



GLOBAL ENERGY EFFICIENCY WORKSHOP

6-13 MARCH 2010

WASHINGTON, DC

Managed by UNITED STATES ENERGY ASSOCIATION (USEA)

Funded by THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)



PRESENTATION

on

ENERGY EFFICIENCY ACTIVITIES

IN

BOTSWANA

(Department of Energy)

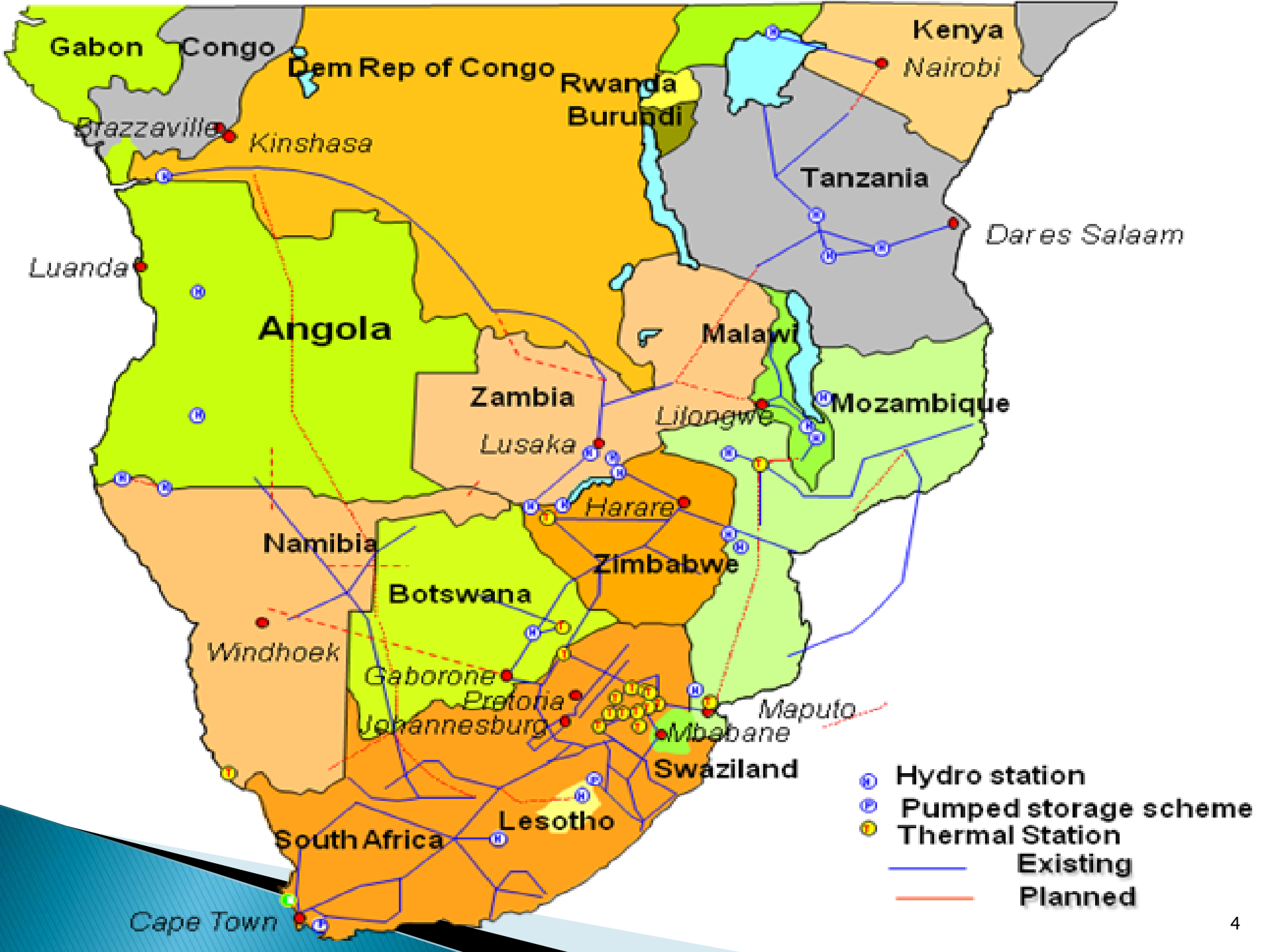
(Ministry of Mineral Energy & Water Resources)

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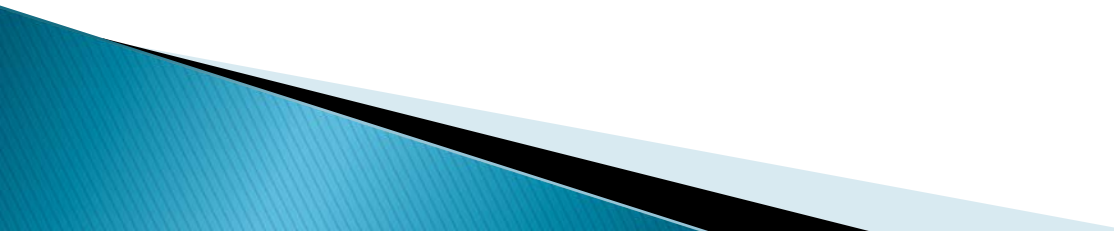
BOTSWANA ENERGY SECTOR

- Botswana is a landlocked country situated in Southern Africa with a population of about 1.7million and with a semi-arid climate.
- Size of 582 000 km²



ENERGY SITUATION

Botswana has the following primary energy resources, composed of the following;

- **Coal**
 - **Biomass**
 - **Solar**
 - **Limited Wind Energy**
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ELECTRICITY CHALLENGE




SOURCE	QUANTUM	REMARKS
MORUPULE POWER STATION	120 MW	Normally operating at 90 MW
ESKOM (South Africa) 2007 410 MW	350 MW - 2008 350 MW - 2009 250 MW - 2010 150 MW - 2011 150 MW - 2013	5 Year stepped Reduction
HCB (Mozambique)	Up to 50 MW / 75 MW	1 Year Renewable Supply Agreement (Non Firm)
EDM (Mozambique)	Up to 40 MW	1 Year Renewable Supply Agreement Not Available at Peak (17:00 Hrs – 22:00 Hrs)



ENERGY EFFICIENCY INITIATIVES

1. Energy champion competition
2. National Electricity Efficiency Campaign
3. Energy conservation in building sector
4. Energy Efficiency Coordinators' training
5. Energy survey in building

1 .ENERGY CHAMPION COMPETITION

- Targeted 32 schools
 - Monitor their monthly electricity consumption
 - One year duration project
 - Award to the school that saved a lot of electricity
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2. NATIONAL ELECTRICITY EFFICIENCY CAMPAIGN

- Aims at educating people on electricity conservation
- Using cartoon strips, road show campaigns, billboards, news papers, radio jingles
- Promotion of energy efficient equipments, such as CFLs

3.ENERGY CONSERVATION IN BUILDING SECTOR

- Energy Efficient building design guidelines
- Energy efficiency booklets for schools
- Development of the Energy Efficiency curriculum and course material for engineering classes for the University and Advanced Diploma for Vocational Educational (DVET)

4.ENERGY EFFICIENCY COORDINATORS TRAINING

- SELECTION OF ENERGY EFFICIENCY REPRESENTATIVES FROM GOVERNMENT DEPARTMENTS
- CONDUCTION OF TRAINING TO THESE REPRESENTATIVES
- MONITOR ENERGY CONSUMPTION IN THEIR DEPARTMENTS

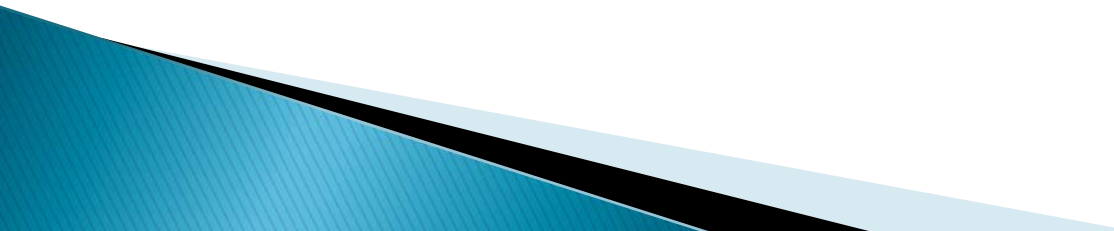
ENERGY SURVEY IN BUILDING

- CONDUCTION OF WALK THROUGH ENERGY AUDITS
- DE LAMPING EXERCISES
- DE CENTRALISATION OF LIGHTSWITCHES IN GOVT. BUILDINGS CENTRALISED LIGHTS SWITCHES

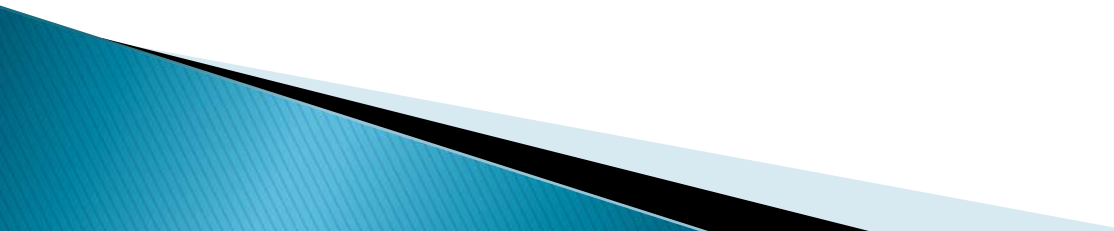
DSM INITIATIVES

- ▶ NATIONAL CFL ROLL OUT
 - THE PROJECT AIMS AT REPLACING 1 MILLION INCANDESCENT BULBS WITH CFLs
 - EXPECTED TO SAVE 30MW
 - CURRENTLY ABOUT 150,000 CFLs HAVE BEEN INSTALLED

HOT WATER LOAD CONTROL (HWLC)

- ▶ HWLC AIMS AT REPLACING 8,000 EXISTING DISK TYPE METERS WITH SMART METERS
 - ▶ ABOUT 40 MW CAN BE SAVED THROUGH THE IMPLEMENTATION OF SMART METERS
 - ▶ THE FIRST PHASE HAVE BEEN COMPLETED WITH 466 SMART METERS INSTALLED
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FUTURE PROJECTS

- Development of Energy Efficiency Strategy for the Industrial and Transport Sector
 - Carry out Energy Audits in the Hotel Industry
 - Development of DSM Strategy for the whole country
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THE END

THANK YOU!

