RE Practices in Bangladesh – Wind Energy

Water pumping Windmill

Design and Installed by Local Government Engineering Department, Bangladesh

Technical Data:
- Rotor dia. 2.75m
- No of blades 24
- Starting wind speed 1.8 m/s
- Pump type semi rotor reciprocating suction pump
- Output 20,000 litters/day, 10m head at 4.0 m/s wind velocity

Introduction:
- Low cost
- Locally manufactured
- Minimal maintenance

Uses of Wind Pump:
- Villages
- Schools
- Rural Clinics
- Farms (irrigation & livestock)
- Small scale industries
- Nature/Wildlife reserves
- Land Drainage
- Salt Production
- Waste water treatment
- Aerations

Project Developer
Sustainable Rural Energy (SRE), Local Government Engineering Department
Sustainable Rural Energy (SRE), Local Government Engineering Department, LGED HQ, GIS Unit, Level-4, Agargaon, Dhaka-1207, Bangladesh.
Tel: +88-02-811 9138, 811 2126
Fax: +88-02-811 6390
E-mail: [sreproject@yahoo.com ; zmsajjad@gmail.com]
Web addresses: www.lged.gov.bd

Source:
Renewable Energy & Environmental Information Network (REEIN)
E-mail: reein@dhaka.net, myreein@yahoo.com, recinorg@hotmail.com, reeinorg@gmail.com ; Website: http://www.reein.org
Wind Energy Programme under Bangladesh Center for Advanced Studies (BCAS)

Wind energy installation under Renewable Energy Programme (REP):

Energy Resource : Wind Turbine
Type of installation : Water pumping wind mill Irrigation
No of installation : 1
Capacity of installation : 1X1.0 kW, 3X1.5 kW, 1X10 kW
Cost of Installation :
Location of Installation : Patenga (Coastal Area), Chittagong
Functional Status : Functioning
Type of installation : Resource Assessment

Project Developer
Bangladesh Center for Advance Studies (BCAS)
Non-Government Organization (NGO)
COAST Trust, House # 9/4, Road # 02, Shaymoli, Dhaka-1207, Bangladesh.

Contact:
Dr. M Eusuf, Senior Fellow
M. Osman Goni Shawkat, SRO
Tel: 88-02-8851237, 8851986, 8852217, 8852904
Fax: 88-02-8851417
E-mail: muhammad.eusuf@bcas.net; osman.gani@bcas.net
Web Address: www.bcas.net

Source:
Renewable Energy & Environmental Information Network (REEIN)
E-mail: reein@dhaka.net, myreein@yahoo.com, reeinorg@hotmail.com, reeinorg@gmail.com; Website: http://www.reein.org
RE Practices in Bangladesh – Wind Energy

Demonstration of 10 kW Wind-Solar hybrid power system facilitates biodiversity and conservation research works and promotes ecotourism infrastructures at St. Martin’s Island at bay of Bengal, Cox’s Bazar district, Bangladesh

Hardware Used:

For Solar PV Part:
- Solar module: Kyocera 125Wp (Multi Crystalline)
- Number of Solar module: 44
- Capacity of Solar module: 5000 Wp
- Inverter: XANTREX, USA, 2nos @ 4.5kW
- Battery: VARTA, 100Ah, 44 nos

Wind Turbine:
- Wind turbine: Whisper 175 (15 ft), Made in USA
- Rotor Diameter: 15 ft
- Tower height: 70 ft
- Weight: 175 lbs (55kg)
- Start up wind speed: 7.1 mph (3.1 m/s)
- Voltage: 24, 32, 48 V, DC
- Number of turbines: 7
- Capacity of each: 3.2kW (at wind speed of between 3-4 m/s)
- Peak power: 3.2kW@27 mph (12m/s)

Other accessories:
- Computer: Pentium - IV, Compaq
- Printer: Laser Printer
- Refrigerator: Caravall Brand
- Water Filter: EVA, 2 hp, 210 lit capacity UV resistant water filter
- Water pump: Pedrollo

Source:
Renewable Energy & Environmental Information Network (REEIN)
E-mail: reein@dhaka.net, myreein@yahoo.com, reeinorg@hotmail.com, reeinorg@gmail.com; Website: http://www.reein.org
Wind Energy Business in Bangladesh – List of Companies

Bangladeshi Trading Corporation

- **Business type:** manufacturer, wholesale supplier, exporter, importer
- **Product types:** solar water pumping systems, energy efficient homes and buildings, power conditioning equipment, wind energy assessment equipment, backup power systems.
- **Address:** 51, Siddeshwari, Dhaka, Bangladesh 1217
- **Telephone:** 88-02-8333280

First Bangladesh Technologies

- **Product types:** photovoltaic systems, wind energy systems (small), solar water heating systems.
- **Service types:** consulting, installation, project development services
- **Address:** H - 64, Road 17, Block E, Banani, Dhaka, Dhaka Bangladesh 1213
- **Telephone:** (880 2) 88 11 768
- **FAX:** (880 2) 8828836

OmniTech

- **Business type:** manufacturer, wholesale supplier
- **Product types:** DC to AC power inverters, uninterruptible power supplies UPS, solar electric power systems, wind turbines (small), batteries lead acid, solar water pumping systems.
- **Service types:** design
- **Address:** 79 Satmasjid Road (1st Floor), Dhanmondi R/A, Dhaka Bangladesh 1209
- **Telephone:** +(8802) 8120298, 8115302
- **FAX:** +(8802) 9556475

Xebec & Partners Limited

- **Business type:** manufacturer, retail sales, wholesale supplier, importer
- **Product types:** solar electric power systems, telecommunication batteries, fluorescent lighting, marine power systems, remote home power systems, wind energy systems (large).
- **Service types:** installation, construction, maintenance and repair services
- **Address:** H-71 (2nd Floor) New Airport Road, Amtoli, Mohakhali, Dhaka1212 Bangladesh
- **Telephone:** 880 2 988 2024
- **FAX:** 880 2 882 5379

Source:
Solar Energy Business in Bangladesh
Website: http://energy.sourceguide.com