



Invest in Kenya's Energy & Renewable Energy sectors



MITI
MINISTRY OF INVESTMENTS,
TRADE & INDUSTRY





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Kenya at a Glance



3rd largest
economy in sub-Saharan Africa.



US\$ 110.35 Bn
7.5% growth
Dominant economy in EAC
≈46% of EAC's GDP.



US\$ 2,081.8
+75% growth since 2010
Growing middle-class with an
increasing appetite for high-value
goods and services.



- Regional economic hub
- Host to over 200 Multinational Corporations with regional & continent-wide HQs in Nairobi
- Robust financial system
 - 43 banking institutions
 - 9 representative offices of foreign banks,
 - 13 Microfinance Banks,
 - 3 credit reference bureaus
 - 19 Money Remittance Providers
 - 73 forex bureaus



- Africa's UN HQs (UNON) which is one of four main UN secretariat duty stations globally.
- Global headquarters of UNEP and UN-Habitat, together with a joint presence of 23 other UN Agencies.



- Communications & Logistics hub of the region
- Access to regional transport corridors.
 - 4 international airports
 - 2 sea ports and 2 ICDs
 - 30-freight and 2-passenger rail services daily between Nairobi and Mombasa.

Existing Bilateral Trade Treaties with Kingdom of Saudi Arabia



The Investment Environment is Conducive



Source: World Bank, UNCTAD, CBK, KNBS

1

- Guaranteed repatriation of capital and profits
- Constitutional protection against expropriation
- Investment guarantee against non-commercial risks: ICSID, MIGA and ATIA

2

- One stop shop facilitation
- Periodic Presidential roundtables with private sector
- Digitization of government services
- Facilitative Industrial zone programs - EPZs & SEZs

3

- Political and macroeconomic stability.
- High labour productivity: a large pool of youthful, trainable and literate workforce
- Globally competitive:
 - 56th in the Ease of Doing Business
 - 1st for five years in a row in financial inclusion
 - 1st globally in protection of minority investors
 - Nairobi – Africa's leading business travel destination and hub for impact investors.
 - 2nd in Africa in the logistics performance index

Wide Market Access & Good Trade Relations



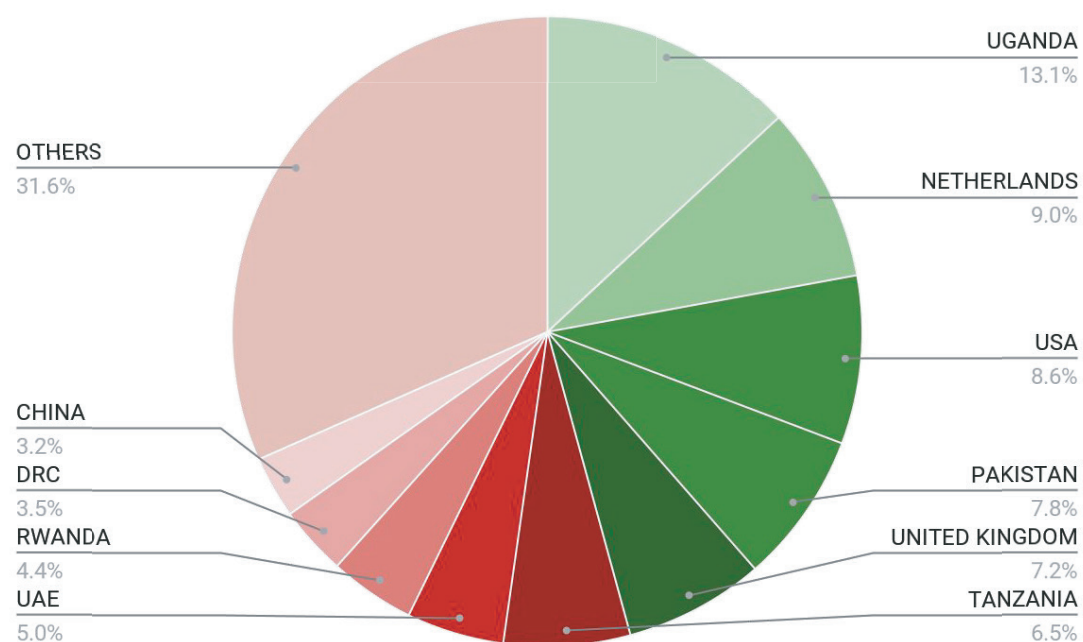
US\$ 17.43 Bn
Total Imports



US\$ 6.09 Bn
Total Exports

Preferential Trade Agreements

1.7Bn ~ US\$ 40Tn
Population Market value



Kenya's untapped export potential **~ US\$ 4.1 Bn (ITC)**

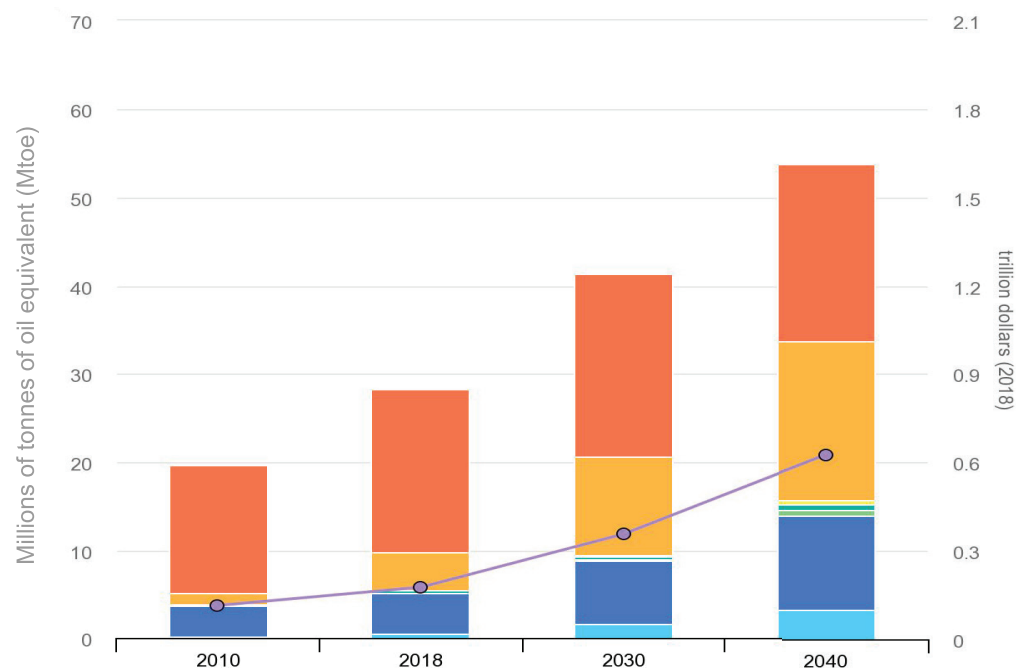


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Kenya's Energy market

Kenya primary Projected Energy Demand and GDP (\$ Trillion)



Source: International Energy Agency

GENERATION CAPACITY

- Total Installed Capacity : 2,819 MW
 - Hydro: 826 MW
 - Geothermal: 828 MW
 - Thermal (MSD & GT): 749 MW
 - Wind: 331 MW
 - Solar: 51 MW
 - Biomass: 28 MW

CURRENT GRID CONNECTIONS

- Current Electricity Access Rate: 75%
 - Urban: 100%
 - Rural: 65.7%

Kenya's Water Market



- The Kenya's National Water Master Plan 2030 estimates that \$14 billion in investment in water supply and \$5.4 billion in investment in urban sewerage infrastructure are needed over the next 15 years.
- The current estimated water demand for Nairobi is 650,000 m³/day compared to the production of 482,940 m³/day, and the situation is replicated across the country.
- Currently, demand for water has been exacerbated by unprecedented drought the country has been facing over the last 40 years.
- There exists an opportunity for investment in water infrastructure, water management, and conservation.

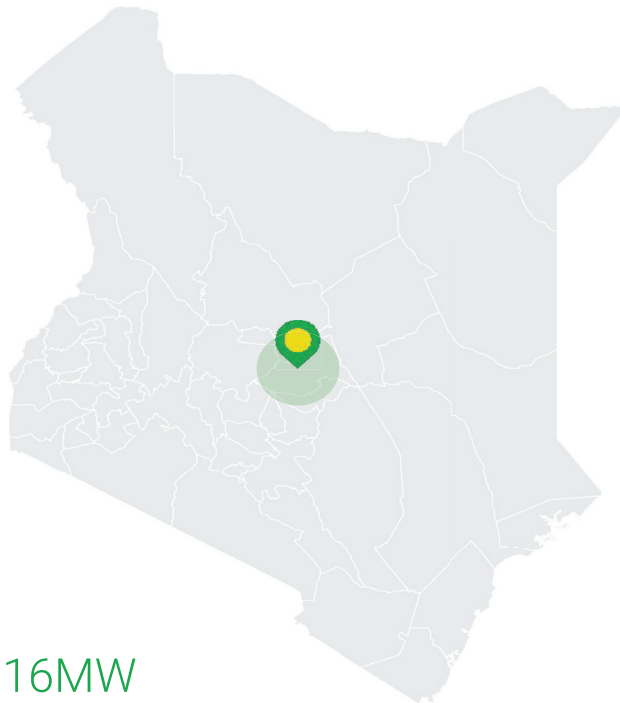
Development Of Water Harvesting Dam



- The country has **7 large dams** with about **3.976 BCM** of stored water for hydropower.
- Total water storage capacity for hydropower, domestic and irrigation is **5.03 BCM** that translates to **107m³** per capita. The recommended global average per capita storage is **1,500m³**.
- 44 dams identified for development. The dams will harvest and store **2.123 BCM** to provide domestic water to **11,570,705** people, provide irrigation water for **442,934 acres** and can support generation of **341 MW** of power.
- The total cost is estimated at **\$ 3.87 Billion**.

Invest in the proposed Isiolo Dam

Estimated Investment Cost: US\$ 136 Million



16MW

Hydropower to be generated



Implementing Agency: National Water Harvesting and Storage Authority

The proposed dam is intended to supply water to Isiolo town, the proposed Isiolo resort city and rural areas of Isiolo, Laikipia and Samburu counties.

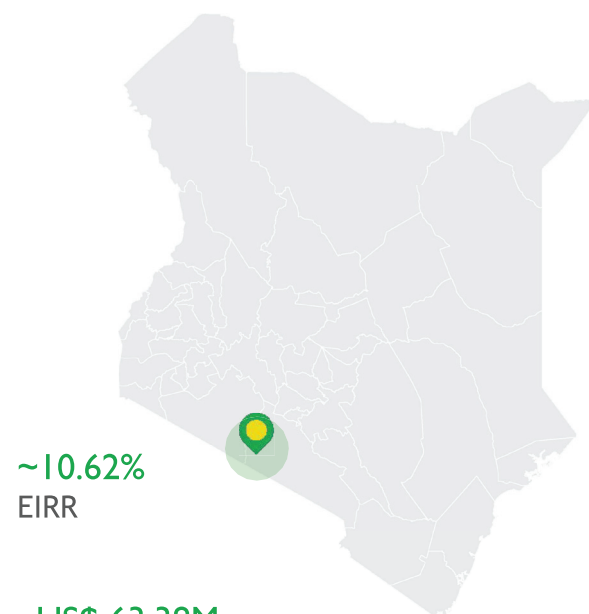
Annual water demand for Isiolo and its environs is 113,681 m translating to an annual demand for 41,493,565 m³.



Public-private Partnerships (PPP)

Invest in the Lower Ewaso Ng'iro South Multipurpose Dam Development

Estimated Investment Cost: US\$ 1.4 Billion



~10.62%
EIRR

~US\$ 63.38Mn
NPV

~1.07
Benefit Cost Ratio (BCR)



Kenya cannot meet the food deficit through rain-fed agriculture alone, hence need for enhanced irrigated agriculture. Water demand is estimated to reach 4,000m³/day for domestic and over 10,000m³/day for industrial use by 2030.



- 3 cascaded dams development
- Hydropower with a potential of 180 MW
- Irrigation of 4,500Ha
- Community Water Supply to 350,000 equivalent inhabitants
- Environmental Conservation of 3,000Ha



The project to be implemented on BOT model through the PPP arrangement. Feasibility studies already done

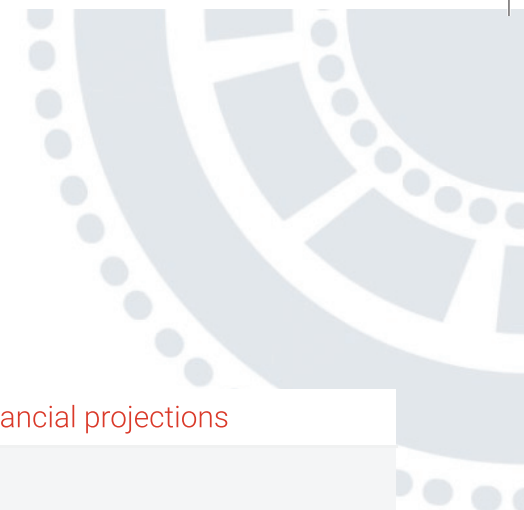
~49.5%
Hydroelectric power generation

~15.3%
Water supply

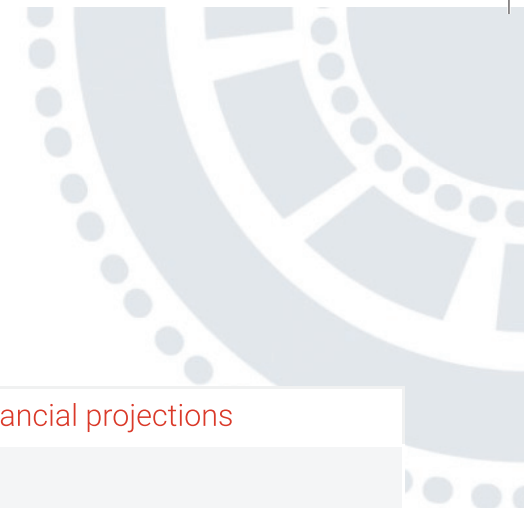
~14.4%
Water management

~13.7%
Irrigated crop development

Other Investment Opportunities

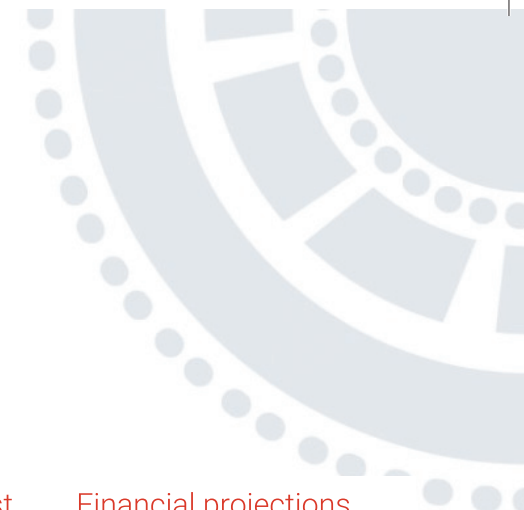


Project	Description	Est. Investment cost	Financial projections
High Grand Falls Multi-purpose Dam	One of the Flagship projects in the Kenya Vision 2030. Located about 260 km from Nairobi City and 50 km downstream of Kiambere Dam. The dam will be the last project on the existing Tana River cascade. Project scope: Irrigation scheme; Hydroelectric power generation; A reservoir; Public water supply	US\$ 1.849 Billion	EIRR ~16.3%; NPV @ 12% ~US\$ 243.3Mn; Benefit/Cost ratio (BCR) ~1.23;
Augmentation of Chebara Pipeline	A water supply project aiming to improve the transmission capacity of Chebara-Kapsoya transmission mainline to evacuate the full design potential of the treatment works of 28,000 m ³ /day and determine the capability of the treatment plant to treat the 34,000m ³ /day maximum outflow from the dam.	US\$ 3.75 Million	BCR: 1.26
Two Rivers Dam and expansion of Sosiani Treatment Plant	The project involves construction of a 38m high Roller compacted dam, construction of a new treatment plant of 60,000m ³ /day capacity. The project will also involve expansion of distribution network within Eldoret town to serve a population of about 1 Million.	US\$ 1.756 Billion	BCR: 1.22
Kamiti 1 Dam project	A proposed water supply project, located along Kamiti River, Kiambu County. The project seeks to supply an additional 16,500m ³ /day of water to the area serving 250,000 residents.	US\$ 32 Million	TBD



Other Investment Opportunities

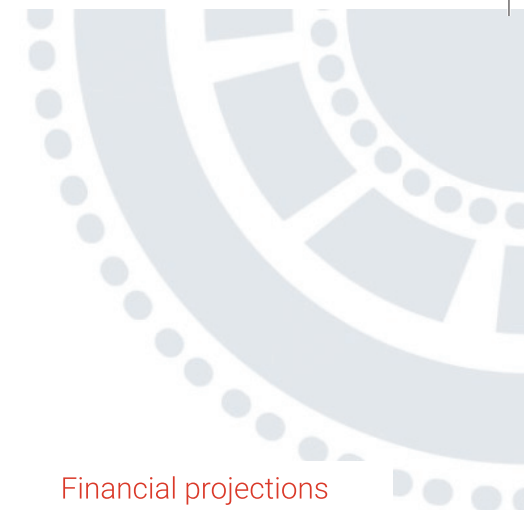
Project	Description	Est. Investment cost	Financial projections
Keben Dam Water Supply Project	Involves construction of a 12m high concrete dam, construction of a new treatment plant of 8,000m ³ /day capacity and expansion of distribution network within Kapsabet and Baraton towns of Nandi County. It will serve a population of about 250,000 people and increase supply hours to 24 from the current 12 hours.	US\$ 56.1 Million	BCR: 1.2
Gatamaiyu Dam project	A proposed water supply project, located along the Gatamaiyu River about 2.5Km North West of Kambururu Shopping Centre. The project target areas are Ruiru, Juja & Githunguri in Kiambu County which currently experience inadequate water supply due to rapid population growth over the years.	US\$ 140 Million	NPV: US\$ 20.89 Mn at 5% EIRR: 13% BCR: 1.35
Bonyunyu Dam project	Located along Gucha River. The project will serve Kisii and Nyamira Counties. The Bonyunyu Dam will be designed to allow sufficient storage for the projected water demand (525,000 people) by 2040	US\$ 92.2 Million	IRR: 6.77%
Water Supply Reduction and Associated Management Project	Project designed to increase the efficiency and effectiveness of water distribution networks and related operations. Entails Network Replacement Works, System Expansion Works that might become necessary because of new customers applying for connections, as well as a provision for Emergency works and Unforeseen works.	US\$ 60 Million	TBD



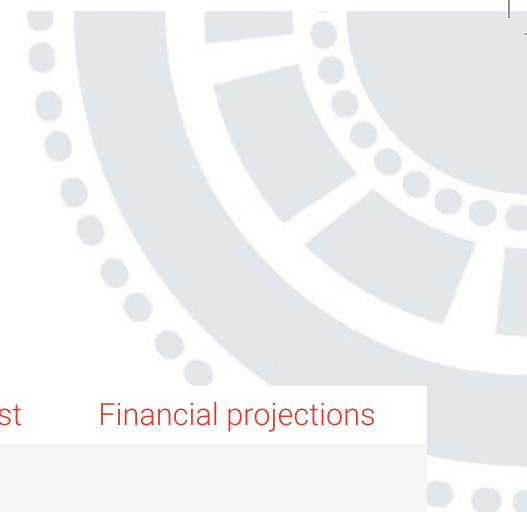
Other Investment Opportunities

Project	Description	Est. Investment cost	Financial projections
Pesi dam project	Project located 1.5Km upstream of the confluence of rivers Pesi and Gathanji in Nyandarua County. Upon completion, the identified project site will have a gross storage capacity of ~15.5 million Cubic meters. Project scope: Conventional Water Treatment Plant ~50,000m³/day; Augmentation of existing water supply network (Approx. 88 Km) and Mini-hydro power Generation of 262kW.	US\$ 108.5 Million	IRR: 14.89%
Rehabilitation and improvement of Eldoret town's existing water network and installation of automatic meter reading	Project aims at reducing Non-Revenue Water from the current 34% to the recommended value of 25%. It will involve replacement of aging water infrastructure in Eldoret town, expansion and extension of the existing water network and Replacement of aged water meters with AMI-enabled (smart meters) and acquisition of AMI meter management.	US\$ 20.8 Million	TBD
Enhancing Food and Water Security for small holders community in the TARDA region	The project aims at enhancing integrated food and water security for small scale holder communities in the TARDA region through promotion of sustainable and effective use of natural resources, enhancing access to water and introduction of improved farming and water management practices.	US\$ 44.24 Million	TBD

Other Investment Opportunities



Project	Description	Est. Investment cost	Financial projections
Lower Muranga Small Holder Irrigation Project	Seeking investors and private sector partners to invest in irrigation & hydropower infrastructure as well as dam development spread across 5 clusters representing 5 regions within the larger Muranga catchment area.	US\$ 102.5 Million	NPV: US\$ 11.76 Mn IRR: 26.67%
Bubisa Integrated Wind Power Generation project	To be located along Marasabit Moyale road. To be implemented as part of the larger Chalbi Desert Integrated Development Programme which has four components: 420MW Wind Power Generation, Water Development, Development of access roads and CSR activities such as construction of schools.	US\$ 906 Million	TBD
Lake Chala Water resources Integrated development project	Project is focusing on irrigated Agriculture, forestry and domestic water supply. Targeted acreage is 2,020ha across 6 sites to be developed in a phased approach. The Coast Development Authority proposes a Build Operate and Transfer model. Project development o be implemented in 3 years.	US\$ 158.29 Million	IRR: 7.48% NPV: US\$ 73.57 Mn Benefit-Cost Ratio: 1.42



Other Investment Opportunities

Project	Description	Est. Investment cost	Financial projections
Radat Dam	This project aims to construct the Dam to regulate the flow of the Perkerra River and enhance the development of the Perkerra Irrigation Scheme. Project scope: Construction of a dam with a storage capacity of 124Mm ³ ; Hydropower generation of 1 MW	US\$ 38.088 Million	TBD
Lowaat Dam	Lowaat Dam and Irrigation Development project is proposed across the lower reach of Kerio River in Turkana East sub county, and approximately 15 km upstream of Lokori town. Project Scope: Water storage reservoir with a capacity for 383.7 Mm ³ ; Irrigation system covering 43,759 acres; Hydropower plant with capacity for 9.3 MW; Water treatment plant with capacity for 17,280m ³ /day to serve 253,000 individuals and livestock use.	US\$ 29.668 Million	TBD
Kithinu Multipurpose Dam	The Project will provide sustainable access to safe water to the 59% currently unserved population (33,000 households), ultimately irrigate 12,000 acres of high value crops and power the Water Treatment Plant and agro-processing industries. Project Scope: Construction of a 44Mm ³ reservoir; 25,000m ³ /day Water Treatment Plant (WTP), Irrigation: Construct Small Hydro Power Plant (SHPP) with capacity for 1 MW together with electricity distribution to the WTP.	US\$ 10.744 Million	TBD



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Get Started with KenInvest and KDC



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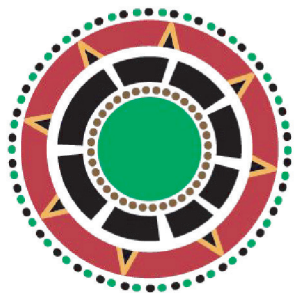


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