

AEPC



Alternative Energy Promotion Centre

Making Renewable Energy Mainstream Supply to Nepal



Energy for All Partnership

Opportunities and Challenges to Scaling up Wind Power in Asia: Nepal Perspectives

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Presentation Outline

- Nepal and Energy Situation
- AEPC and its Scope
- Historical Background
- Present Activities and Subsidy Arrangement
- Way Forward

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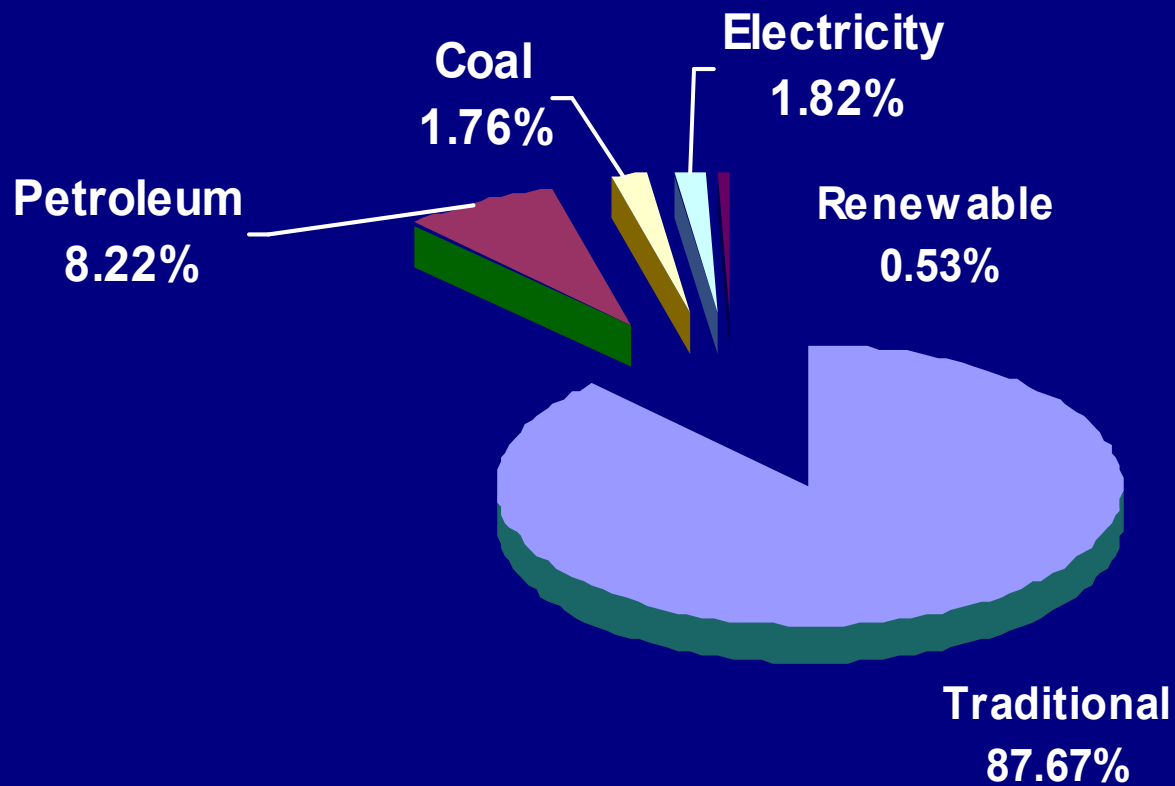
Nepal



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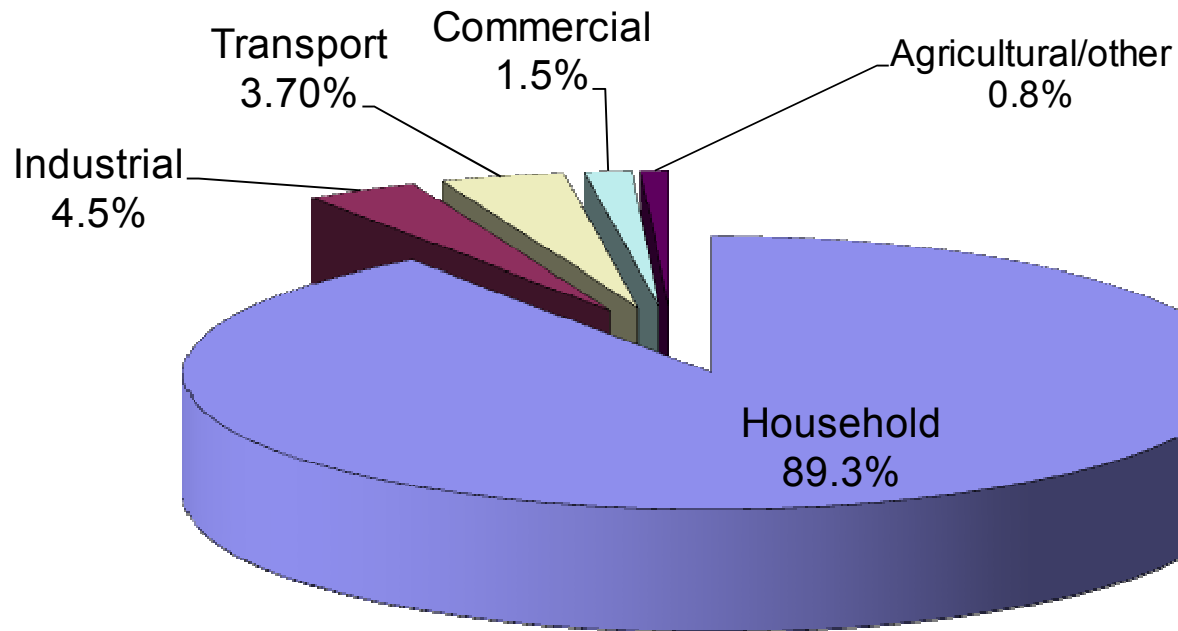


Energy Scenario_1





Energy Scenario_2





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Alternative Energy Promotion Centre

- Established in November 3, 1996
- **National Executing Agency** - RE programmes and projects
- **Government institution under MoEST**- semi autonomous status
- **Mandate:** policy and plan formulation, resource mobilization, coordination and quality assurance

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Scope of AEPC

- Micro/Mini Hydro
- Solar PV and thermal
- Biogas
- Improved cooking stoves
- Wind energy



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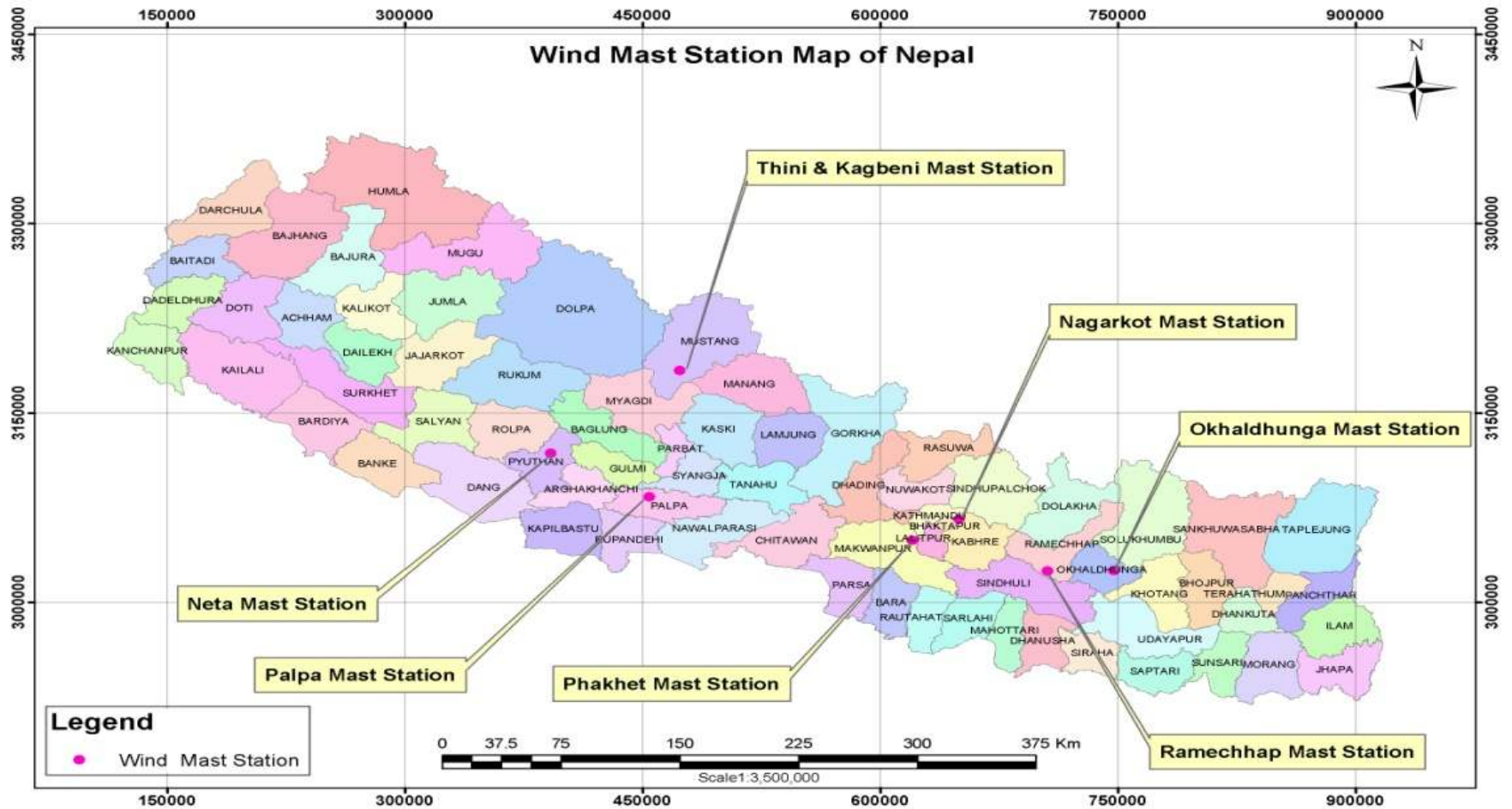
Historical Background

- Early seventies: USAID supported to establish a wind turbine at Rampur in Chitwan District (Southern Plain)
- Late seventies
 - An individual installed a wind turbine for pumping water in Ramechhap District (Eastern hilly region)
 - RECAST: Two wind turbines from India for water pumping
- In 1989, Nepal Electricity Authority (NEA), installed and operated two 10kW wind turbine generators (WTG) in Kagbeni of Mustang (Supported by DANIDA)
- From 1990-95, Krishna Grill and Engineering Works (KGEW) fabricated and installed 3 wind pumps in the eastern region of Nepal
- In 2001 WECS has established five anemometer stations to assess the Wind energy potential in Nepal.



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SWERA Project: Solar and Wind Resource Assessment

- Potential area of about 6074 sq. km with wind power density greater than 300 watt/m².
- 10 percent has been analyzed and more than 3,000 MW of electricity can be generated with consideration of the installed capacity of 5 MW per sq.km
- Most potential areas lie high and middle mountains of the country.



Present activities

- Wind speed data collection and expansion of wind stations
- Implementation of small wind power generation projects



Subsidy Arrangement

- Euro 100 per household for electrification. Capacity between 100 Watt and 1000 Watt capacity.
- Each household obtain 7 kWh of electricity per month.
- Pre-qualified companies should install components certified by Renewable Energy Test Station (RETs).



Documents Prepared

- Draft Wind Energy Policy, 2008/09
- Users' guidelines on small scale wind energy system
- Wind Permanent Magnet Generator (PMG) generator manufacturing manual
- Wind Rotor Blade manufacturing manual



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Local Wind Systems for electricity and water pumping

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Linkage with Working Group

- Access to technology
- Capacity Building:
 - Wind Resource Assessment
 - Private Sector manufactures, installers
- Investment Financing



Thank You for Your Kind Attention!!!

For further information:

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