



Questionnaire for Village Power Systems in Mongolia

1. General information

1.1. Administrative information

• Village: Distance from Township:

• Township: Distance from nearest railway station:

County:

• City (District):

Province:

Highway from railway station to : Km;Country Road from to : Km

• Government Head (Name, Sex, Age):

Way of Communication:

Address and Post Code:

1.2. Households and Population

- Households:
- Permanent Residents:
- Temporary Residents and the duration of stay (M-M):
- Annual average cash income per household:
- Annual average cash income per capita:
- Cash income from which business:
- Labor hired cost: Yuan/Day

1.3. PV Power Plant

- System Capacity (PV)
- System Designer
- System Installer
- Government Counterpart
- Date of Commissioning

1.4. Map of the Village





2. Geographical and Weather Data

- Latitude
- Longitude
- Elevation
- Longest rainy days and rainy month
- Highest temperature and hottest month
- Lowest temperature and coldest month
- Highest humidity and wettest month

2.1. Solar Resources (10 year average data)

Month	1	2	3	4	5	6	7	8	9	10	11	12	Average
Global													
Diffuse													
Direct													

2.2. Wind Resources (10 year average data)

Month	1	2	3	4	5	6	7	8	9	10	11	12	年总计
WS (m/s)													
WD													
Typhoon													

Weather Station: Distance from the site:

Times of Calm and Calm Days

Month	1	2	3	4	5	6	7	8	9	10	11	12	年总计
Times of Calm													
Longest Calm													
Hours													

(When wind speed less than 3m/s for 3 hours, it is called one time of Calm)

• Highest wind speed and the month appeared:





3. Load information (current and future expectation)

No	Load	Voltage	Power	Quantity	Total	Daily	Consum
		(V)	(W)		Power	Working	ption
					(W)	(h)	(KWh)
1	Light 1						
2	Light 2						
3	Light 3						
4	TV						
5	DVD						
6	Washing						
	Machine						
7	Refrigerator						
8	Freezer						
9	Radio						
10							
11							
12							
13							

3.1. Loads of Housholds

3.2. Public Load

No	Load	Voltage	Power	Quantity	Total	Daily	Consum
		(V)	(W)		Power	Working	ption
					(W)	(h)	(KWh)
1	Water Pump						
2	Government						
3	School						
4	Clinic						
5	Hotel						
6	Restaurant						
7	Electric Mill						
8							

3.3. Monthly Load Consumption

Month	1	2	3	4	5	6	7	8	9	10	11	12	Avera
													ge
Power													
(W)													

reeep	renewable energy & energy efficiency partnership	 Y		N 1975
Consumpt				
ion				
(KWh)				

4. Planed Power Plant Information

4.1. System Designer and Installer of the Power Plant;

4.2. Civil Works

No.	Item	Quantity	Type	Cost
				(where available)
	Control Rooms	M^2		
	Transmission Line	M		
	Line to Households	M		
	Meters to Households	Sets		

4.3. Configuration and technical specification of the power plant (PV or PV-wind power plant);

No.	Component	Manufacturer	Capacity	&	Cost
			Specification		(where available)
	Wind Turbines				
	PV Modules				
	PV Charge Controller				
	Batteries				
	Inverter				
	Diesel Generator(s)				
	Other Equipment				
	Total Investment				
	Cost of Diesel in				
	locally				

4.4. If the System Contain Solar or Wind Home Systems, Please Indicate:

Type	PV	Wind	Batt.	Sys. Vol.	DC/AC	Quantity	Unit
	(Wp)	(W)	(Wh)	(V)		(Sets)	Price
1							
2							
3							

reeep	renewable energy & energy efficiency partnershi	0	Y	A	
4					
5					

5. Operational Statures

- Who will manages the operation of the system? Who pays them to do this?
- Operator's education and training background?
- How much of the price of electricity to the end users? Who will set the tariff level? Who will collect the revenue?
- Are there any potential business and productive applications;
- In the case of a component breaking down, who will pay for the replacement?

6. Socio-economic Impacts of the System

- 6.1. What the main impacts of the system expected on the domestic life of the village population?
- 6.2. Have additional economic activities estimated as a result of the establishment of the village power system new businesses or extended working hours?
- 6.3. What additional community benefits does the system will provide e.g. energy for a school, health centre, community centre?