

### Project Proposal 13

Project title	Hydropower Master Plan
<p><b>Project background</b></p>	<ul style="list-style-type: none"> <li>~ In order to provide energy security of the country a sound mix of a different power generating sources is essential for the reliability and the efficient functioning of energy system. Therefore, developing of cost-effective and genuine domestic hydropower resources is extremely important for Mongolia, where all generating electricity comes from coal-fired thermal plants and imported fossil-fueled diesel stations, causing heavy dependence and unsatisfactory reliability and efficiency.</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 detailed studies of renewable energy (solar, hydro, geothermal, hydrogen, and biomass etc.) potentials of Mongolia to develop and implement Master Plan to use these sources. The program recommended to take measures to perform technical economical feasibility studies of large hydropower stations namely Eg river 220 megawatts station, Artsat 118 megawatts station on Selenge River and Orkhon river 110 megawatts station on rivers with significant hydropower resources such as Selenge, Eg and Orkhon rivers, and to implement these studies.</li> <li>~ The necessity of the Hydro Power Master Plan study was also recommended by the studies such as “Power System Master Plan” 1995 and Energy Master Plan Update: “Capacity Building in Energy Planning” 2002.</li> </ul>
<p><b>Production scale</b></p>	<p>The Hydro Power Master Plan will cover following 3 category of hydro electric schemes:</p> <ol style="list-style-type: none"> <li>1. Hydroelectric schemes of year around operation for remote area (soum centers)’s electricity supply.</li> <li>2. Small scale schemes up to 20MW, conventional hydropower plant of year around operation for electricity and heat supply to provincial centers.</li> </ol> <p>Medium and large scale storage hydro projects for supply to the national central grid if located in more remote areas, in connection with the development of mining and other energy intensive industries.</p>
<p><b>Total investment</b></p>	<p><u>approx. 1.5 million US\$ and it consists of:</u></p> <ul style="list-style-type: none"> <li>- field survey - 0.6 million US\$;</li> <li>- research work - 0.5 million US\$;</li> <li>- equipment - 0.15 million US\$;</li> <li>- expert, training and the other costs - 0.25 million US\$.</li> </ul>
<p><b>Requested Investment from foreign partners</b></p>	<p>Technical assistance/Grant aid</p>
<p><b>Project venue, construction venue:</b></p>	<p>The Hydropower Master Plan study should be covered 12 aimags with hydropower resources, located mainly in the Western and Northern mountainous regions of Mongolia.</p>