

Project Proposal N 12

Project title:	A CENTRALIZED PHOTOVOLTAIC-DIESEL HYBRID SYSTEM IN SELECTED 12 SOUM CENTERS OF MONGOLIA
Project background, project outline:	<p>On June 9, 2005 the State Great Khural of Mongolia passed the National Program for Renewable Energy. Government of Mongolia has established aggressive and meaningful targets to provide renewable energy power system to all off-grid soum centers, which can not be connected to centralized power grid system in near future.</p> <p>“Mongolia: Feasibility study on Establishment of a Centralized Photovoltaic Rural Electrification System” was carried out by Japan Bank for International Cooperation, January 2004.</p>
Production scale	50-100 kW
Market orientation and market analyses, market survey	Same approach could be applied to the electrification of more 30 soum centers of total 127 off-grid soums in Mongolia.
Total investment	Estimated 9,257,000 US\$
Requested Investment from foreign partners	Grant aid/Loan Soft loan with interest rate less than 1% and term of 10 years
Project venue, construction venue:	Selected 12 soum centers in Mongolia such as . The selected 12 soum centers are most remote soum centers in Mongolia, but with a higher solar potential. All not connected to the electric grid due to the length of transmission line. There are also no accesses to the highway.
Estimated economic benefit	<p>Annual energy production - 65.7 - 185.2 MWh;</p> <p>Annual average revenue - 18.2 thousand US\$ (based on the tariff for household is 13.04 US¢/kWh and 24.52 US¢/kWh for public facility);</p> <p>Annual O&M cost - 10.1 thousand US\$ (including backup diesel fuel cost).</p>