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# Integration of renewable energy source, pathway to a sustainable energy future

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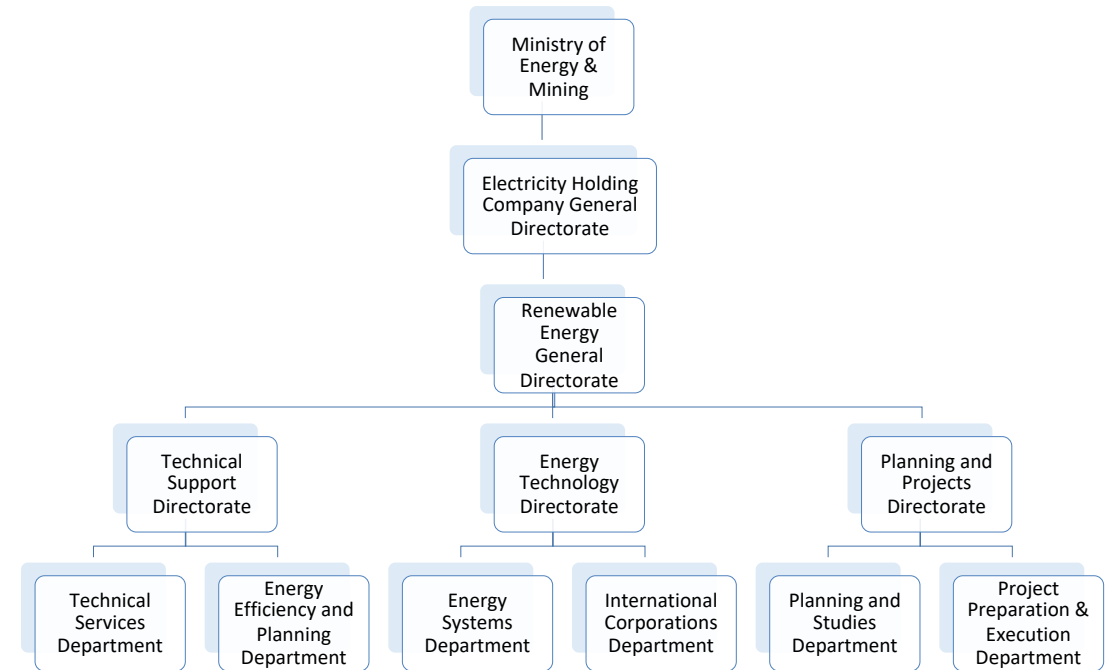
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# ***Renewable Energy Integration***

- **Installed generation capacity 3,579 MW**
  - 53.3% is hydroelectric, 46.7% is thermal
  - Part of the East African Power Pool (EAPP), Sudan is currently importing 200 MW of power from Ethiopia
  - Imports averages 3.5% of the country's total power supply.

# Renewable Energy Integration

- **Institutional capacity**  
Renewable Energy General Directorate



# Renewable Energy Integration

## – Renewable Energy projects by the ministry

- Al Fashir solar power plant (**5MW**): off-grid solar PV plant which is the first utility-scale PV solar plant owned by the ministry
- Al Dien solar power plant (**5 MW**)
- Rural electrification project (10,000 roof top solar installations)
- Wind resource assessment project (wind mast project)

### Donors project:

Solar pumping project in the Northern state	(UNDP/GEF financed)
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Wind Energy Project	(UNDP/GEF financed)
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# ***Energy Access and Rural Electrification...***

- Electrification for the total population is 54%
- Electrification for urban areas is 82%
- Electrification for rural areas is 39%

## **Off-Grid Solution**

National target of 1.1 million SHS units by 2030, GoS Intended Nationally Determined Contribution (INDC).

# ***Policies, Regulations to boost investment in Renewable Energy in Sudan ....***

- **Electricity Act 2001**
  - Generally open for private participation
  - No clear procedures for engagement
- **The National Investment Act (NIA) of 2013**
  - encourage investment and set incentives for priority sectors
- **The Public-Private Partnership Act (PPP Act)**
  - increase private participation in infrastructure development

The Electricity Sector Strategy (2020-2035)

- **Approval of the new Electricity Act of 2019** (Delays in enacting the finalized new Electricity Law)
- **Policies for Encouraging Rooftop Solar Installations**
- **Policy Requirements for Self-Generation and Cogeneration in the Industrial Sector**

# ***Policies, Regulations to boost investment in Renewable Energy in Sudan ....***

- ***Net Metering policy 2023***
- ***Private IPP projects (Alshamal 54MW PV Plant)***

# ***Modernize the Grid and Introduction of Smart Grid Solutions***

## ***Introduction of net metering policy***

- Advanced metering infrastructure
- Renewable energy integration
- *Smart Communication*
- *Raise awareness about energy efficiency*



# ***Women Participation in RE sector***

- *Unfortunately there is No dedicated initiatives for women capacity building programs in Sudan*

## ***Importance of Capacity Building and Skills Development initiatives for Women***

- *women empowerment through capacity buildings*
- *Career advancement: honing skills increase their chances f promotion and access higher level positions*
- *Increase representation in leadership positions*
- *Gender equality and creating more inclusive work environment*

***Thank You***

***Elaff Ismail***