



Energy efficiency (EE) practices Participants from Ethiopia

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*Energy Efficiency in sub-Saharan African Cities
SE4All and the covenant of mayors in Africa
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General information

Power generation/consumption

Total installed capacity

- **2300MW hydro. > 2000/45000MW**

Wind 300+MW

Geothermal 7.3MW

Diesel 80 MW

Peak demand 1580MW.

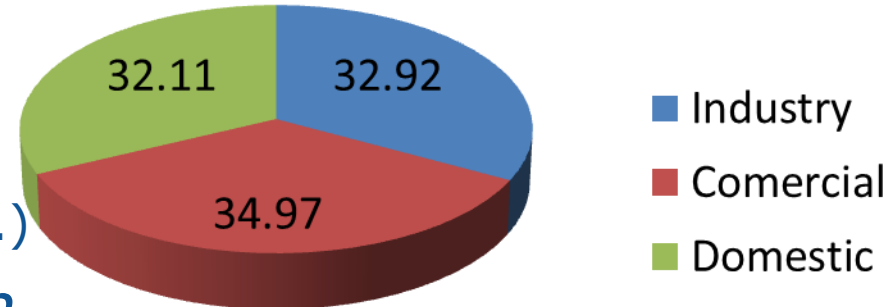
Demand Growth

25-28% / year (Mainly Indust.)

Per capita cons. < 100kwh

Access 55%

Consumption by sector





Review of current EE strategies and policies (National level)

- **There is Energy policy on the draft stage,**
- **EE is addressing**
 - Industry (Power factor correction and EE motors)
 - Transport (Public transport and light rail)
 - Building & Residence (appliances)
- **EEA has set a target for GTP 2 saving 1165 GWh of energy from all sectors**
- **EEA is a nationally designated body for energy regulation**
 - Proclamation 810/2013
 - regulation 308/2014.

- **Government transformation plan (GTP 2 and beyond), CRGE, and SE4ALL initiative's are aligned with (SDG 7) three main goals:**
 - access to modern energy services,
 - increasing EE & C and
 - optimization of diversified RE mix....
- **EEA Started EE S & L for selected appliances based on the mandate given**

Participants - stakeholders

- **The parliament** - as law making organ,
- **The ministry (MoWEE)** - Supervision
- **The standard agency** - setting and implementing standard
- **EEP/EEU** - Energy supply
- **Academia** - R & D on EE
- **Suppliers** - quality product to the market

Participants – stakeholders

- **Industries - willingness for EE technologies**
- **Donners and collaborators (supports)**
 - NCF “DSM”,
 - DFID “SCIP”,
 - EU “ TA on Various aspects of reg. framework dev.”
 - KEMCO/UNIDO EE S & L

Energy Efficiency initiatives

- **Duty support for import and manufacture of EE products.**
- **Phase out incandescent bulbs (2012)**
- **Free distribution of CFL (about 10 Mil.)**
- **Ethanol blending (E10)**
- **Mandatory installation of PFC**
- **Mandatory standards for solar lanterns**

Energy Efficiency initiatives

- **Awareness campaigns (Media)**
 - Labeling, saving, replacement (Tv, radio, Printed media)
 - Demonstration centres of EE & RE
- **Pilot installation of solar and LED street lights (cities)**
- **Dissemination/distribution of EE Cook stoves (Biomass)**

Energy Efficiency initiatives ...

Industrial Energy Audits

A, walkthrough, detailed,

>150 industries

B, meter inspections

>200 industries

C, hotels, hospitals, Gov. offices, schools

>50

➤ **The activity is Voluntary**

➤ **Mandatory Agreements will follow as per the mandates**

EEA's priority for EE S & L

Electric ovens and cooking plates;

Refrigerators;

Air conditioners;

washing machines (cloth);

*Imported and locally manufactured
welding machines;*

*Locally manufactured injera mitad and
cooking stoves.*

TV sets

Challenges

Lack of public awareness on EE,

Culture to old appliances

Low electricity tariff rate

Import of inefficient technologies at low price

Unaffordable initial cost of EE technologies,

Lack of EE standards and labeling

Insufficient institutional and human capacity and arrangement

Insufficient government budget

Future generation consideration

- **All towards RE (GREEN)**

Hydro

Wind

Geothermal

West 2 energy

solar



Thank you for your attention

