

Energy Demand and Production

Group 8

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Introduction

Common Forms of Energy in Rwanda

Biomass

Production of Hydro Energy

Energy Demand in Rwanda

Electricity Production in Rwanda

Electricity Consumption in Rwanda

Energy Forecast in Rwanda

Application



Energy



Energy

- ▶ Renewable



Energy

- ▶ Renewable
- ▶ Non renewable



Energy

- ▶ Renewable
- ▶ Non renewable





- ▶ Biomass (fire wood)



- ▶ Biomass (fire wood)
- ▶ Solar energy



- ▶ Biomass (fire wood)
- ▶ Solar energy
- ▶ Gas



- ▶ Biomass (fire wood)
- ▶ Solar energy
- ▶ Gas
- ▶ Bio gas



- ▶ Biomass (fire wood)
- ▶ Solar energy
- ▶ Gas
- ▶ Bio gas
- ▶ Hydro Power



- ▶ Biomass (fire wood)
- ▶ Solar energy
- ▶ Gas
- ▶ Bio gas
- ▶ Hydro Power



Figure 2: Biomass Energy (Source:<https://bit.ly/35zxEnW>)

Production of Hydro Energy

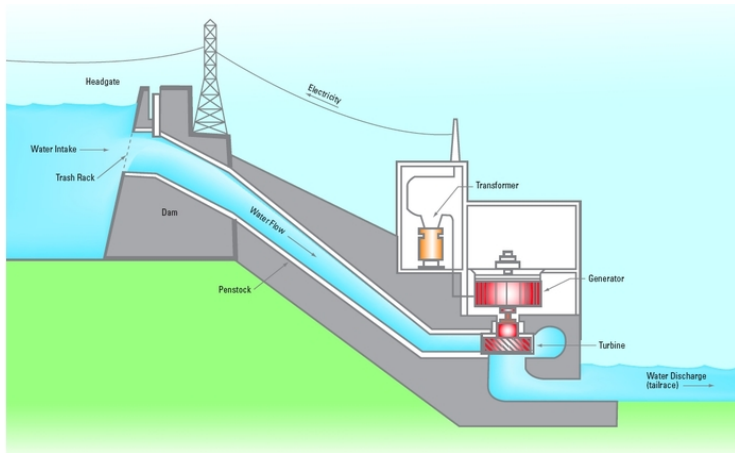


Figure 3: Hydro power (Source:<https://bit.ly/35E0ELn>)



► $ME_{water} = \rho vgh$



▶ $ME_{water} = \rho vgh$

▶ $ME_{R_water} = \frac{mv^2}{2}$



▶ $ME_{water} = \rho vgh$

▶ $ME_{R_water} = \frac{mv^2}{2}$

▶ $E_{energy} = IVt$



Influenced by:

- ▶ Population growth



Influenced by:

- ▶ Population growth
- ▶ Industrialisation



Influenced by:

- ▶ Population growth
- ▶ Industrialisation
- ▶ Civilisation

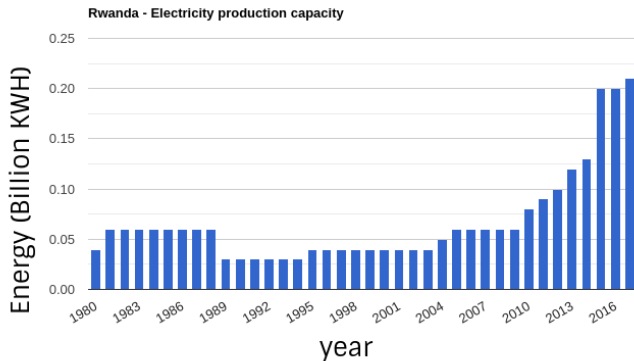


Figure 4: electricity production

(Source: https://www.theglobaleconomy.com/Rwanda/electricity_production)

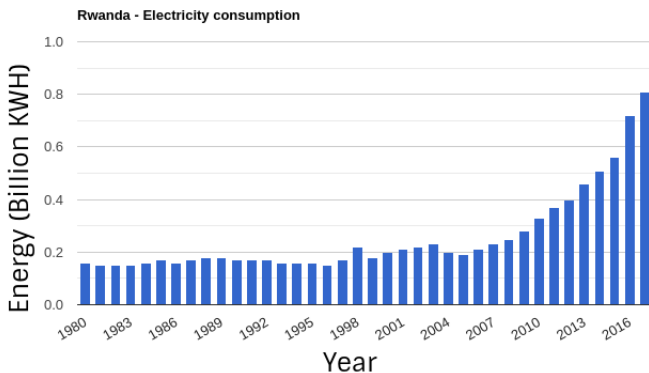


Figure 5: electricity consumption (Source:https://www.theglobaleconomy.com/Rwanda/electricity_consumption/)

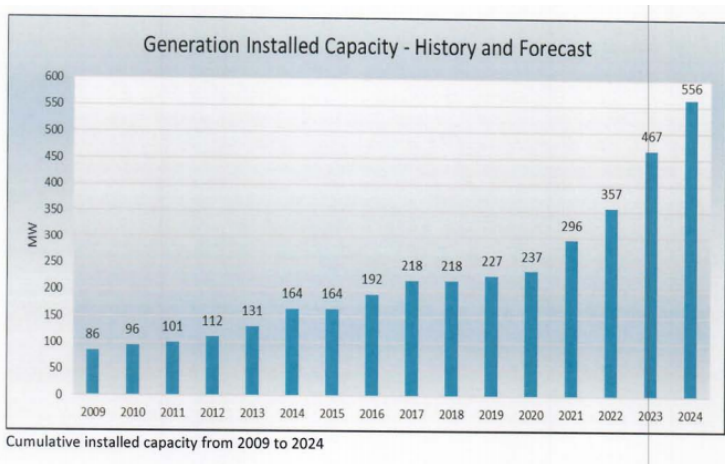


Figure 6: consumption of electricity in Rwanda
(Source: <https://www.theglobaleconomy.com/Rwanda>)

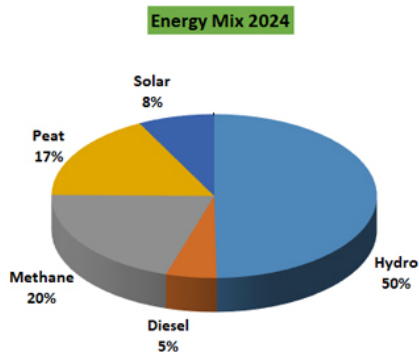


Figure 7: energy forecast (Source:<https://bit.ly/3jv7NCI>)



Used by Governments for:



Used by Governments for:

- ▶ Proper Planning



Used by Governments for:

- ▶ Proper Planning
- ▶ Proper Budgeting



END



[https : // www.theglobaleconomy.com](https://www.theglobaleconomy.com)

[https : // www.usaid.gov/powerafrica/rwanda](https://www.usaid.gov/powerafrica/rwanda)