

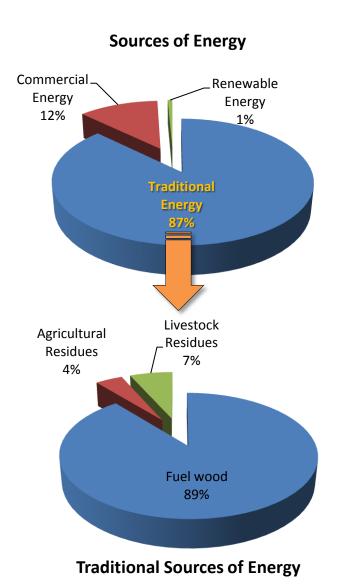
## Nepal's RE Status & Expectation from SREP





### **Introduction & Energy Situation of Nepal**

- Landlocked Himalayan country, one of LDCs with diverse climate situation.
- Per capita income US\$562 and GDP growth rate 3.5%.
- **83% population** live in **rural areas** (among national population of 28.8 million) and agriculture main occupation.
- Total energy consumption 11.9 Million Tons of Oil Equivalent & per capita energy consumption is 14 GJ.
- 54% population have access to electricity including 9% from Renewable Energy Technologies (RETs).

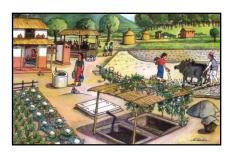


Note: All data are as of 2009

### **Renewable Energy Situation of Nepal**



*Micro-Hydro (MH)*: Potential 100MW & Progress 15MW (0.13million HHs)



**Domestic Biogas**: Potential 1.1 million HHs & Progress 0.22 million HHs



Improved Cook Stove (ICS): Potential 2,500,000 HHs & Progress 400,000 HHs







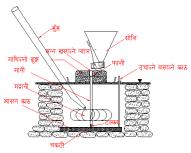
*Wind*: Potential 3,000MW & Progress only a few Pilot Projects



**Biofuel**: Potential 1,100,000 tons & Progress XXXX tons



Institutional Solar System & Solar Water Pumping: Progress 200, 000 HHs



Improved Water Mill (IWM): Potential 25,000 Nos (1 mill HHs) & Progress : 6200 Nos (0.25 million HHs



**Solar Home System (SHS)**: Potential 4.5 kWh/m²/day & Progress 0.2 million HHs

### **Development of Nepal's RET Sector**

Description	Status in 1996 (before AEPC)	Current status of AEPC	
Annual Budget	US\$ 0.6 million	US\$ 28 million	
Staffs	10	Core-32; Program-130; Local-200	
Local Offices/support	No	Yes, District Energy & Environment Units (DEEUs) in all districts & 8 Regional Renewable Energy Service Centers (RRESCs) covering all districts of Nepal	
Donors	SNV/DGIS	ADB, DANIDA, DFID, EU, GTZ, KFW, Norway, SNV, USAID, UNDP, WB	
Multilateral Donors	No	-WB (GPOBA, MH with additional finance & CDM) - ADB (IWM, Wind)	
RETs installation	MH-5MW; Biogas-25,000 HHs; IWM-700 Nos ; SHS- 11,000HHs	MH-15MW; Biogas-220,000HHs; IWM-6,200Nos; ICS- 330,000HHs; SHS-200,000HHs	
Subsidy mechanism	No	Yes to RET users including initiation of Smart subsidy	
Credit mechanism	No	Revolving fund channeled through Micro Finance Institutes (MFIs) to users	
Involvement of Private Sector	MH-4; Solar-3; Biogas-11; Employment- 500	MH-65; Solar-59; Biogas-80; Employment-30,000	
Priority of GoN	No high priority program	High & first priority program in "3 Years National Plan"	

### **Expectation from SREP**

SREP



- Environment protection
- Private sector development
- Less drudgery on women
- Social capital formation

High potential of RE

Private sector in business (PPP)

Best practices in RE promotion

Government's priority-l sector

#### **Expectation from SREP**

The overall objective for the SREP Funded RET Programme is to contribute to the national development goal of poverty reduction by up-scaling and commercialization of RETs through policy reform and increased access to technology, knowledge and finance. Particularly the objectives are:

- Increase livelihood opportunities through promotion of RET applications and support to establish enterprises
- Adaptive research and promotion of new RETs
- Fulfilling funding gap for scaling up existing RET programs
- Credit Access to service providers and users
- Policy reform and institutional strengthening (AEPC, Local Government Organizations & Private Sector)

### **SREP Activities and Tentative Investment Plan**

Targeted Activities	Targets	Required Budget (in USD)	
Policy / Institutional Support	<ul> <li>Policy and institutional support to AEPC</li> <li>Capacity building &amp; technical assistance to local bodies DEEUs &amp; private sector</li> </ul>	2.4 million	
<b>New Pilot Projects</b> (Mini/Micro- Hydro Grid Connection, Wind, Gasifiers, and Solar Local Grid )	<ul> <li>Mini Hydro-3MW</li> <li>Local Solar-1 MW</li> <li>Biogas /Municipal Waste-1 MW</li> <li>Gasifiers-0.5MW</li> <li>Benefitting 80,000 HHs</li> </ul>	33.5 million (plus users contribution 16 million)	
Meeting Funding Gaps of <b>Existing</b> Program for Subsidy	Micro-hydro, Biogas, SHS, ICS, IWM benefitting <u>130,000 HHs</u>	19.5 million (plus users contribution 19.5 million)	
Enhancing Access to <b>Credit for</b> Service Providers and End-Users	Benefitting 200,000 HHs	10 million	
<b>Livelihood Supports</b> through RET Applications	5,000 New Micro Enterprises (possibly benefiting to 100,000 HHs)	5.7 million (plus 5 million developers contribution	
Sub Total		71.1 million	
Management Cost (5%)		3.56 million	
Total	<b>74.66 Million (GoN-</b> 7.46 million & <b>SREP</b> 67.18 million) plus 40.5 million users contribution		

# Thank you very much!

Is there any solution?