

## RE Practices in Nepal – Wind Energy Technologies Small Wind Generators for Home Lighting



### Features:

- Two bladed wooden impeller with 2.05 m diameter
- Car alternator with 1:4 gear box.
- Tail guide to keep the windmill towards the wind always.
- From approx. 300 Rpm onwards the Wind Generator provides 12 Volt.
- Wind Generator: Bosch K1 14 Volt 35 Amps car alternator

### Source:

Rural Integrated Development Service (RIDS) - Nepal

G.P.O. Box: 8975

E.P.C. No: 2704

Everest Postal Care

Kathmandu,

Nepal.

[www.rids-nepal.org](http://www.rids-nepal.org)

Contact: Mr Alex Zahnd  
RIDS-Nepal Project Director  
Tel. 911126192954  
Email: [azahnd@wlink.com.np](mailto:azahnd@wlink.com.np)

## **RE Practices in Nepal – Wind Energy Technologies**

### **Wind Mill Water Pumping**



#### **PRODUCT:**

Device pumps up underground water, converting Wind Energy to Mechanical Energy (Pumping Water).

#### **FEATURES :**

- No need of fuel like Diesel , Petrol, Kerosene etc
- No need of electricity
- Zero operation and fuel cost
- Simple structure, Automatic Mechanism, easy
- Operation system
- Technology easily available in own country
- Discharging capacity approximately 4 lps.

#### **APPLICATIONS:**

Suitable for irrigation, for e.g. vegetation, paddy, wheat etc. Mostly suitable in fishery farm.

#### **Produced & Marketed by:**

Krishna Grill & Engineering Works (PVT.) LTD.  
[www.krishna.grill.free.fr](http://www.krishna.grill.free.fr)

## **RE Practices in Nepal – Wind Energy Technologies**

### **Wind Mill Generator**

#### **SMALL WIND MILL**

- Small device generating electricity from the wind.

#### **FEATURES:**

- Availability of electricity facilities in rural village
- Small, light in weight therefore easy to transport, install especially in hilly region
- Installation cost low
- Takes short time for installation
- Whole technology available in own country
- Therefore spare parts easily available
- Rated Power Output : 200 watt
- Rotor Diameter : 2 m
- Design Tip Speed Ratio : 6
- Controlling Mechanism : Hinged Tail Vane
- No. of Blades: 2 nos.
- Design Wind Speed : 5 m/s
- Rated Wind Speed : 9 m/s

#### **APPLICATIONS:**

To operate T.V, V.C.R, Refrigerator, Air-conditioner, Computer, Oven etc.  
Especially suitable for hilly areas. Emergency light and Batteries can be charged.

#### **Source:**

Krishna Grill & Engineering Works (PVT.) LTD.  
[www.krishna.grill.free.fr](http://www.krishna.grill.free.fr)

## Wind Energy Related Organizations

No.	NAME/TYPE OF ORGANIZATION	SERVICE PROVIDED
1	<p><b>Alternative Energy Promotion Centre (AEPCC)</b> Khumaltar, Lalitpur Tel: 5539391 Fax 5542497 Email: <a href="mailto:aepc@aepc.gov.np">aepc@aepc.gov.np</a></p> <p>Government</p>	<p><b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Briquette/Biomass/Gasification) Solar PV Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power Geo thermal</p> <p><b>Scope of work</b> Inputs to policy Formulation/Planning Programme/Project execution/Implementation Financing (Loan) CDM Support to community (Financial/material/technical) Social Mobilization Communication/Awareness Capacity building/Training</p>
2	<p><b>APETEC Consultancy Pvt. Ltd. (APETEC)</b> Jawalakhel, Lalitpur Tel: 5548096 Fax: 5548096 Email: <a href="mailto:aptec.vianet.com">aptec.vianet.com</a></p> <p>Consultancy</p>	<p><b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Bio-Fuel Briquette/Biomass/Gasification) Solar PV Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power Geo thermal</p> <p><b>Scope of work</b> Inputs to policy Formulation/Planning Programmed/Project execution/Implementation technical backup support Social Mobilizing Communication/Awareness Capacity building/Training</p>
3	<p><b>Association of District Development Committees of Nepal (ADDCN)</b> Sanepa, Lalitpur Tel: 5529202, 5554081 Fax: 5548469 Email: <a href="mailto:shambhu@addcn.org.np">shambhu@addcn.org.np</a> Web: <a href="http://www.addcn.org.np">www.addcn.org.np</a></p>	<p><b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Bio-Fuel Briquette/Biomass/Gasification) Solar PV Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power Geothermal</p> <p><b>Scope of work</b> Inputs to policy Formulation/Planning Technical backup support Communication/Awareness Capacity building/Training</p>
4	<p><b>Centre for Energy Studies</b> Pulchowk, Lalitpur Tel: 5532235 Fax 5532234 Email: <a href="mailto:ces@ioe.edu.np">ces@ioe.edu.np</a> Web: <a href="http://www.ioe.edu.np/bodies/ces">www.ioe.edu.np/bodies/ces</a></p> <p>Research Institute</p>	<p><b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Briquette/Biomass/Gasification) Solar PV Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power Geo thermal</p> <p><b>Scope of work</b> Inputs to policy Formulation/Planning Programmed/Project execution/Implementation Technical backup support Communication/Awareness Capacity building/Training</p>

5	<p><b>Centre for Renewable Energy (CRE)</b>  Jwagal, Lalitpur  Tel: 5011010  Fax 5550452  Email: <a href="mailto:cre@wiseuse.org.np">cre@wiseuse.org.np</a>  Web: <a href="http://www.crenepal.org.np">www.crenepal.org.np</a></p> <p>Non-Government Organization</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power  Geo thermal</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  CDM  Communication/Awareness  Capacity Building/Training  Academic Course  R&amp;D</p>
6	<p><b>Community Awareness Development Centre (CADEC)</b>  Naya Baneswor, Kathmandu  Tel: 4472264  <a href="mailto:cadec@enet.com.np">cadec@enet.com.np</a></p> <p>Non-Government Organization</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Programmed/Project execution/Implementation  Support to Community (Financial/Material/Technical)  Social mobilizing  Communication/Awareness  Capacity building/Training  Energy data management  Networking</p>
7	<p><b>Energy Systems/EC</b>  Bansbari, Kathmandu  Tel: 4372171  Email: <a href="mailto:systems@info.com.np">systems@info.com.np</a></p> <p>Consultancy</p>	<p><b>Renewable Energy Technologies</b>  Biomass (Biogas)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater)  Hydropower/Micro Hydro  Wind Power</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  CDM  Survey design  Technical backup support  Communication/Awareness  Capacity building/Training</p>
8	<p><b>Environment Camps for Conservation Awareness</b>  Jwagal, Kopundol  Tel: 5553870  Fax: 5011006  Email: <a href="mailto:ecca@mos.com.np">ecca@mos.com.np</a>  Web: <a href="http://www.ecca.org.np">www.ecca.org.np</a></p> <p>Non-Government Organization</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater)  Wind Power</p> <p><b>Scope of work</b>  Programmed/Project execution/Implementation  Financing (Loan)  Support to community (financial/material/Technical)  Social mobilizing  Communication/Awareness  Capacity building/Training</p>
9	<p><b>Flensberg Association for Energy Management (FAEM-NEPAL)</b>  Pulchowk, Lalitpur  Tel: 5009154  Email: <a href="mailto:faemnepal@info.com.np">faemnepal@info.com.np</a>  Web: <a href="http://www.faem.org.np">www.faem.org.np</a></p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Micro Hydro/Improved Water mill  Wind Power</p>

	<p>Consultancy</p>	<p><b>Scope of work</b>  Programmed/Project execution/Implementation  CDM  Technical backup support  Communication/Awareness  Capacity building/Training</p>
10	<p><b>Group of Engineers &amp; Architects for Kathmandu</b>  Tel: 5011006  Email: <a href="mailto:great@greatnepal.com">great@greatnepal.com</a>  Appropriate Technology Nepal, GREAT Nepal</p> <p>Consultancy</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette)  Solar PV  Hydropower/Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Survey/design  Installation/construction  Technical backup support</p>
11	<p><b>Institute of Engineering (TU, IoE)</b>  Pulchowk, Lalitpur  Tel: 552111531  Email: <a href="mailto:ioe@ioepc.healthnet.org.np">ioe@ioepc.healthnet.org.np</a></p> <p>Research Institute</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power  Geo thermal</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  Programmed/Project execution/Implementation  CDM  Academic course</p>
12	<p><b>Integrated Technology Department Nepal (P) Ltd, ITD</b>  Kathmandu, Nepal  Tel: 5553870  Fax: 5011006  Email: <a href="mailto:itd@itdnepal.com">itd@itdnepal.com</a></p> <p>Private Company</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette)  Solar PV  Hydropower/Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Manufacturing  Survey/Design  Installation/Construction</p>
13	<p><b>National Planning Commission (NPC)</b>  Singh Durbar, Kathmandu  Tel: 4226873</p> <p>Government</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power  Geothermal</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  CDM</p>
14	<p><b>Nepal Academy of Science and Technology (NAST)</b>  Khumaltar, Lalitpur  Tel: 5547717</p> <p>Government</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  Programmed/Project execution/Implementation  R&amp;D</p>
15	<p><b>Nepal Oldenburg Renewable Energy Centre (NOREC)</b>  Asan, Kathamndu</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)</p>

	<p>Tel: 9851094963  Email: <a href="mailto:prashun@yahoo.com">prashun@yahoo.com</a></p> <p>Non-Government Organization</p>	<p>Solar PV  Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Social Mobilizing  Communication/Awareness  Capacity building/Training</p>
16	<p><b>Practical Action Nepal</b>  Lazimpat, Kathmandu  Tel: 4446015  Fax: 4445995  Email: <a href="mailto:practicalaction@practicalaction.org.np">practicalaction@practicalaction.org.np</a></p> <p>International Non-Government Organization</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  CDM  Social mobilization  Communication/Awareness  Capacity building/Training</p>
17	<p><b>Solar Energy Foundation</b>  Babarmahal, Kathmandu, Nepal  Tel: 4277404  Fax: 4445523  Email: <a href="mailto:info@sef.org.np">info@sef.org.np</a></p> <p>Consultancy</p>	<p><b>Renewable Energy Technologies</b>  Biomass (ICS/Biogas/Briquette/Biomass/Gasification)  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro Hydro/Improved Water mill  Wind Power</p> <p><b>Scope of work</b>  Inputs to policy Formulation/Planning  CDM  Social mobilization  Communication/Awareness  Capacity building/Training</p>
18	<p><b>Swet Bhairab Power Supply (P) Ltd.</b>  Kathmandu, Nepal  Tel: 4425793  Fax: 4440332  Email: <a href="mailto:spbbs@infoclub.com.np">spbbs@infoclub.com.np</a></p> <p>Private Company</p>	<p><b>Renewable Energy Technology</b>  Hydropower  Wind Power</p> <p><b>Scope of work</b>  Survey/Design</p>
19	<p><b>Water and Energy Commission</b>  Singh Durbar, Kathmandu  Tel: 4211415  Fax: 4211425  Email: <a href="mailto:wecs@mos.com.np">wecs@mos.com.np</a></p> <p>Government</p>	<p><b>Renewable Energy Technologies</b>  Solar PV  Solar Thermal (Dryer/Cooker/Water Heater/Passive)  Hydropower/Micro hydro/improved water mill  Wind Power  Geothermal</p> <p><b>Scope of work</b>  Inputs to policy formulation/Planning</p>
20	<p><b>Nepal Electricity Authority (NEA)</b>  Ratnapark, Kathmandu  Tel: 4252835  Fax: 4256091</p> <p>Government</p>	<p><b>Scope of work</b>  Sole buyer of electricity generated by wind farms  Inputs to policy formulation/Planning</p>
21	<p><b>Nepal Agriculture Research Council (NARC)</b>  Khumaltar, Lalitpur  Tel: 5535981</p> <p>Government</p>	<p>NA</p>
22	<p><b>Department of Hydrology and Meteorology (DHM)</b></p>	<p><b>Renewable Energy Technologies</b></p>

	Babarmahal, Kathmandu Tel: 4255920, 4426348 Email: <a href="mailto:dg@dhm.gov.np">dg@dhm.gov.np</a>  Government	Solar Radiation Wind Hydropower <b>Scope of work</b> Data Collection Data Publication
23	<b>National Trust for Nature Conservation (NTNC)</b> Jawalakhel, Lalitpur tel: 5526971 Email: <a href="mailto:info@kmtnc.org.np">info@kmtnc.org.np</a> Government	NA
24	<b>Research Centre for Academy of Science and Technology</b> Kirtipur, Kathmandu  Research Institute	<b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Briquette/Biomass/Gasification) Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power <b>Scope of work</b> Experience in wind turbine installation for pumping water R & D in wind energy Inputs to policy formulation/Planning
25	<b>Kathmandu University, (KU)</b> Dhulikhel, Kavre District Tel: 6661399 Fax: 6661443  Research Institute	<b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Briquette/Biomass/Gasification) Solar PV Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power <b>Scope of work</b> Experience in wind turbine installation for pumping water R & D in wind and other alternative energy
26	<b>Krishna Grill Engineering P. Ltd.</b> Biratnagar, Jhapa District Tel: (21)525492 Fax: (21) 531162 Email: <a href="mailto:kgkct@brt.wlink.com.np">kgkct@brt.wlink.com.np</a>  Private Manufacturer	<b>Renewable Energy Technologies</b> Biomass (ICS/Biogas/Briquette/Biomass/Gasification) Solar Thermal (Dryer/Cooker/Water Heater/Passive) Hydropower/Micro Hydro/Improved Water mill Wind Power <b>Scope of work</b> Experience in manufacturing wind pumps and wind turbine for electricity generation
27	<b>Lotus Energy P. Ltd. (in the past it was involved in manufacturing)</b> Bhatbhateni, Kathmandu Tel: 4418203 Fax: 4412924 Email: <a href="mailto:info@lotusenergy.com">info@lotusenergy.com</a>  Private Supplier	<b>Renewable Energy Technologies</b> Solar PV Hydropower/Micro Hydro/Improved Water mill Wind Power <b>Scope of work</b> Supply of SHS and other RETs including wind turbine and generators

**Source:**

**Alternative Energy Promotion Centre (AEPC)**

Khumaltar, Lalitpur

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