

Paper Presented on:
Knowledge Co-Creation Program
“JICA ENERGY POLICY B”
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Eritrea, Country report
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OUT LINES

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1. Country profile

Eritrea is found in the horn of East Africa



- Bordered by Sudan, Ethiopia and Djibouti, it occupies a strategically important area in the Horn of Africa.



The State of Eritrea : Asmara

Population: 5.5 million

Area :117,400 sq km (45,300 sq miles)

Major languages :Tigrinya, Tigre, Arabic, English

Major religions: Islam, Christianity

Ethnic group: 9

Life expectancy: 63 years (men), 67 years (women)

Currency :Nakfa

Coastal lines: 1347 Km it have more than 350 Island

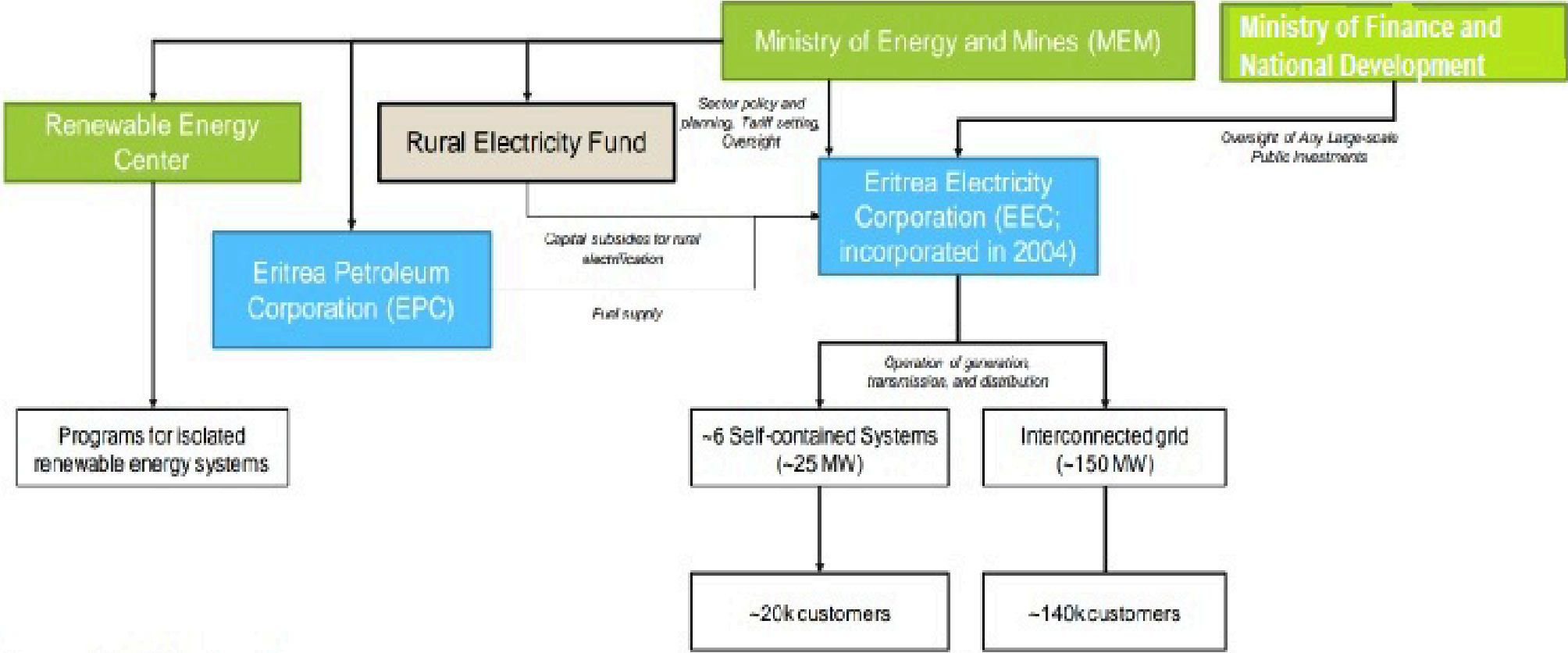
The highest point =3,018 m above sea level

The lowest point= -100 m below sea level

GDP(in US Dollar)= about 2 billion USD

Energy Orginazation structure

Figure 1: Institutional Structure of the Power Sector in Eritrea.



final energy consumption (ktoe)

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total final consumption	533	477	491	527	529	534	546	562	556	573	577	586
Coal	-	-	-	-	-	-	-	-	-	-	-	-
Bioenergy	405	344	396	425	420	424	434	438	426	430	435	436
Industry	18	15	11	12	12	13	11	14	13	15	14	15
Coal	-	-	-	-	-	-	-	-	-	-	-	-
Oil	12	10	6	6	6	6	6	6	6	7	6	6
Natural gas	-	-	-	-	-	-	-	-	-	-	-	-
Electricity	6	5	6	6	6	7	6	8	8	8	9	9
Bioenergy	-	-	-	-	-	-	-	-	-	-	-	-
Transport	67	59	47	51	55	56	57	64	66	75	78	81
Oil	67	59	47	51	55	56	57	64	66	75	78	81
Electricity	-	-	-	-	-	-	-	-	-	-	-	-
Biofuels	-	-	-	-	-	-	-	-	-	-	-	-
Buildings and other	443	387	430	461	458	462	474	480	471	477	480	482
Coal	-	-	-	-	-	-	-	-	-	-	-	-
Oil	30	28	18	19	20	20	21	21	23	24	22	23
Natural gas	-	-	-	-	-	-	-	-	-	-	-	-
Electricity	8	14	17	17	18	18	19	21	21	22	23	24
Bioenergy	405	344	396	425	420	424	434	438	426	430	435	436

Demand projections for electric energy and electric power

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
demand in MW	188.0	197.9	208.1	230.2	243.3	257.4	282.5	298.7	316.1	334.8	335.5	377.3
growth ratio	5.3%	5.2%	10.6%	5.7%	5.8%	9.8%	5.7%	5.8%	5.9%	0.2%	12.5%	6.6%
ICS demand in GWh	1,010.4	1,060.7	1,112.7	1,243.0	1,307.9	1,377.8	1,523.2	1,603.5	1,689.8	1,782.7	1,884.5	1,994.0
growth ratio	5.0%	4.9%	11.7%	5.2%	5.3%	10.6%	5.3%	5.4%	5.5%	5.7%	5.8%	6.4%

Energy policy and measures

- To develop the electricity supply sector, based on diversified energy sources, so that it can proactively meet the growing needs of the Eritrean economy for reliable, sustainable and affordable electricity services.
- To harness the extensive indigenous renewable energy resources (solar, wind, geothermal) and make them available for the benefit of all Eritreans.
- In line with the Government's commitment to SDG 7, provide access to modern, affordable energy to all Eritreans.
- To radically shift from an over-reliance on inefficient biomass use (for cooking etc.) to a more sustainable model based on energy efficient technologies and appropriate fuel-switching, which addresses the problems of deforestation and environmental degradation.
- ▶ To strengthen the institutional and regulatory framework of the Energy Sector, through capacity building, investing in modern energy management systems.

Main constraints facing the Energy sector

- ▶ Sharply increasing demand and lack of capacity to meet it.
- ▶ Dependence on expensive imported oil ,with consequent national budget constraints and dependence implications , price fluctuations
- ▶ The unsustainable continued reliance on biomass, constituting unbearable burden on the already depleted forest resources and fragile environment
- ▶ Low technical and financial efficiency in energy production and distribution system due to old generation plants, transmission and distribution systems as well as scarcity of skilled man power.

Bottlenecks Currently faced in formulating energy policies

- ▶ Lack of necessary human resources capacity
- ▶ Inefficient data collection and data management system
- ▶ Low level financial resources for massive energy related investment

Conculsion

- ▶ This program will help the energy sector to prepare its energy policy effectively
- ▶ From this course I would like to learn the data collection, data processing and effective data management using software.
- ▶ Specially related to the new renewable energy technologies which is more feasible in our country (specially solar energy) .

THANK YOU

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.