Republic of Kenya

PREPARED FOR UKRAINE INVESTORS

INVESTMENTS IN ENERGY SECTOR IN KENYA

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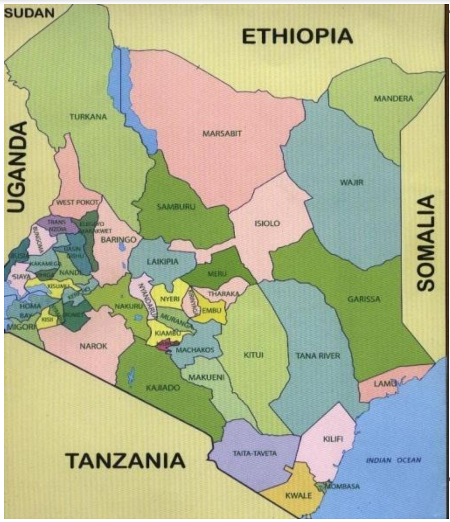
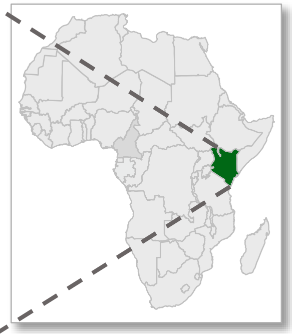
December, 2016
NAIROBI

Track Record of Resilient and Inclusive Growth

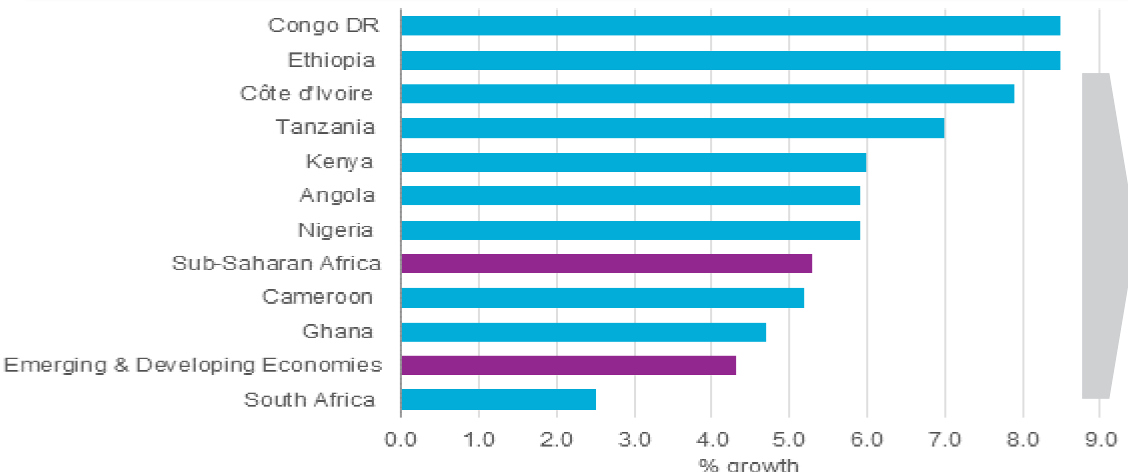
Kenya, the Economic Hub of East Africa, has Demonstrated Capacity to Convert Investments into Sustainable Growth





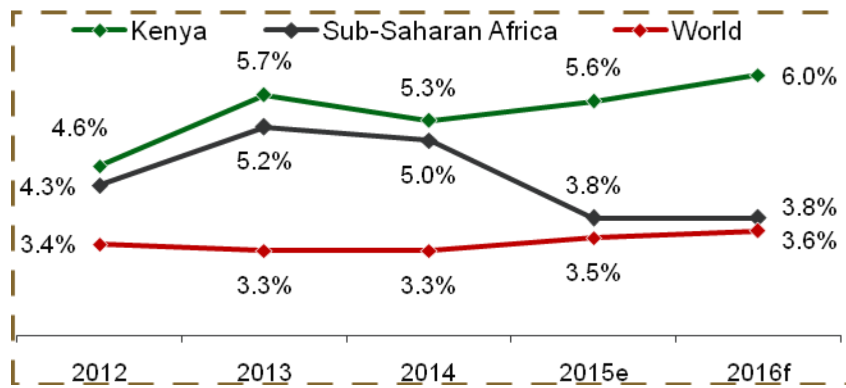
Territory	581,309 Sq. Kilometres
Capital	Nairobi
Population (m, 2015)	44.2
GDP Growth Rate (2015)	5.6%
Nominal GDP (2015)	US$ 59.3 billion
GDP Per Capita (US$, 2015)	1,409
Sovereign Credit Ratings	B1 (Moody's) / B+ (S&P) / B+ (Fitch)
Currency	Kenya Shilling ("KES")
Average Exchange Rate	USD/KES: 101.7856 (through March 2016)
System of Government	Multi-party democracy with five (5) year election cycles since 1992 Next general elections scheduled to take place in August 2017
Borders	Uganda, Tanzania, Ethiopia, South Sudan, Somalia

Kenya is Sub-Saharan Africa's 5th Largest Growing Economy with a Track Record of Resilient and Inclusive Economic Growth



Source: Euromonitor International from national statistics/Eurostat/OECD/UN/IMF

Real GDP Growth (Annual %) [1]



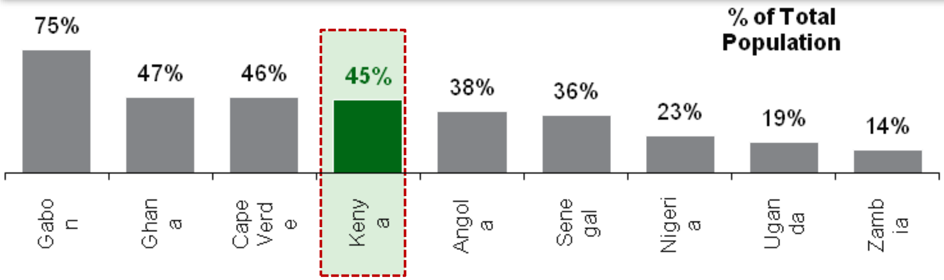
Note: (1) Estimates. The real GDP growth data compares data from KNBS for Kenya and IMF World Economic Outlook (WEO) October 2015 data for Sub-Saharan Africa (SSA) and World.

One of the Best Business Environments in Africa

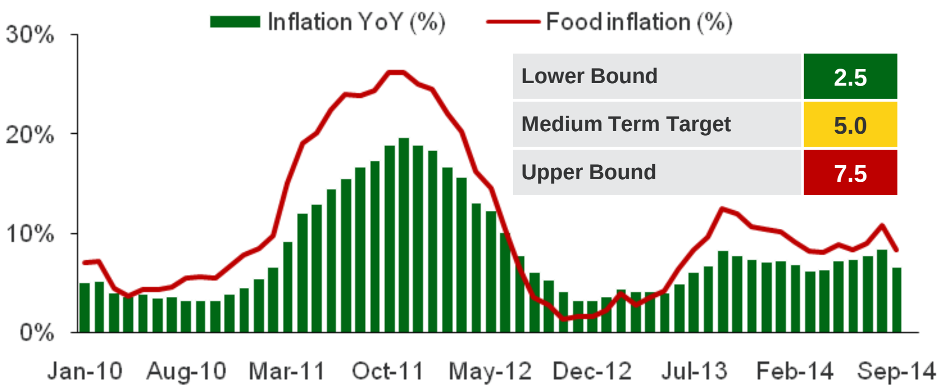
Kenya Steps-Up in Ease of Doing Business

Year	Rank	Change
2016	108	21 ⬆
2015	129	

One of the Largest Middle Class Populations in SSA



Inflation Under Control

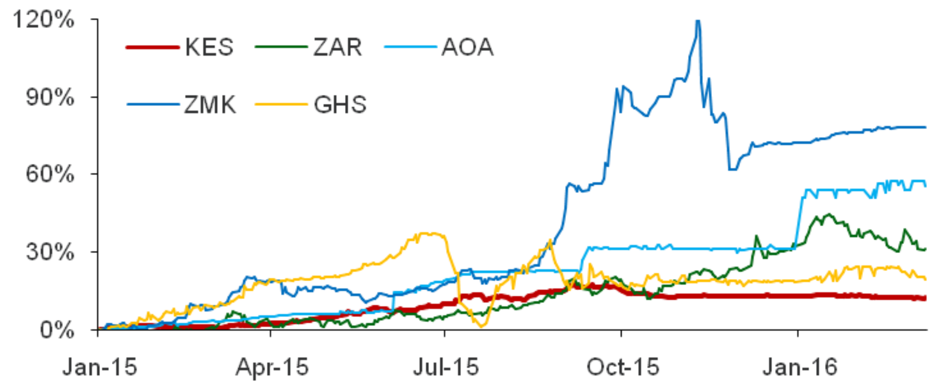


Lower Bound	2.5
Medium Term Target	5.0
Upper Bound	7.5

Logistics Outperformance Cementing Status as Trade Hub

Economy	Logistics Performance Index	Sub Saharan Africa Rank
South Africa	34	1
Malawi	73	2
Kenya	74	3
Nigeria	75	4
Cote d'Ivoire	79	5
Rwanda	80	6
São Tomé and Príncipe	84	7
Namibia	93	8

Stable Currency Relative to Peers



Sources: UN Human Development Index, AFDB Middle Class Index, World Bank Logistics Performance Index 2014, World Bank Doing Business 2016

Mission & Vision

Mission

To facilitate provision of :

- ✓ **clean,**
- ✓ **sustainable,**
- ✓ **affordable,**
- ✓ **competitive and**
- ✓ **secure energy**

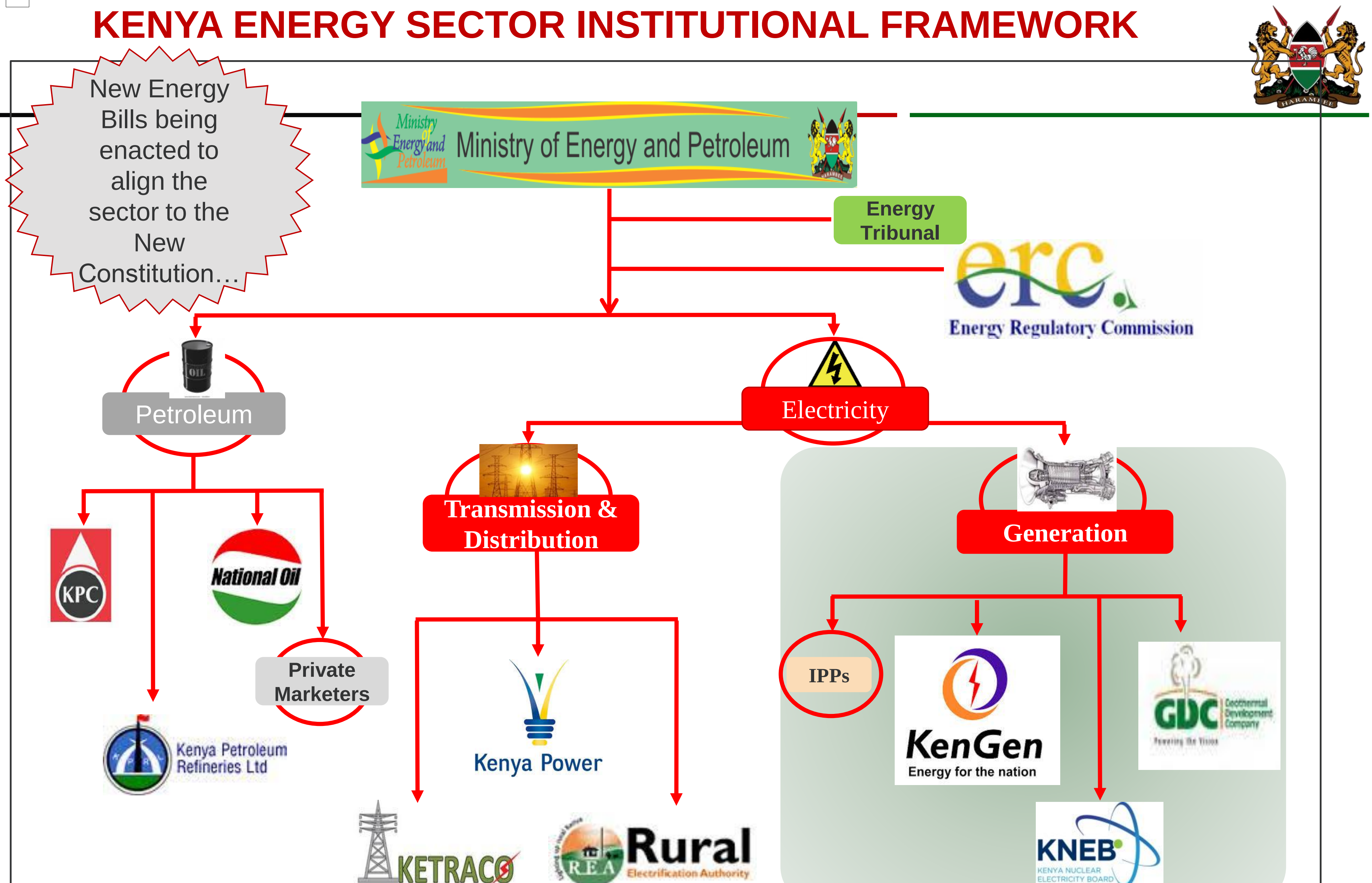
for national development while protecting the environment …

Vision

… affordable, competitive quality energy

for all Kenyans …

KENYA ENERGY SECTOR INSTITUTIONAL FRAMEWORK



IPPs – Independent Power Producers
KPC – Kenya Pipeline Company Ltd

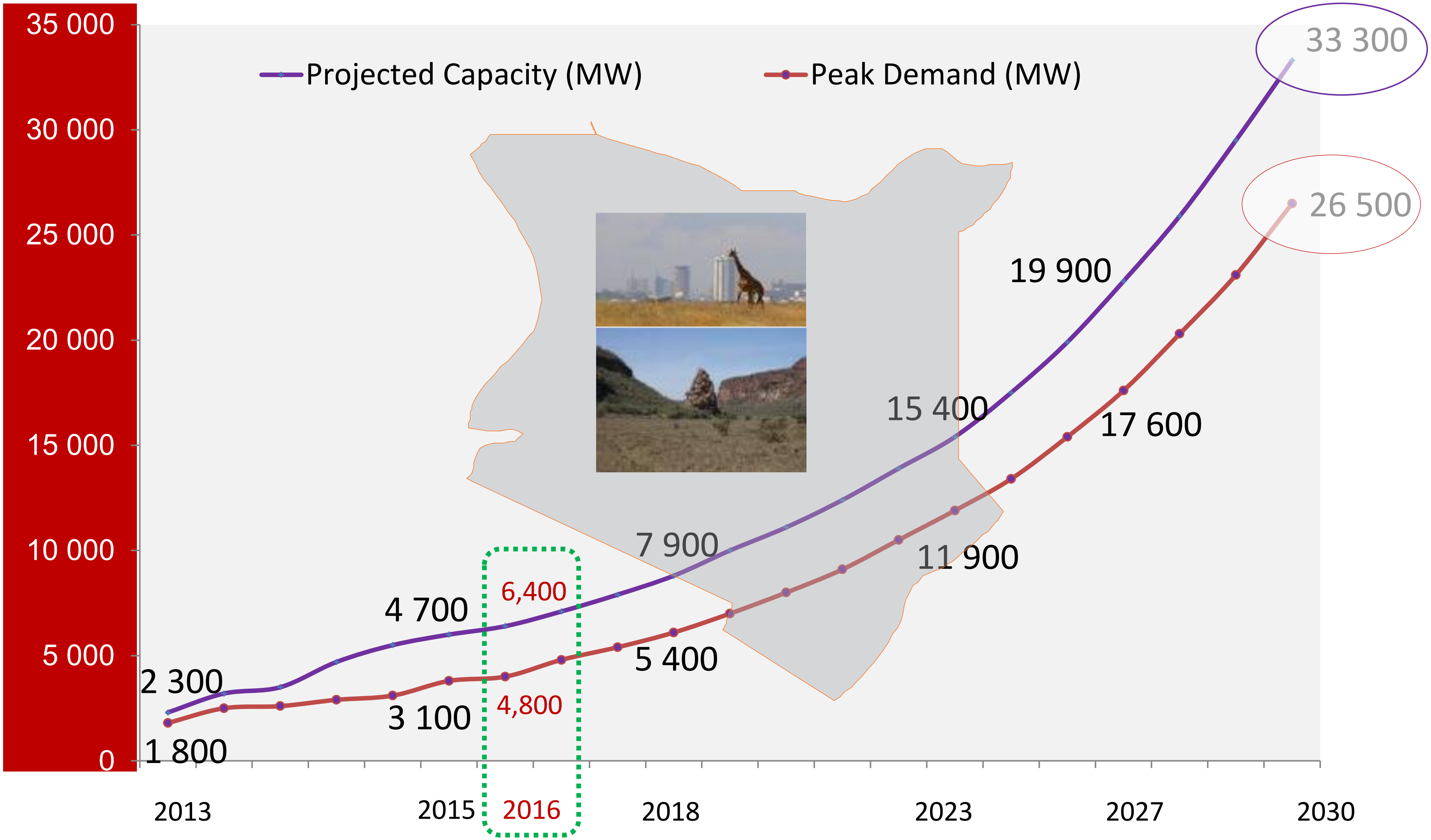
Core Objectives of Kenya’s Strategic Energy Plan

- ✓ Increase electricity generation capacity from cheaper, sustainable and reliable energy sources –
  lower cost of power
  (To cost about 9 US cents for industries and 10 US cents for domestic tariff by 2020

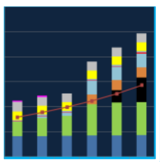
- ✓ Expand and upgrade the transmission and distribution network infrastructure – ***reduce power loss, lower cost of power, increased revenue generation, stable power network***

- ✓ Increase electricity access country wide to increase the uptake of power and grid / off-grid network extension – ***socio-economic growth, increased and devolved industries***
  To achieve access of 70% by 2017 and universal access by 2020

Kenya Vision 2030 Power Demand Projections



PILLARS OF THE 5,000+ MW PROJECT



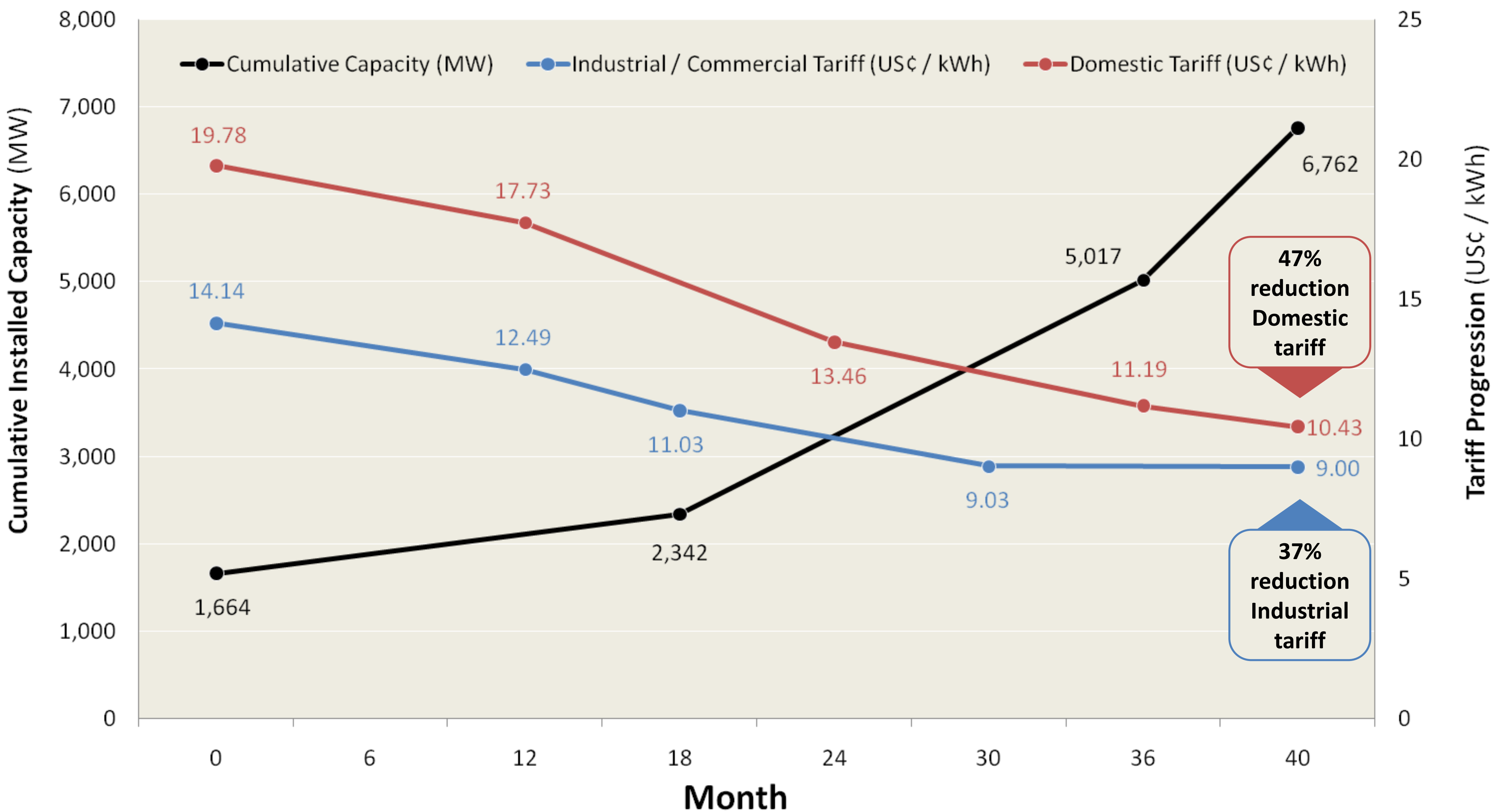
- **ADEQUACY** roadmap to raise generation capacity from 2323 MW in 2015 to over 6,700 MW by 2020

- **RELIABILITY** enhanced through diversified energy mix

- **REDUCE COST** by increasing generation from cheaper energy sources and reduced power losses

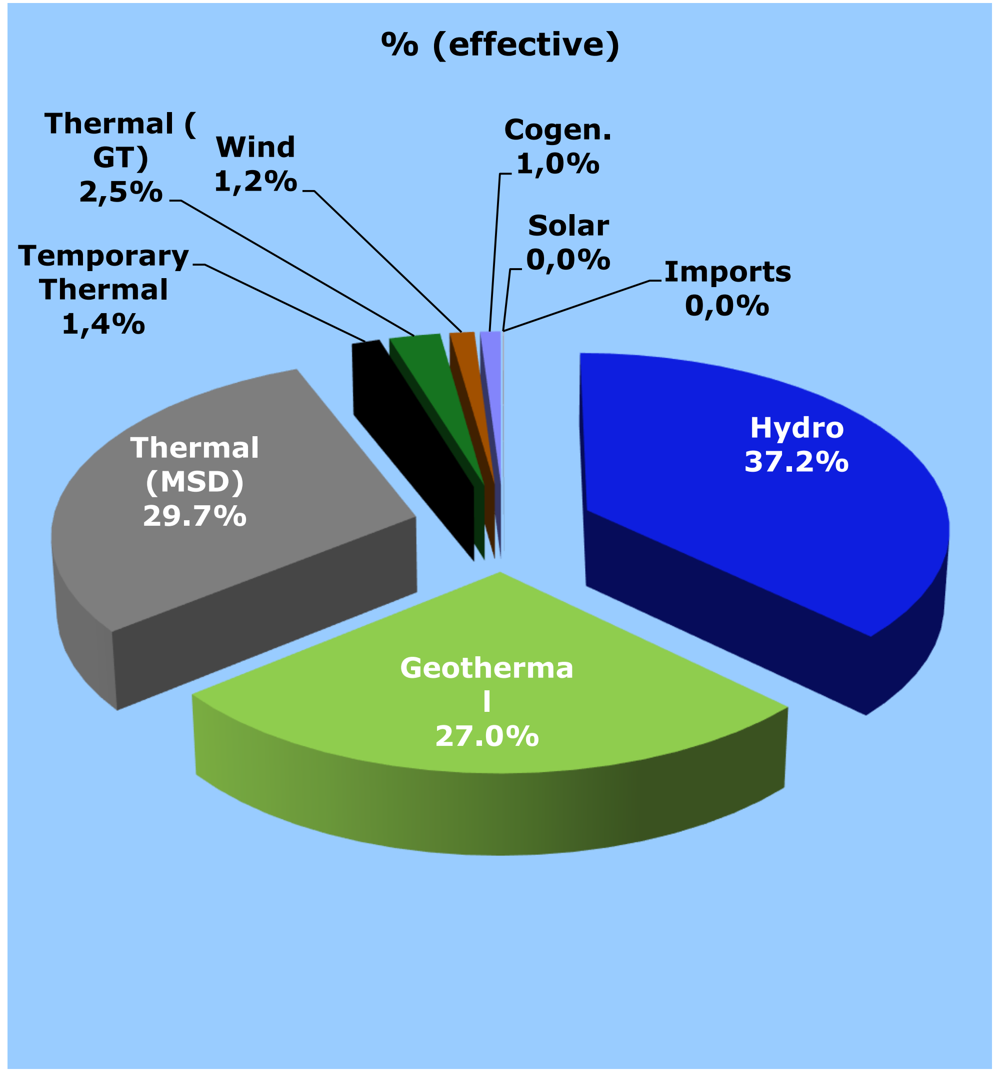
Target Tariff and Generation Progression

Our Aspirations are to Improve Affordability and Access Whilst Generating Positive Returns for Investors and Partners

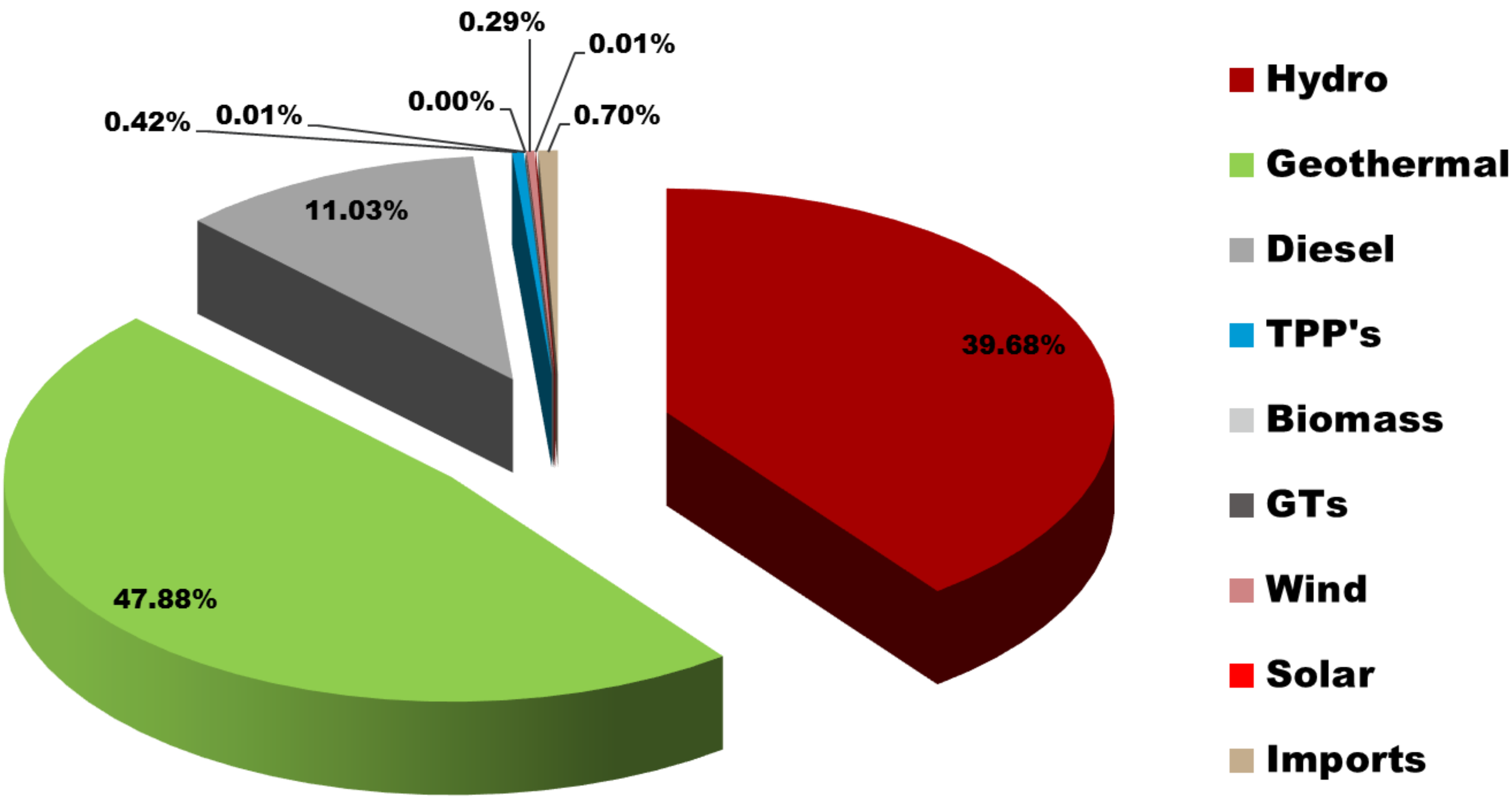


CURRENT GENERATION CAPACITY

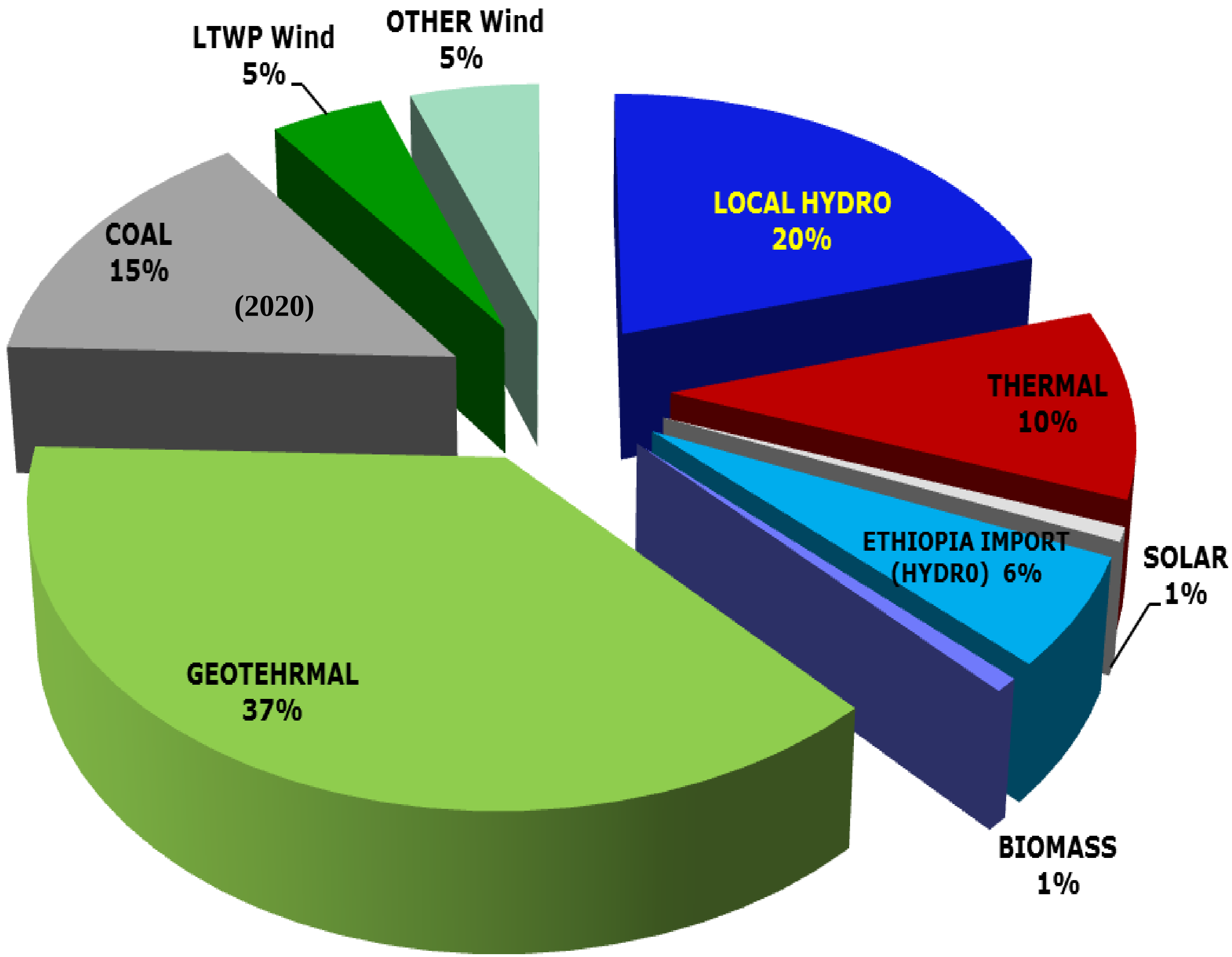
	Installed MW	Effective MW
Hydro	820.73	800
Geothermal	632.00	624
Thermal (MSD)	716.32	690
Temporary Thermal	30.00	30
Thermal (GT)	60.00	54
Wind	25.50	26
Biomass	28.00	24
Interconnected System	2312.55	2,247
Off grid thermal	27.00	23
Off grid wind	0.57	1
Off grid solar	0.55	0
Imports	0.00	0
Total Capacity MW	2,341	2,270



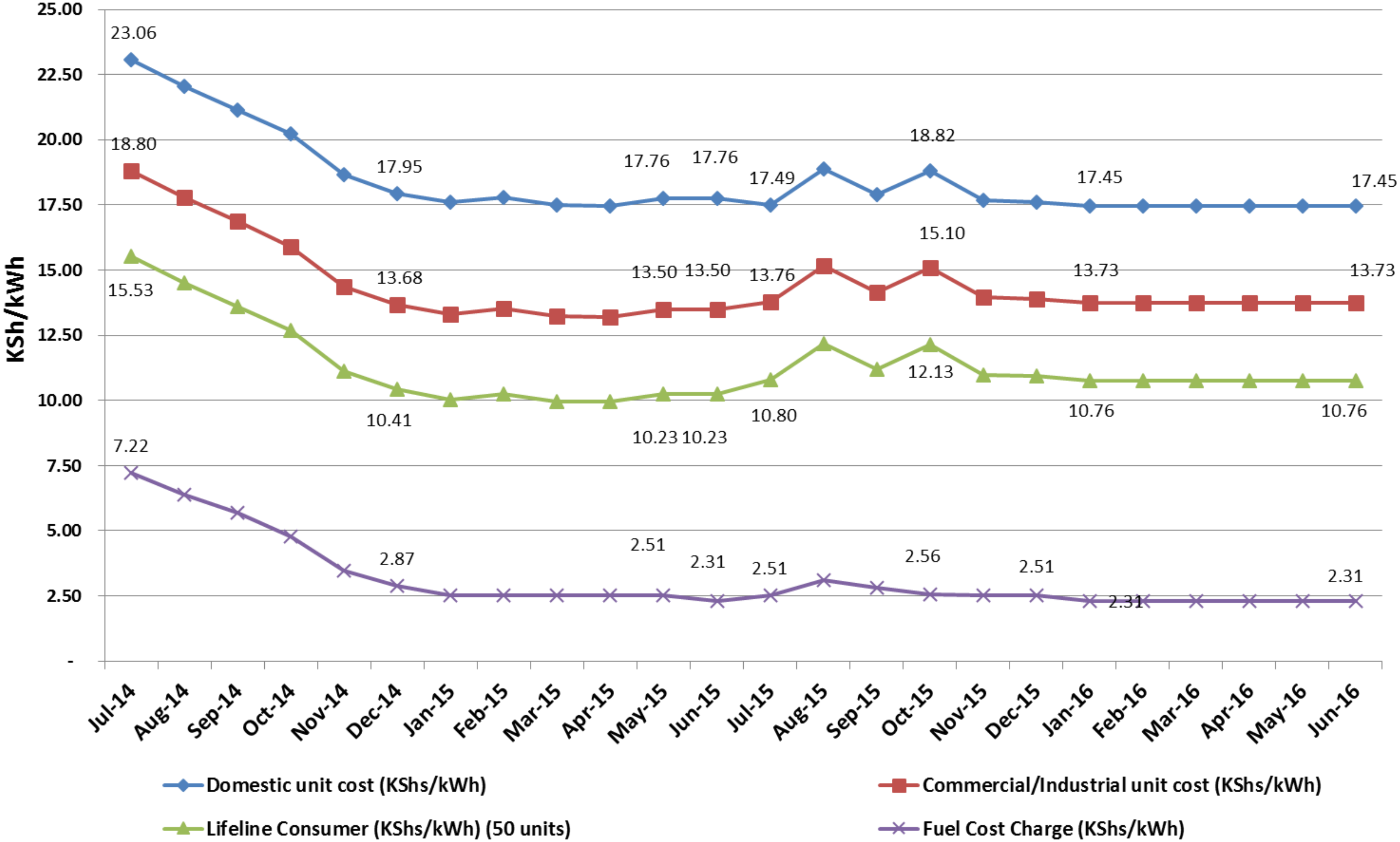
CURRENT ENERGY CONSUMED BY SOURCE



TARGET GENERATION CAPACITY BY 2020



CURRENT TARIFF EVOLUTION



Mode of Participation

1 Competitive Bidding

Through competitive PPP arrangements- Advertisements normally in press and in websites of Ministry and Agencies.

2 Feed-In-Tariffs

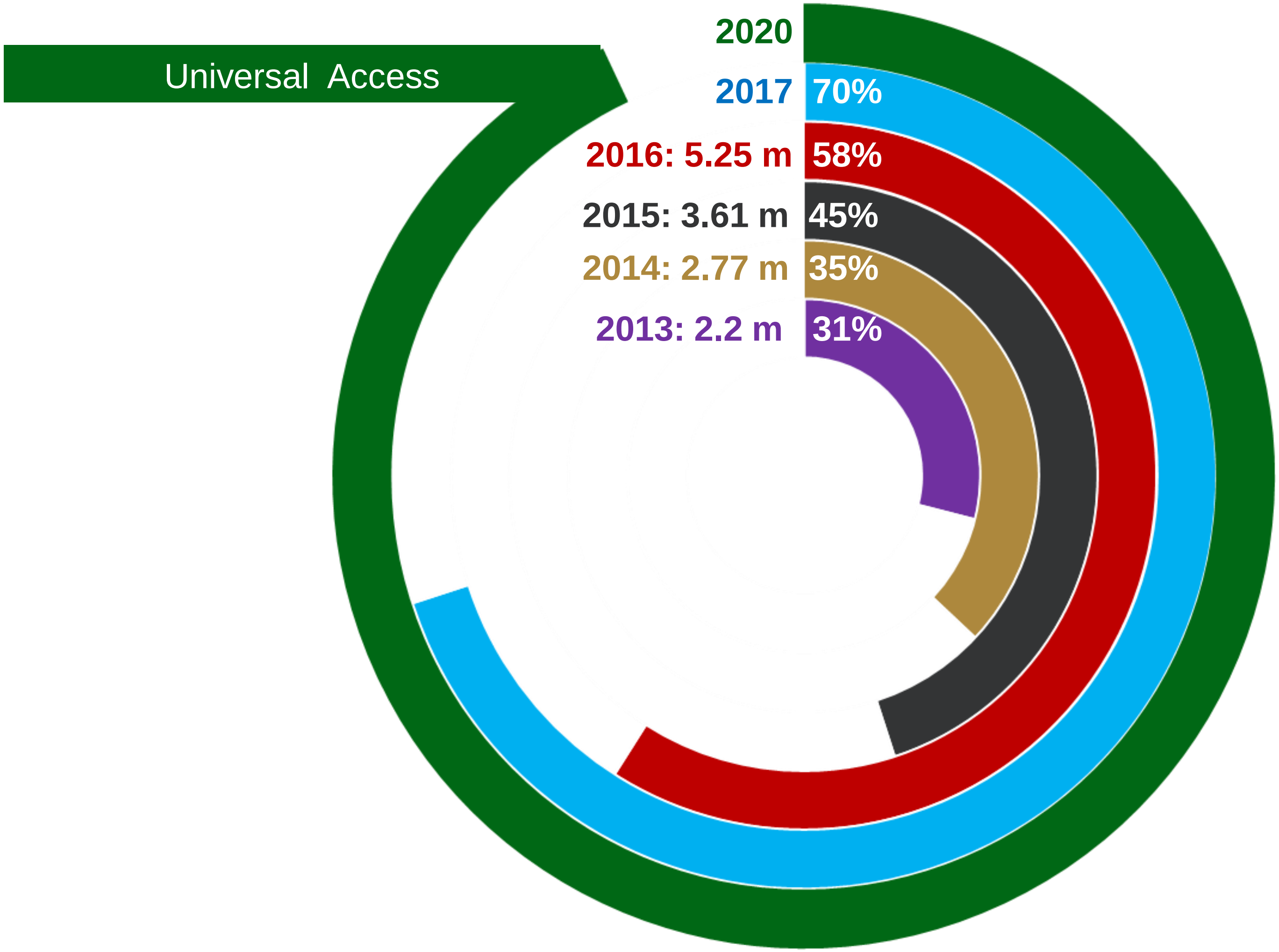
Renewable Energy Projects done under Feed-in-Tariff Policy- soon transiting to Energy Auctions framework, other than for very small sized projects

3 PPP initiated Proposals for concessions

Concessional projects e.g. geothermal

Electricity Access Growth: Customer Numbers

Our Intention is to Deliver Universal Access to Energy in Kenya by 2020



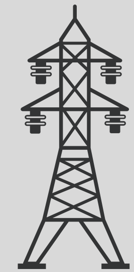
Year	Population size "Million"
2013	41.8
2014	43.0
2015	44.2
2016	45.7
2017	46.3
2020	52.0

Average household size is 5.5

Electricity Access Strategies

Last Mile Connectivity:

- Phase 1 – Those near transformers – target 3.4M Kenyans
- Phase 2 – Increasing the transformers
- Phase 3 – Reaching Off grid areas

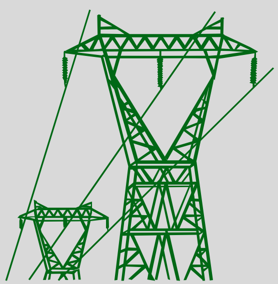


Global Partnership Output Based Aid (GPOBA)

- Targeting highly populated settlements e.g. Kibera 1.9 million Kenyans to benefit across all 47 counties

Transformers for every constituency

- Aimed at supporting fast-tracking the connectivity programs



OFF-GRID

- Currently there are 21 public operational mini grids. Another seven under development
- All these are diesel based but nine have been retrofitted with Renewable Energy
- REA developing 25No. solar mini-grids of about 60kW$_p$ each
- To do more, with funds from GoK, AFD, World Bank, Nordic Development Fund(NDF), DFID, KfW, GIZ and other Development partners
- Study on National Electrification Strategy underway, and GeoSpatial mapping about to commence- To inform areas and strategies for electrification by grid, mini-grid and other distributed energy
- 150m $ World Bank Facility being formulated

Transmission & Distribution Infrastructure

Regional Transmission Lines:

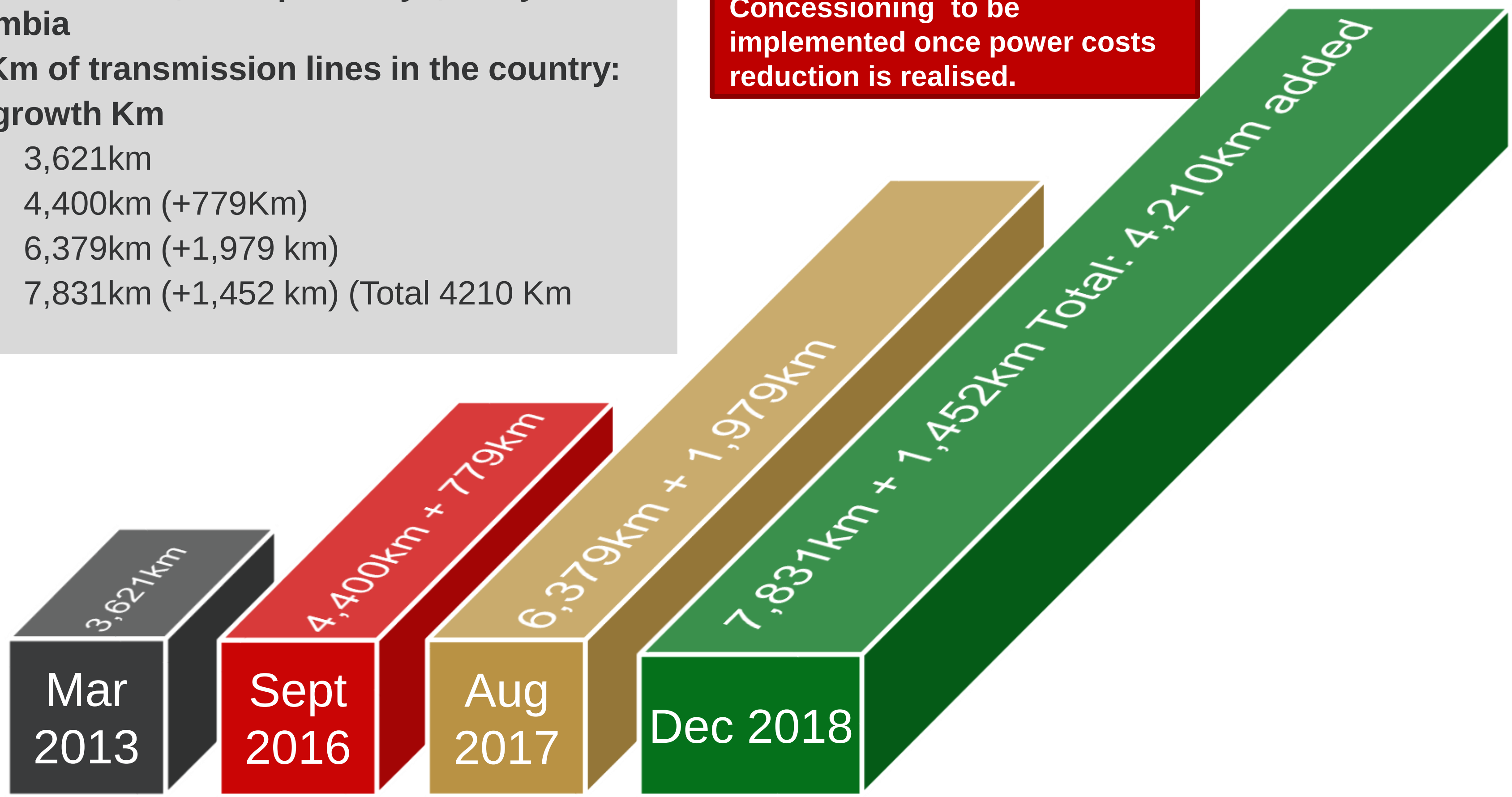
Kenya-Uganda-Rwanda; Ethiopia-Kenya; Kenya-Tanzania-Zambia

Increase in Km of transmission lines in the country:

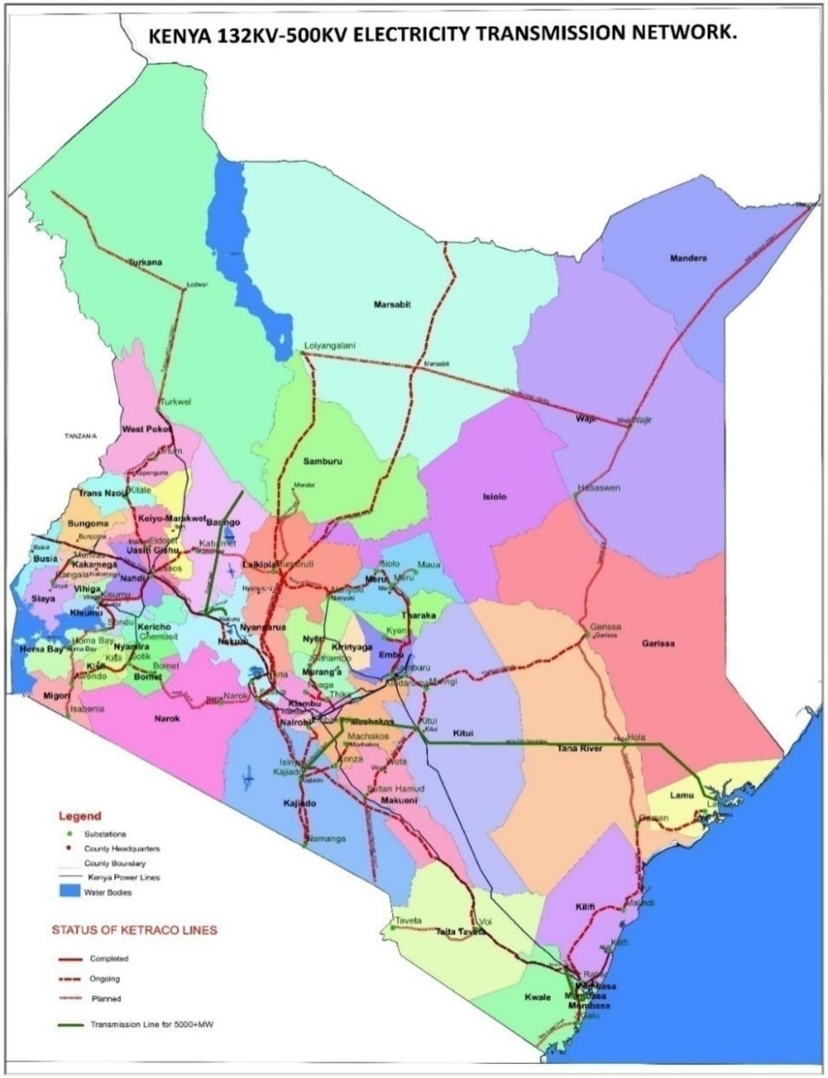
Cumulative growth Km

- Mar 2013 3,621km
- Sept 2016 4,400km (+779Km)
- Aug 2017 6,379km (+1,979 km)
- Dec 2018 7,831km (+1,452 km) (Total 4210 Km added)

MoEP has allowed for open access and therefore concessioning framework in the New Energy Bill and Policy. Concessioning to be implemented once power costs reduction is realised.



Transmission in Kenya



REGIONAL INTERCONNECTION

www.energy.go.ke

THANK YOU