

## Project Proposal <sup>14</sup>

<b>Project title</b>	<b>Very Large Scale Photovoltaic Power Generation System in Gobi Desert area of Mongolia: Demonstrative Research Stage-I</b>
<b>Project background</b>	<ul style="list-style-type: none"> <li>~ Very Large Scale Photovoltaic Power Generation (VLS-PV) system should become one of main energy sources from a long-range viewpoint in consideration of future cost reduction of PV system by further R&amp;D and market growth as well as global energy and environmental issues.</li> <li>~ In the “National Program for Renewable Energy /2005-2020/” approved by the State Great Khural’s Resolution No 32 June 9, 2005, it was pointed out to perform feasibility studies of VLS-PV power generation system in the scope of international research activities and implement pilot project in Gobi region of the country.</li> <li>~ There is abundant mineral resource in the Gobi desert area and recently in southern and southeast part of Mongolia a big deposits of Cu-Au was discovered in Oyu Tolgoi and Tsagaansuvraga, development of which is possible with development of reliable energy supply to these sites. The mining sites are located in quite remote area and a significant amount of new infrastructure, especially electricity and water supply, rail transportation systems, will have to be established for the copper and gold products to be marketed. It is expected that such development will be valuable under a national policy of Mongolia. It is under active discussion to establish the Cu-Au mining both at Oyu Tolgoi and Tsagaansuvraga, therefore the consumption of electricity for Gobi desert area will grow quite fast.</li> <li>~ The comprehensive study on the “Feasibility of VLS-PV systems in Gobi desert of Mongolia” was carried out by the Task VIII of the International Energy agency PVPS Program.</li> <li>~ According to the results of the case studies on the feasibility of VLS-PV systems in Gobi desert of Mongolia, it has been concluded that a significant areas of Gobi Desert is most promising candidate sites for VLS-PV installation.</li> </ul>
<b>Production scale</b>	5x500kW for Demonstrative Research Stage-I
<b>market analyses, market survey</b>	To be connected to the Central Energy System
<b>Cooperation mode:</b>	Soft loan/private investment/Grant aid
<b>Total investment</b>	Approx. 15 million US\$
<b>Requested Investment from foreign partners</b>	Long-term soft loan with an interest rate of less than 1 %