

DEVELOPMENT DIALOGUE FORUM  
SERIES 3A  
THEME: SUSTAINABLE ENERGY FOR ALL

*Rural Electrification (Grid & Off-Grid) – Status and experiences in improving modern energy access in rural areas in Namibia*

by

Joseph S. Iita, Permanent Secretary

Ministry of Mines and Energy

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# PRESENTATION OUTLINE

1. **Background**
2. **Energy access to Rural communities**
3. **Financing Rural Electrification**
4. **Challenges**
5. **Current situation**
6. **Conclusion**

# Background

## ▣ Objectives of Rural Electrification

- To improve rural standards of living and increase quality of life
- To increase economic & commercial activities in rural areas
- To improve the quality of health and educational facilities in rural areas
- To reduce unemployment through job creation
- To combat deforestation
- Is a vehicle for economic development
- To reduce rural urban migration

# Background..

- ▣ The Rural Electricity Distribution Master Plan, is currently being updated, and the Off-Grid Energization Master Plan are the guiding documents for project implementation
- ▣ **To date, approximately 25% of rural Namibia has access to electricity**
- ▣ Higher priority is given to government and public institutions before extending to businesses and private homesteads within 500m radius from the transformer

# Energy access to rural communities

## ▣ **Grid Electrification**

- The new approach focus only on electrification of rural schools and public institution which are currently without electricity
- In the new approach, household connections will not be provided as part of the program.
- **Advantages of the new approach:**
  1. It will speed up the process of electrifying government and public buildings.
  2. Fast-tracking of the improvement of educational and medical conditions in rural areas.

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## ▣ **Off-grid Electrification**

- Establish energy shops within a reasonable distance of the targeted communities. The energy shops would sell suitable, approved energy products and compatible appliances.
- Solar revolving fund scheme, is aimed for rural communities to have access to credit finance to make off-grid energy solutions affordable.
- Solar electrification of public institutions.  
institutions in those areas where it is not feasible to extend the grid network

# Financing of Rural Electrification

- ▣ Central Government of the Republic of Namibia allocates a budget for rural electrification activities
- ▣ There is also EIB (European Investment Bank), SIDA and the Nampower Performance Agreement (NP) funding available for rural electrification projects implemented by NamPower in coordination with the Ministry of Mines and Energy.
- ▣ The Solar Revolving Fund – subsidized loans for renewable energy technologies i.e. Solar home systems (SHS), Solar water heaters (SWH) and Solar water pumping (PVP)

# Challenges

- The insufficiency of adequately qualified electrical contracting companies locally presents a major problem
- Extremely sparsely populated rural areas make grid electrification projects very expensive and highly capital intensive
- Limited time frame to implement projects due to rainy season
- Regions without REDs to operate and maintain the infrastructure erected through the rural electrification programme.
- Limited budget to carry out all projects.
- Still high investment costs for Renewable Energy Technologies (RETs)
- Maintenance and ownership of installed solar systems in off-grid areas
- Lack of PV installers for certain regions in the country



# Current Situation

- ▣ Rural Schools with access = 54%
- ▣ Rural Government Buildings with access = 59%
- ▣ Homesteads with access = 16%
- ▣ It will require a budget of N\$1, 473,361,699 to electrify the following:
  1. Localities = 2879
  2. Homesteads = 59 774
  3. Schools = 642
  4. Other GRN buildings = 98

# Conclusion

- ▣ To provide modern energy access to rural areas is and will continue to be a High Priority for the Government of Namibia
- ▣ The rural electrification program have significantly contributed to the socio-economic development of rural communities.
- ▣ Sustainable energy for all is the ultimate goal.

Thank you!

