

MAINSTREAMING OF ENERGY POLICY WITHIN SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN SIERRA LEONE

Presentation

By

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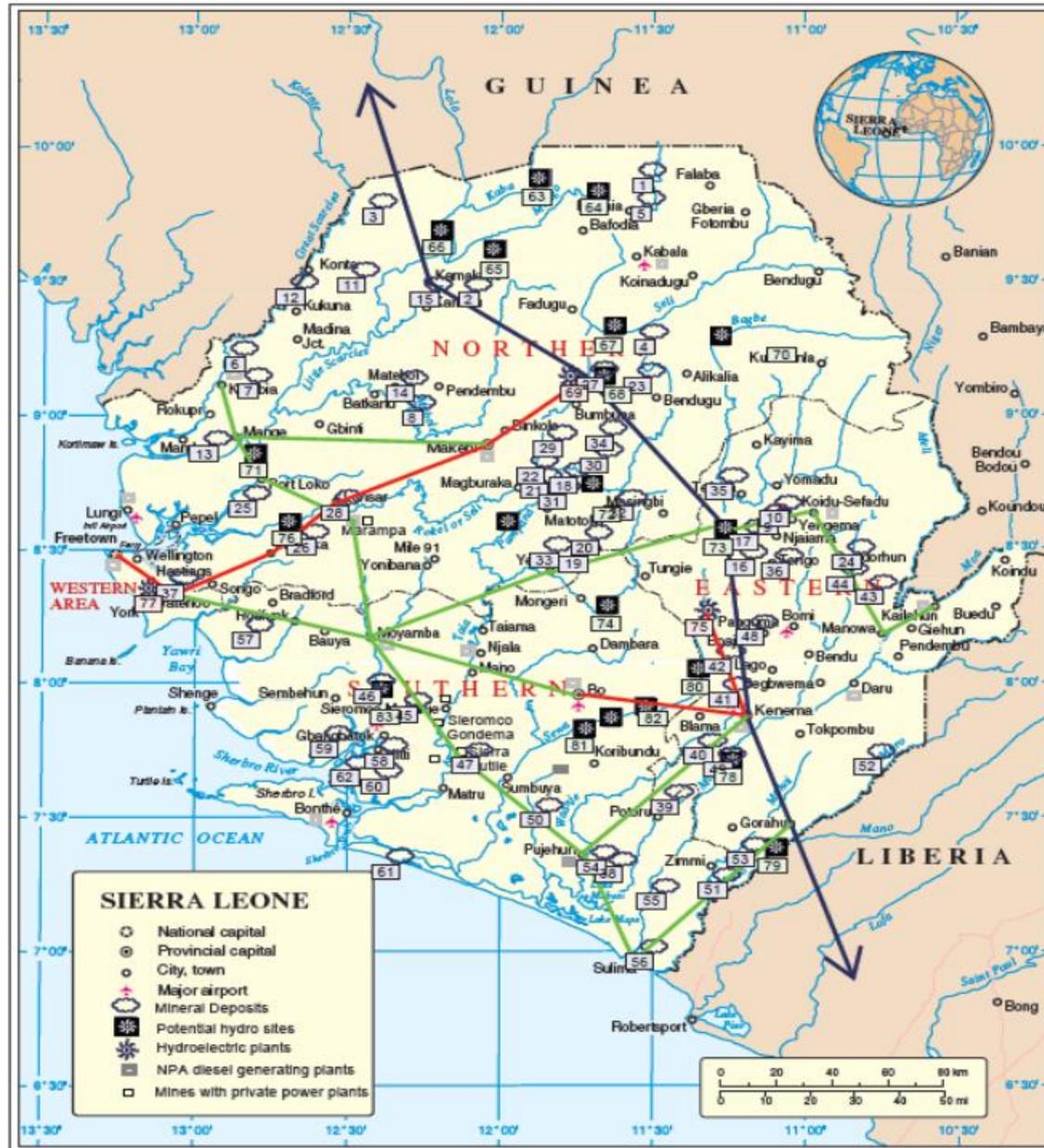
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Presentation Outline

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Country Profile



- Sierra Leone is located on the west coast of Africa, between the 7th and 10th parallels.
- Bordered by Guinea to the north and northeast, Liberia to the south, and the Atlantic Ocean to the west.
- The population of Sierra Leone is 7,075,641 (SSL 2015 PHC).
- The capital city of Freetown is located in the western area of the country and is home to approximately 1.25 million people (~21% of the total population).

- Sierra Leone has a tropical climate with hot and humid weather in the rainy season, which usually spans from June to November and a dry season, which typically spans from December to May.
- The country has an ambient temperature range of 27°C - 35°C and relative humidity varying from an average of 80% in the rainy season to about 50% in the dry season.

Introduction

- The provision of energy is vital for the realization of sustainable economic growth and human development as the key to industrialisation is energy.
- The energy situation in Sierra Leone is significant improved over the last five years but still short of meeting the country demand .

Introduction Contd.

- The Ministry of Energy (MoE) is the custodian of Energy services in Sierra Leone with the mandate to chart out policies and coordination of these services.
- Over the past years, the sector is being transformed and reformed to meet the ever increasing demand of our time and moving towards the productions of clean form of energies with the daunting challenge to make Energy reliable and accessible.

Introduction Contd.

- Energy consumption in Sierra Leone is dominated by biomass, which accounts for over 83% of energy used. The largest source of biomass energy is wood fuel followed by charcoal - is the traditional form of energy and is used almost exclusively by households for cooking and craft activities.
- Imported Petroleum Products are the next largest source of power at approximately 15.8%. Grid-generated electricity accounts for the remainder of the power supplied to the country's citizens.

Sources of Energy & Power Generated

- Currently, the Electricity sub-sector in Sierra Leone faces challenges with less than 13% access. Efficiency and access are constrained by high technical losses on the T&D Network, which are further compounded by low voltage quality due to overburdening of infrastructure by illicit users and pro rata the age of the Net Work.
- The stock of energy efficient appliances and equipment also remains low. Further, the development and use of Renewable Energy from Hydro, Solar, Biomass and other facilities has been a slow process but with contributions from DFID and the UNDP, there has been meaningful interventions hitherto .

Sources of Energy & Power Generated

Solar energy

The country experiences sunshine for majority of the year with an average daily solar radiation at 4.1-5.2 kWh/m².

The current installed capacity of solar PV is about 25 kW, which provides solar systems for hospitals, schools, domestic and commercial use.

Sources of Energy & Power Generated

Biomass

- Biomass is the main source of energy used in households , mainly in the form of fuel wood and charcoal.
- Addax Bioenergy, a Swiss group, constructed a biomass-fueled power plant and sugarcane ethanol refinery in the country is expected to produce up to 90 million litres of ethanol annually, and is powered entirely through the conjoined biomass station, which feed renewable power into the national grid system. Its sad to note

Sources of Energy & Power Generated

- **Hydropower**

SL's estimated hydroelectric potential is 1,513 MW from roughly 27 different sites...

- Currently, two are operational – Dodo (6MW) a regional grid linking thermal power plants in Bo and Kenema in the south-east and Bumbuna Falls (50MW in the wet & 18MW in the dry) in the north. Its supply Makeni and also linked to the Freetown electricity grid
- There are several on going hydropower sites ranging from 1MW – 5MW in all regions in SL

Sources of Energy & Power Generated

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- Electricity grid generation increased by 3.1 percent to 175.7 GWh in 2011 compared to 170.5 GWh in 2010. Industrial consumption of electricity increased to 30.6 GWh from 24.9 GWh in the previous year, an increase of about 23.1 percent.
- losses remained high and estimated at about 40 percent of units generated.
- However with interventions in grid upgrade from the World Bank and Islamic Dev. Bank, this figure is now estimated at 28%.

Sources of Energy & Power Generated

REGION	SOLAR MW	BIOMASS MW	HFO MW	DIESEL MW	HYDRO MW	COAL MW	TOTAL MW
W/AREA			26.5	25			51.5
NORTH		30.25	6	7.18	50.3		93.73
SOUTH				10			10
EAST				2	6		8
TOTAL MW	0	30.25	32.5	44.18	56.3	0	163.2

Policy Regulation Framework

- The Ministry for Energy (MoE) is responsible for energy matters in Sierra Leone. Traditionally, the MoE dealt mainly with issues related to electricity. But, in recent years, extended its focus to other sources of energy
- The MoE has produced a comprehensive Sierra Leone national energy policy to accompany the national energy strategic plan.

Policy Regulation Framework

- Other institutions involved in the energy sector are the Ministry of Agriculture, Forestry and Food Security (MAFFS), which holds a key role in matters related to bioenergy and crop-related energy issues.
- Petroleum marketing and sales are handled by the Ministry of Trade and Industry (MTI) through the Petroleum Unit (PU).
- The Ministry of Finance and Economic Development (MoFED) also plays a supportive role in fiscal matters.

Policy Regulation Contd.

- In addition, the Office of the President has appointed an energy advisor, who has a coordination role and tracks implementation of cabinet decisions by the ministries.
- A key priority of government since 2009 was to strengthen the energy sector with the aim of stimulating economic activities.

Policy Regulation Contd.

- The energy efficiency policy and action plan formulated in 2014 with funds from ECREEE addresses the policy and implementing measures for efficient lighting, solar cookers, efficient buildings, energy labelling of products/buildings, transport and improved cookstoves.

Policy Regulation Contd.

- The Power Utility has been restructured to create a separate Distribution and Supply Authority (EDSA) and a separate Generation and Transmission entity (EGTC).
- Together with the Electricity and Water Regulatory Commission, EWRC, independent management of the utility will ensure transparency and accountability, leading to profitability.

Mainstreaming SDGs & Sustainable Energy in Sierra Leone

- Sierra Leone implemented the MDGs during 2000-2015. The Goals were operationalized within the framework of the country's national development plans, such as the poverty reduction strategy papers (PRSPs), which have been implemented since the end of the civil war in 2002.
- The SDGs constitute a major policy thrust by GoSL during 2016 National Budget presentation in parliament in 2015.
- Defining actors and their responsibilities for reporting on the SDGs within government MDAs competing for state resources as being categorized under the various planned expenditure headings.

Mainstreaming SDGs & Sustainable Energy in Sierra Leone

- Sierra Leone adapted the SDGs into national development processes. The report constitutes initial steps undertaken by GoSL to domestically implement the SDGs
- The Goals have been integrated into the 2016 National Budget, and have been aligned to the Eight Pillars of Sierra Leone's Agenda for Prosperity.
- Additionally, a technical workshop was organized to draft a national monitoring and evaluation framework for the SDGs. The workshop produced (i) a draft national integrated results framework, aligning the SDGs to the monitoring and evaluation matrix of the country's Agenda for Prosperity; and (ii) a draft set of 91 SDGs indicators specific to Sierra Leone.

Mainstreaming SDGs & Sustainable Energy in Sierra Leone

The 17 SDGs Regrouped	Sierra Leone's Agenda for Prosperity
1) Reducing general poverty prevalence— Goals 1,2&10	Pillar 1: Diversified economic growth— directly related to SDGs 7,8&9
2) Human development— Goals 3,4&6	Pillar 2: Managing natural resources— directly related to SDGs 12,13,14&15
3) Gender parity— Goal 5	Pillar 3: Accelerating human development— directly related to SDGs 3,4&6
4) Employment, economic growth and competitiveness— Goals 7,8&9	Pillar 4: International competitiveness— directly related to SDGs 7,8&9
5) Human settlement, housing and population infrastructure— Goal 11	Pillar 5: Labour and employment— directly related to SDGs 7,8&9
6) Environmental sustainability— Goals 12,13,14&15	Pillar 6: Social protection— directly related to SDGs 1,2&10
7) Governance, peace and security— Goal 16	Pillar 7: Governance & public sector reform— directly related to SDG 16
8) Means of implementing Goals 1 to 16— Goal 17	Pillar 8: Gender & women's empowerment— directly related to SDG 4&5

Source: Simplified Version of the SDGs prepared by GoSL (2015, p.4).

INTERVENTIONS RELATED TO THE SDG'S

- The MoE has been mandated to Double Access and Triple Generation through the Ebola Recovery Plan within 24 Months.
- Piloting this challenge means identifying donor partners and areas of interventions, upgrade of the aging network and repairs to the generating equipment nationwide, increase both generation and transmission capacities and access
- In May, of 2016, His Excellency the President launched the Energy Revolution.
- The aim: to connect rural communities with solar energy

Some Interventions on Going

- The Ministry is closely working with SREP, GEF, UNDP, The World Bank, DFID, EU, AfDB and the IDB.
- Each of these organizations within the framework of increasing Energy Access and Generation to meeting the Ministry's target set for 2018.

Some Interventions on Going

- AfDB: Rural Electrification Project of the CLSG Interconnection Project: to be completed by 2018- Rural Energy penetration using shield wire arrangement to a minimum of 30 Communities
- The AfDB/ WB/ CIF: SREP
- DFID: Piloting the Energy Revolution with independent Renewable Energy Partners to ensure solar power is rolled out to rural communities: 250,000 homes by 2017
- DFID/AfDB : Working on the Network Improvement and Expansion for the Bo- Kenema Cities

Some Interventions on Going

- WB: Energy Access project
- IDB: Improvement and Extension of the MV Line in the Western area of Freetown
- Govt SL: Rural Electrification Project: Electrification of all district head quarter towns and solar street lights in all chiefdom head quarter towns
- NACSA: with funds form the IDB, working on the provision of 2MW of Electricity in 7 of the poorest communities in Sierra Leone.

SSL's role in Sustainable Energy Data Collection & Monitoring within the SDGs Context

- Statistics Sierra Leone (SSL) as one of its functions is to support Govt. and development partners collecting credible data, analysed and anal
- With its foot print some MDAs and all districts throughout the country has complemented Govt. & partners in collecting data for MDGs in the past, the SDGs will not be an exception.
- With the right policies in place, SSL intends to further strengthen its ties with all relevant stakeholders in the energy sector and the Ministry of Energy in particular, to ensure that energy statistics data collection will be in line within the SDGs context.

Challenges

- Implementation of the energy policy and strategic plan has been a great achievement of Govt. It is hope that this process will be quickly absorbed and adopted by local Govt. councils within their development plans.
- Technical Institutional capacity building for the Ministry and other institutions aligned to the energy sector is urgently required to better understand the SDGs in the context of sustainable development.
- The in availability or lack of energy statistics in the past demonstrated the weak structures therein. With the active collaboration and capacity building within the MDAs and SSL, strong structures will be created and strengthened to effectively collect energy statistics within the framework of the SDGs.

Conclusion

- GoSL had set the stage right in ensuring there is a strong political will and commitment in creating key policies to improve on the energy sector and adapting the SDGs into mainstream govt. activities and programmes
- There are various reform within the energy sector in diversifying energy sources and output in the country with the intension to make power accessible.
- SSL will strengthen its collaboration with all state actors and other players in the energy sector to ensure that timely and credible data on energy are collected, compiled and made available to the public and development partners.
- The need for continued Donor Partners intervention and collaboration.

Thank you for your Attention