

# STATE OF ENERGY IN NEPAL

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# PRESENTATION HIGHLIGHTS

- I. Country's energy status
- II. Role of Clean Energy Development Bank in addressing energy poverty and promoting energy efficiency

# PRESENTATION HIGHLIGHTS

## II. Administrative map and region wise area



Region	Area (sq km)
Far western	19,539
Midwestern	42,378
West	29,398
Central	27,410
East	28,456
Total Area	147,181 Sq km

## Population Figures

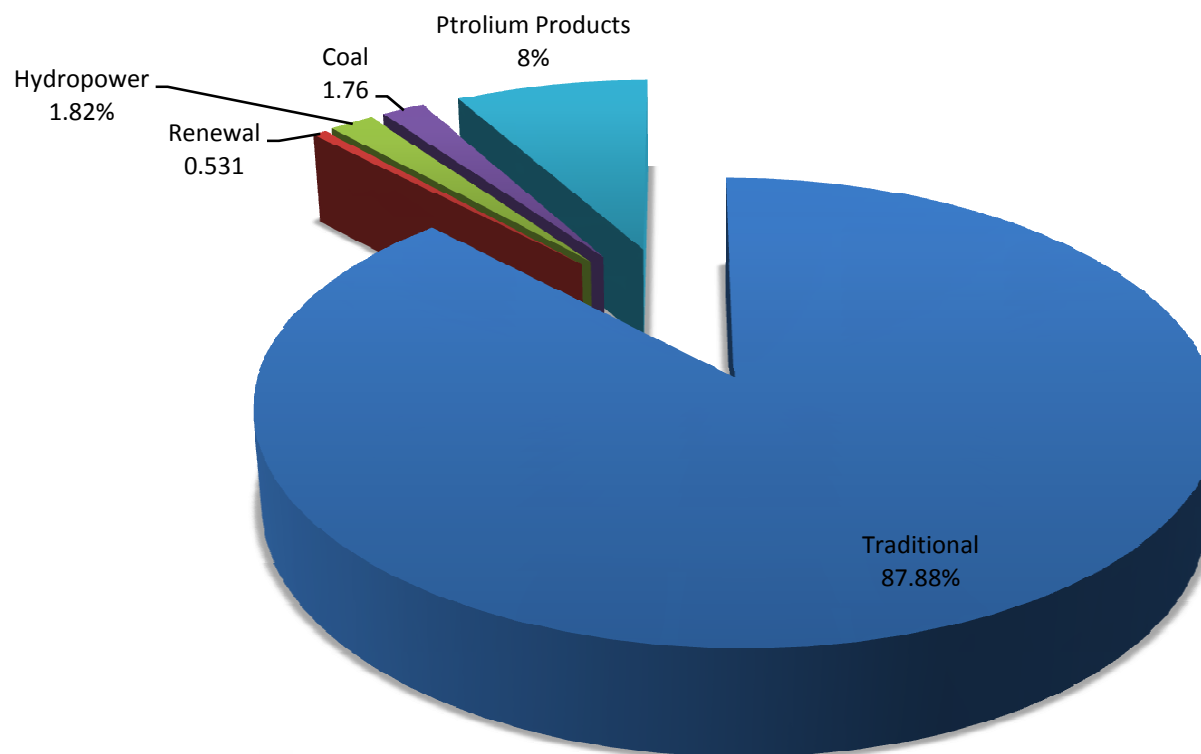
Total Households	4,253,220
Total Population	23,151,423
Total Male	11,563,921
Total Female	11,587,502
Total Area	147,181 Sq.Km.

# CONSUMPTION PER PERSON PER YEAR

- World average energy consumption per year per person is 68 gigajoule
- Per capita energy consumption of Nepal is 15 gigajoule

Source: Report of 20 years hydropower development Plan

# CONSUMPTION OF ENERGY IN NEPAL



Source: Report of 20 years hydropower development Plan

## STATUS OF HYDROPOWER IN NEPAL

- Availability of enormous water resources and topographic situation gives rise to a potential for 83,000 MW of hydropower of which about 43,000 MW of power production seems to be economically and technically feasible.
- Total energy generated 714 MW (Economic Survey, MOF, 2009/10)
- Currently power deficit of 400 MW in the country

# STRATEGIES FOR HYDROPOWER DEVELOPMENT OF NEPAL

- Promotion of public, private, community and cooperative investment to fulfill domestic demand of energy need
- Rapid expansion of national grid
- Reduction of power cut by generation of power
- Access to energy for poverty reduction



## HYDROPOWER RELATED LEGAL PROVISIONS

- **Water Resource Act 1992**
- **Hydropower Development Policy 2001**
- **Electricity Act 1992**
- **Rural Energy Policy 2006**
- **Renewable Energy Subsidy Arrangement 2000/2006/2008/2009**
- **Subsidy Delivery Mechanism 2000/2006/2008/2010**

# STATUS OF ALTERNATIVE ENERGY IN NEPAL

RETS	Total installation		Unit	District Covered
	Number	Capacity		
Hydropower				
Micro hydro	804	13.24	MW	59
Pico hydro	1274	2.45	MW	53
Improved Water Mills	6609			46
Biogas				
Household biogas plant	217429			72
Institutional biogas plant	111			25
Community biogas Plant	61			20
Solar				
Household Solar PV	192820	5.36	MW	74
Institutional Solar PV	259			42
Solar Pumping	79			26
Solar cooker/dryer	1408			30
Biomass				
ICS	474922			48
Wind	19			11

Source: RETs Data Book, AEPC, 2010

# ALTERNATIVE ENERGY

- Micro/mini hydro (less than 1 mw), solar, wind, improved cooking stove, biogas, are major alternative energy sources, more feasible for addressing energy poverty by promoting energy security among rural poor of Nepal
- The difficulties in extension of the National Grid for rural electrification due to mountain topography, dispersed settlement pattern, and the limited financial resources

# ALTERNATIVE ENERGY

- Total 9 percent of people have access to Electricity through renewable energy
- Nepal has adopted rural energy policy in 2006

# RURAL ENERGY GOAL

- Contribute to rural poverty reduction and environmental conservation by ensuring access to clean, reliable and appropriate energy in the rural areas

# Clean Energy Development Bank

- ☐ Established in year 2006 as a National Level Development Bank.
- ☐ Primary objective to become a dedicated bank in Clean Energy and Energy Efficiency Financing.
- ☐ Bank with the clear vision - **“Development of Clean Energy Sector in the country”**.
- ☐ Will soon become the largest development bank in terms of Capital Base.
- ☐ Supported by different national and international agencies for the promotion of Sustainable Energy.

## Highlights of Renewable Energy Financing

- ☐ Hydropower Project Financing
- ☐ Solar Energy Financing
- ☐ Water mills
- ☐ Biogas Financing
- ☐ Micro Hydro Project Financing
- ☐ Electric Vehicle Financing
- ☐ Energy Efficiency Project Financing
- ☐ Climate Change Mitigation and Adaptation Financing

## Clean Urban Transport Financing

- Pollution free electric vehicle
- Promoting deprived people, especially women under 'Driver Owner Concept'
- Significantly uplifting living standard of the drivers





## Solar Financing

- Benefitting thousands of households in rural areas as well as urban areas
- Saves time and use of kerosene
- Social empowerment of women
- Makes economic sense



## Biogas Financing

- 100s of households installation financing
- Women benefitting the most
- Economic as well as health friendly



## Water Mill Financing

- Support rural water mill that supports women.



# Thank You!

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