for Inclusive Growth".* Available online.

[170] Ministry of Environment, Climate Change and Forestry (2023). *National Climate Change Action Plan 2023-2027.* Available online.

[171] Ministry of Energy & Petroleum (2025). *National Energy Policy 2025 – 2034.* Available online.

- The **Kenya National Electrification Strategy (2018).** Presents a roadmap for achieving universal access to electricity in the country. The KNES is determined to fulfill the potential for: 269,000 connections to the grid through grid expansion and 2.77 million connections to the grid; 35,000 connections through 121 new mini grids; and 1.96 million connections through standalone solar home systems.[172]

Furthermore, Kenya has engaged and put into place partnerships with various international organizations and countries to access financing, funding and technical assistance for electrification projects at national and at county level. The GoK has established effective partnerships with international entities such as the World Bank, KfW, the African Development Bank (AfDB), the United Nations Development Programme (UNDP), the European Union (EU), and the GEF.

As a result of these partnerships, with the aid of international entities, the GoK has executed programs for improving rural electrification, including the facilitation of last-mile electricity connectivity in Kenya:

- The **Last Mile Electricity Connectivity Programme III**, financed by the GoK with a USD $150 million (KES 19,500 million) loan from the AfDB[173], aims to increase on-grid electricity access for households, social-based infrastructure facilities, and micro, small and medium-sized enterprises. A target of 150,047 last-mile electricity connections in the six-year implementation period in the rural and peri-urban areas in 45 counties across the country. The beneficiaries of this Programme include 139,480 households, 10,521 MSMEs, and social infrastructure amenities (23 educational institutions, 15 health facilities, and 8 water supply facilities) that will be connected to the electricity grid.[174]
- The **Kenya Off-Grid Solar Access Project (KOSAP)**, an electrification initiative established with the World Bank. Launched in 2019, KOSAP has the objective of bringing clean electricity to remote communities.[175] This program is also implemented by the REREC and Kenya Power & Lighting Company (KPLC) and aims to achieve Kenya's goal of universal electricity access by 2030, by installing quarter-million standalone solar home systems and 120 mini-grids by 2030.[176] The project aims to reach 277,000 households (representing about 1.5 million people) in the 14 counties of West Pokot, Turkana, Marsabit, Samburu, Isiolo, Mandera,

[172] World Bank (2018). *Kenya National Electrification Strategy: Key Highlights 2018*. Available online.
[173] Global Infrastructure Hub. (n.d.). *Last Mile Connectivity Program – Kenya.* Available online.
[174] African Development Bank Group (n.d.). *Kenya - Last Mile Connectivity Project III.* Available online.
[175] World Bank Group. (n.d.). *Kenya: Off-grid Solar Access Project for Underserved Counties*. Available online.
[176] World Bank Group. (n.d.). *Kenya: Off-grid Solar Access Project for Underserved Counties*. Available online.

Wajir, Garissa, Tana River, Lamu, Kilifi, Kwale, Taita Taveta and Narok.[177] Furthermore, the project will enable 387 public facilities such as secondary schools, health facilities, and administrative offices to be electrified through solar power; and will facilitate the sale of 60,000 clean cooking stoves.[178]

- The World Bank's **Mission 300**, in partnership with the AfDB, holds the mission of connecting 300 million people to electricity in Sub-Saharan Africa by 2030.[179] Launched in 2024, the initiative builds on diverse partnerships with governments, actors from the private sector and other initiatives. ESMAP is one of Mission's partners and it has supported clean energy initiatives in the region, including the development of the KNES.[180]

[177] Ministry of Energy and Petroleum (n.d.). *Renewable Energy Project & Studies*. Available online.
[178] Ministry of Energy and Petroleum (n.d.). *Renewable Energy Project & Studies*. Available online.
[179] World Bank Group. (n.d.). *Mission 300 is Powering Africa*. Available online.
[180] ESMAP (n.d.). *Powering Africa: ESMAP at the Core of Mission 300*. Available online.

6. Financial Mechanism

The GoK will link the financial characteristics of instruments issued under this SLF Framework to the achievement or non-achievement of one or more of the defined SPTs. As illustrated in **Figure 13** below, specific performance outcomes relative to each KPI can trigger coupon rate adjustments, creating a transparent, performance-based incentive structure.

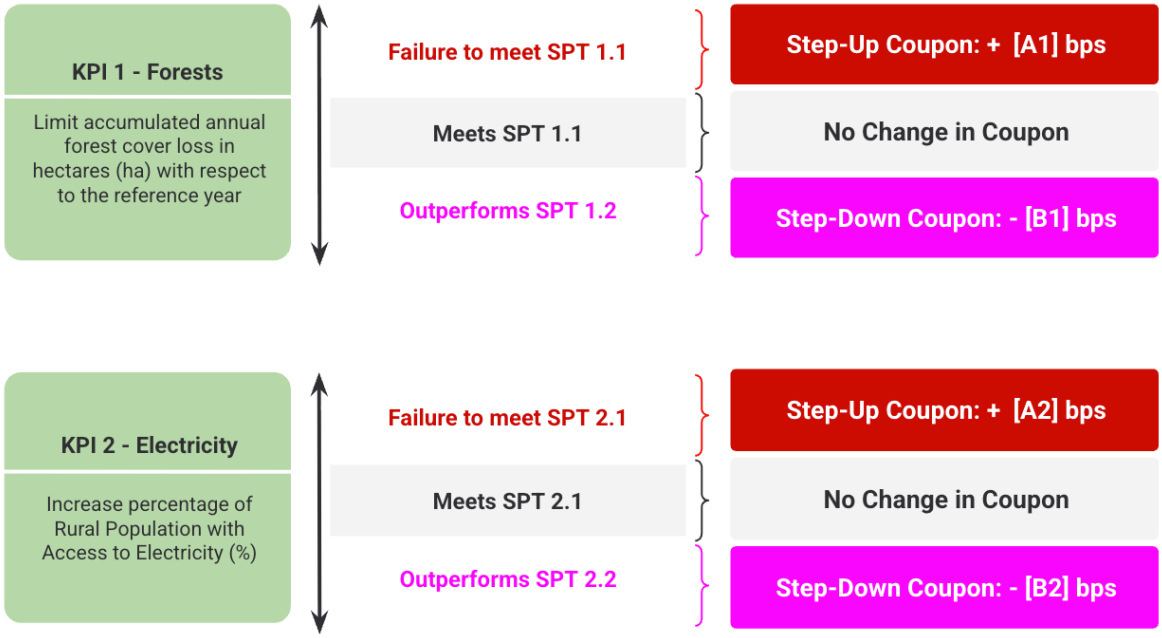


Figure 13. Two-Way Pricing Structure

Under the dual ratchet mechanism:

- **Step-Up Coupon:** Applied when the GoK fails to meet defined SPTs. This results in a penalty in the form of an increased coupon rate, leading to higher debt servicing costs.
- **Step-Down Coupon:** Applied when the GoK outperforms its higher-tier SPTs. This triggers a reduction in the coupon rate, rewarding strong performance by lowering borrowing costs.
- **No Change:** When the GoK meets but does not exceed baseline SPTs, the coupon remains unchanged.

This pricing structure could be applied independently to each KPI, allowing differentiated responses:

- **For KPI 1 – Forestry:** Limiting annual forest cover loss relative to a reference year.

- **For KPI 2 – Electricity:** Increasing the rural population's access to electricity.

At the same time, each KPI is tied to specific performance thresholds:

- **SPT 1.1 / SPT 2.1:** Baseline targets; meeting them avoids a step-up but earns no reduction.
- **SPT 1.2 / SPT 2.2:** Ambitious targets; surpassing them unlocks a step-down incentive.

The adoption of a dual structure offers clear and balanced incentives for the GoK, investors, and lenders. Additionally, this structure can enhance Kenya's credit profile while encouraging strong performance on sustainability objectives.

The **step-up mechanism** aligns with global practices in sustainability-linked instruments, ensuring accountability by increasing borrowing costs if the GoK fails to meet the SPTs. This serves as a deterrent against non-compliance and reinforces Kenya's commitment to its sustainability goals. The **step-down mechanism** takes a more innovative approach[181] by rewarding overachievement. It reduces borrowing costs when more ambitious sustainability milestones are achieved. By offering a positive financial incentive, this mechanism encourages greater efforts in implementing sustainability policies and actions.

This structure creates incentives in both directions, reinforcing Kenya's commitment to sustainability while ensuring that financial consequences remain tied to actual progress. By penalizing underperformance and rewarding overperformance, it motivates the government not only to meet its sustainability commitments but to exceed them whenever possible.

The amount, timing, and mechanism for application of any financial implications (including any potential coupon adjustment, step-up/step-down, or other economic characteristics) will be specified in the legal documentation for each specific SLFI issuance, which will also set out the applicable KPI definitions, calculation methodologies, and the relevant SPT Event(s) and trigger event(s), together with any fallback mechanism where an SPT Event cannot be calculated or observed satisfactorily on the scheduled observation date due to data gaps, methodological disruption, force majeure, or other material impediments.

[181] Uruguay and Thailand include step-downs in their SLF frameworks.

7. Reporting Commitments

Until the maturity of each SLFI issued under this Framework and, in any case, for any period relevant for assessing the trigger of the SPTs performance, the GoK will publish the following:

1) **SLFI Annual Report:** This report will provide updated information on the performance of the KPIs against each SPT, including baselines, observation dates, and any additional quantitative or qualitative information enabling investors to monitor progress toward the SPTs. The Annual Report will also include interim updates on any actions, policies, regulations, or changes in the regulatory framework related to both KPIs.

2) **External Verification Reports:** The verified results for each KPI will be published in a separate document, in accordance with international methodologies and standards for calculating the KPIs.

The PDMO in the NT will be responsible for collecting and consolidating information on the KPIs, coordinating actions across relevant ministries, and preparing the SLFI Annual Report. This process will be supported by the SLFI Task Forces to ensure accuracy and alignment with sustainability objectives. **Figure 14** and***Figure 15*** illustrate key stakeholders involved in the preparation of the SLFI Annual Report.

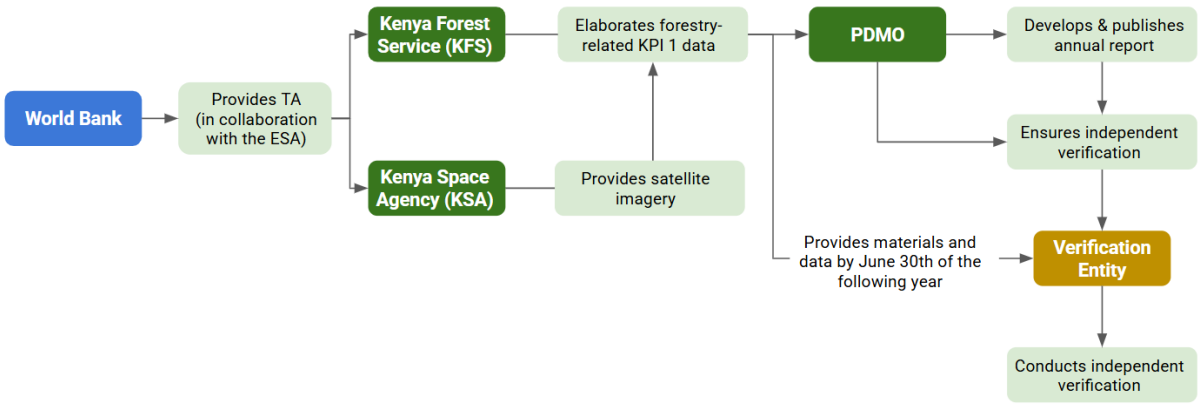


Figure 14. Key Stakeholders Responsible for KPI 1 Reporting

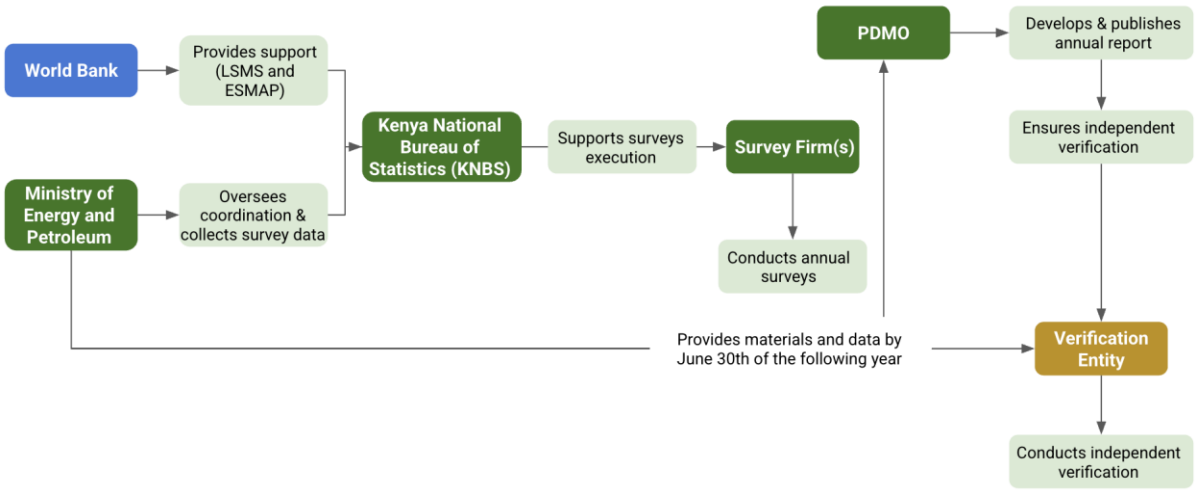


Figure 15. Key Stakeholders Responsible for KPI 2 Reporting

The SLFI Annual Report will be published on the NT website and made available by December 31st each year, six months after the end of the Financial Year. Kenya's reporting cycle will follow the following approach:

- **KPI 1** will be reported and externally verified biennially. In years when KPI 1 is not reported, the SLFI Annual Report will still provide interim information on actions taken, policies implemented, and progress made toward the relevant SPT, while the verified results for KPI 1 will be published every two years in a separate verification report.

- **KPI 2** will be reported and externally verified biennially. In years when KPI 2 is not reported, the SLFI Annual Report will still provide interim information on actions taken, policies implemented, and progress made toward the relevant SPT, while the verified results for KPI 2 will be published every two years in a separate verification report.

In the event that, between the issue date of any SLFI and the relevant Target Observation Date, there is (i) any change in, or amendment to, applicable laws, regulations, rules, guidelines, or policies of the Republic of Kenya that is relevant to the KPI(s) or SPT(s); and/or (ii) a material change to the methodology for the calculation of any KPI to reflect updates in scientific practice, market standards, availability of data, or official national MRV/survey systems, which individually or in aggregate has a significant impact on the level of any SPT or any KPI baseline (each, a "Recalculation Event"), the relevant SPT and/or KPI baseline may be recalculated in good faith by the GoK to reflect such change,

provided that an independent external verifier confirms that the proposed recalculation is consistent with, or higher than, the initial level of ambition of the relevant SPT(s), taking into account the Recalculation Event, and that the nature of the change and its implications are transparently disclosed in the SLFI Annual Report and/or the relevant instrument documentation.

8. External Review

The GoK plans to obtain and publicly disclose a Second Party Opinion (SPO) to assess the framework's alignment with international best practices, including ICMA's 2024 SLBPs, the 2025 SLLPs of the LMA, as well as relevant guidelines from the APLMA and the LSTA.

The SPO will be provided by a globally recognized independent firm with extensive expertise in the field. This review will provide an objective assessment of the framework's credibility, transparency, and consistency with market standards.

To ensure accessibility and transparency, the SPO will be published on the National Treasury website, along with any relevant updates or supporting documents (i.e. SLF Framework, SLFI Annual Reports, Verification Reports, among others).

Any material modifications to the SLB Framework will be duly assessed to determine the necessity of an updated SPO. Should any relevant updates be made, the GoK will secure a new external review to ensure continued transparency and alignment with internationally recognized standards.

Amendments to this Framework and Legal Considerations

The GoK reserves the right to review and update this Framework as needed to ensure alignment with evolving market best practices and any revisions to relevant principles. Additionally, the GoK will reassess the Framework whenever there are significant changes in scope, methodology, KPIs, or the calibration of SPTs. If necessary, these reviews may result in modifications or updates to the Framework. Any major updates will require prior review and approval from qualified external review providers. Future versions of the Framework will continue to uphold or enhance current transparency and reporting standards, including external verification. Updated versions will be made available on the National Treasury website and will replace the previous version. However, any changes to this Framework will not affect the terms and conditions of SLFIs issued before the update.

Kenya's SLF Framework adheres to all relevant laws and regulations, including applicable securities regulations, environmental legislation, and social governance policies.

The SLF Framework contains forward-looking statements regarding anticipated sustainability performance and expected outcomes. These projections are aspirational in nature and subject to variability due to external factors such as regulatory changes, economic conditions, and climate-related developments. As such, these statements do not constitute guarantees of future performance, and investors should recognize the inherent uncertainties involved. The SLF Framework is intended solely for informational purposes and should not be interpreted as an investment recommendation, financial advice, or an offer to buy or sell securities. Investors should rely on their own due diligence and professional advice when making investment decisions related to sustainability-linked financial instruments. The GoK assumes no responsibility for any investment decisions made by investors based on the contents of the SLF Framework. Investors bear full responsibility for assessing the risks and benefits of any investment and should seek independent legal and financial advice before making commitments. This disclaimer is particularly relevant for jurisdictions with stringent securities regulations, such as the United States, where strict liabilities may apply to issuers.

ANNEX 1: REACH and FAB Methodology

Relative Evaluation and BenCHmarking (REACH) Framework: KPI Identification

The REACH Framework evaluates performance by comparing it to a benchmark model to identify KPIs that reflect the issuer's direct influence. This approach is especially relevant for sovereign issuers, where policy actions play a critical role in achieving goals, but external factors beyond the issuer's control—such as macroeconomic conditions—can significantly impact outcomes.

Instead of relying solely on observed outcomes, the REACH Framework uses a statistical model that incorporates historical predictors of the KPI, adjusting for external factors. For instance, deforestation can be driven by macroeconomic influences such as commodity prices, climate conditions, and forest loss trends (see **Figure 16**).

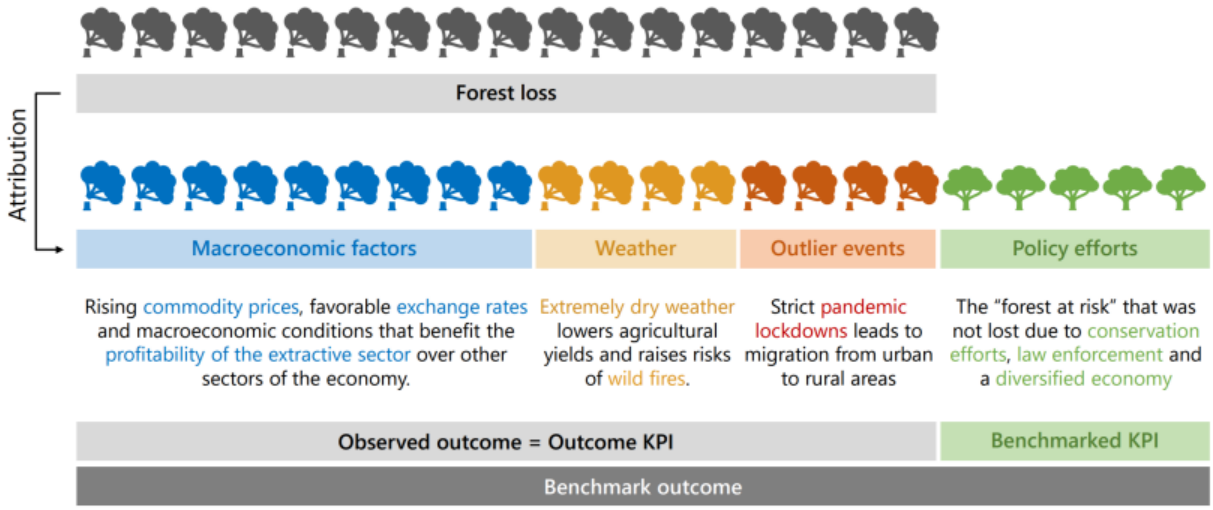
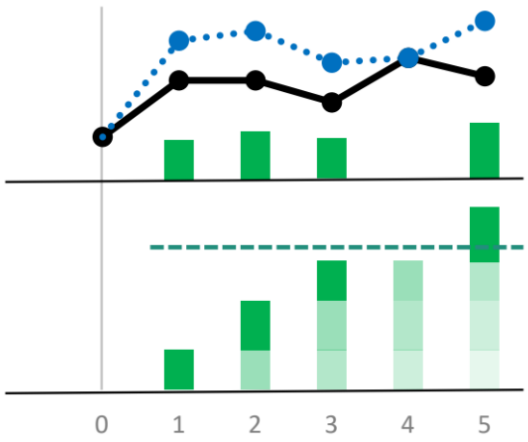


Figure 16. Benchmarked KPI for Deforestation[182]

To assess policy effectiveness in avoiding deforestation, it is important to determine how much forest would have been lost without government intervention (the *benchmark outcome*) and compare it to the *observed outcome*. The difference, or avoided deforestation, represents the KPI attributable to policy actions (*benchmarked KPI*).[183] **Figure 17** illustrates the components of this Framework:

[182] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank.* Available online.
[183] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank*. Available online.



Component	Example
Benchmark outcome	Expected deforestation
Observed outcome = outcome KPI	Observed deforestation
Benchmark – observed = benchmarked KPI	Avoided deforestation
Sustainability performance target (SPT)	Forest preservation goal over five years

Note: The benchmark outcome is a *counterfactual* and is not observed. It needs to be estimated by a statistical benchmark model.

Figure 17. Components of the REACH Framework[184]

A BAU scenario is then extrapolated for the benchmark outcome to assess whether the observed impact is statistically significant or could have occurred by chance.

Figure 18 illustrates how confidence intervals (e.g., 50% and 95%) are used to evaluate the reliability of the observed outcomes:

- **Within the 50% confidence interval:** The impact could be due to chance, making it difficult to attribute the KPI to policy actions.
- **Beyond the 95% confidence interval:** The observed impact is highly unlikely to be due to chance, providing stronger evidence of policy-driven results.

[184] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank*. Available online.

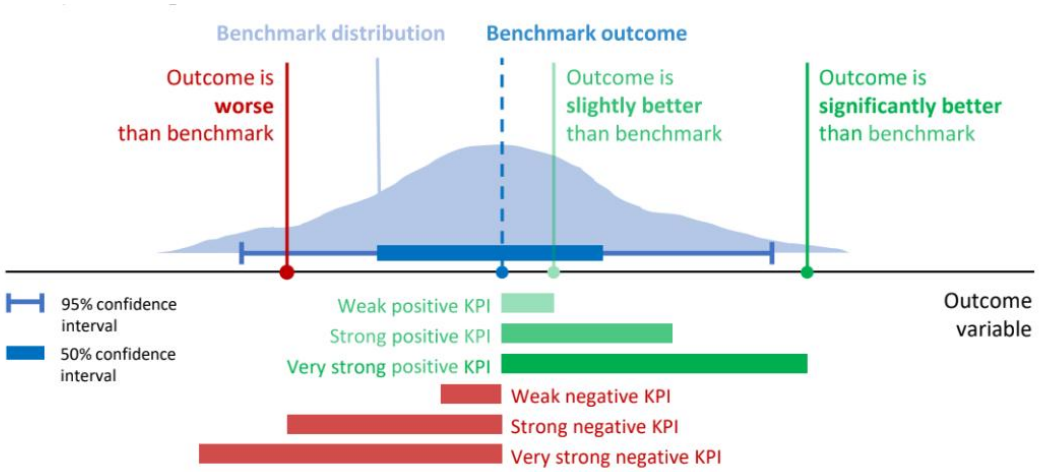


Figure 18. Actual Performance or Coincidence? [185]

This approach enables penalties or rewards related to the SLFI to be adjusted based on how the KPI performs relative to the benchmark.

Feasibility and AmBitiousness (FAB) Matrix: SPT Setting

SPTs are set using the FAB matrix, which evaluates whether the target is both ambitious and feasible.

- **Ambitiousness** is assessed by extrapolating the BAU scenario using cumulative benchmarked KPI values.
- **Feasibility** is determined by analyzing historical data from peer countries to evaluate whether similar goals have been achieved.

Reachable targets are those that balance high ambitiousness with high feasibility (See **Figure 19**).[186]

[185] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank.* Available online.
[186] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank*. Available online.

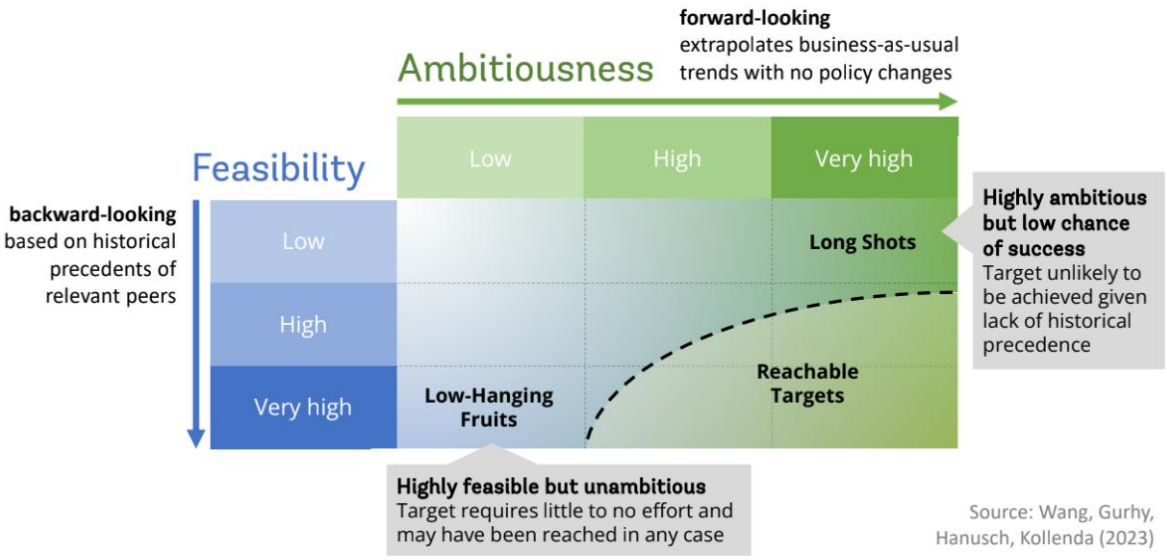


Figure 19. FAB Matrix[187]

By combining BAU and peer analyses, a target range is identified to determine both achievable goals and overperformance thresholds.

[187] Wang et al. (2023). *Could Sustainability-Linked Bonds Incentivize Lower Deforestation in Brazil's Legal Amazon? Policy Research Working Paper 10558. World Bank*. Available online.

ANNEX 2: Data Calibration for KPI 1

Data Calibration and Alignment

The FAB model uses standardized datasets to compare countries. However, Kenya's national definition of forests differs from the global definition used in the GFW dataset.

Kenya defines forests as areas with:

- Minimum tree height of 2 meters,
- Canopy density of at least 15%,
- Minimum area of 0.5 hectares,
- Excludes both public and private plantation forests. [188]

GFW[189], by contrast, defines tree cover using a 5-meter height, 0.09-hectare area, and does not exclude plantations—leading to potential overestimation of forest area and loss for Kenya.

To align the data (see

[188] Kenya Forest Service (2023). *Kenya Forest Service Strategic Plan 2023-2027.* Available online.
[189] Global Forest Watch (2024). *Tree Cover Loss in Kenya.* Available online.

Table *5*):

- The KFS assessments from 2013, 2017, 2018 and 2021 are used to recalibrate GFW estimates.
- GFW consistently overestimates forest area by ~3× across forest types.[190]
- A combination of 4 calibration factors is applied to applied to GFW's annual tree cover loss estimates to reflect Kenya's forest definition more accurately

This approach ensures consistency between FAB-generated benchmarks and the national monitoring system used by KFS.[191]

[190] The calibration factors are 0.314411, 0.320078, 0.332049, and 0.33477. The GFW 10% canopy density is used because it most closely aligns with the share of each forest type compared with the KFS data.
[191] Wang, de Smit et al., (2025, forthcoming). *Building Incentive-Compatible Forestry KPIs for Sustainability-linked Financing in Kenya.* Policy Research Working Papers. World Bank Group.

Table 5. Data Calibration

	High	Moist	Dry	Total	Plantations (excluded)
KFS 2021	1,098,736	597,780	1,299,019	3,509,430	513,895
Share of Total	31.3%	17.0%	37.0%	100.0%	14.6%
GFW10	3,971,007	1,762,976	4,630,939	10,483,118	118,196
Share of Total	37.9%	16.8%	44.2%	100.0%	1.1%
Scaling Factor	27.7%	33.9%	28.1%	**33.5%**	**-**

ANNEX 3: World Bank Multi-Tier Framework

Attribute		Tier 0	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Capacity	*Power capacity ratings (In W or daily Wh)*	Less than 3W	Min 3W	At least 50W	At least 200W	At least 800W	At least 2kW
		Less than 12 Wh	At least 12 Wh	At least 200 Wh	At least 200Wh	At least 3.4 kWh	At least 8.2 kWh
	OR Services		Lighting of 1,000 lmhr per day	Electrical lighting, air circulation, television and phone charging are possible			
	Electricity Sources						
Availability	*Daily Availability*	Less than 4 hours	At least 4 hours		At least 8 hours	At least 16 hours	At least 23 hours
	Evening Availability	Less than 1 hour	At least 1 hour	At least 2 hours	At least 3 hours	At least 4 hours	
Reliability		More than 14 disruptions per week			At most 14 disruptions per week or at most 3 disruptions per week with total duration of more than 2 hours	>3 to 14 disruptions/week or ≤ 3 disruptions/week with >2 hours of outage	At most 3 disruptions per week of total duration < 2 hours
Quality		Household experiences voltage problems that damage appliances				Voltage problems do not affect desired appliances	
Affordability		Cost of standard consumption package of 365 kWh per year			Cost of a standard consumption package of 365 kWh per year less than 5% of household income		
Formality		No bill payments made for the use of electricity				Bill paid to utility, prepaid card seller, or authorized representative.	
Health and Safety		Serious or fatal accidents due to electricity connection				Absence of past accidents and perception of high risk in the future	

Figure 20. World Bank Multi-Tier Framework[192]

[192] HPL elaboration based on: IEA, IRENA, UNSD, World Bank, WHO. (2024). *Tracking SDG 7: The Energy Progress Report*. Available online.