Project Summary

Project Objectives
The technical assistance (TA) helps upscale renewable energy (RE) in remote grid systems in the Mongolia Renewable Energy Investment Plan (MREIP) to contribute to achieving renewable energy capacity in 2023, with 6 years of time horizon in a sector lending modality.

Project Activities
The TA will (i) prepare a project feasibility study (including resource assessment and grid stability study) and environment impact assessments for priority subprojects, (ii) conduct due diligence on several aspects of the priority subprojects, and (iii) provide trainings on Asian Development Bank’s (ADB) procurement procedure, disbursement procedure and environment and social safeguards requirement. Various aspects of due diligence will be conducted through the project preparatory TA:

1) Technical:
- Draft feasibility study and due diligence on the identified priority sub-projects with design, construction schedule, and cost estimates;
- RE resource assessment using satellite imagery and ground measured data sets;
- Grid stability and control analysis to assess impacts of the RE penetration into the existing grid system and to identify necessary grid control measures incl. remote automatic control system and secondary battery.

2) Economic and financial:
- Economic analysis for the proposed subprojects based on the ADB Guidelines covering the 10 key areas of economic analysis, with emphasis on demand analysis, identification of project alternatives, least cost analysis, cost of benefit analysis, sensitivity analysis, risk analysis, and distribution analysis.
- Financial analysis of the subprojects in accordance with ADB’s financial management and analysis to confirm financial viability.
- Corporate financial assessment to achieve and maintain financial soundness of the implementing agencies.

3) Governance: Financial management, procurement, anticorruption and overall project management capacity of the executing and implementing agencies.

4) Poverty and social: Social and poverty analysis including sex-disaggregated impact assessment for poverty reduction and social strategy based on the recent household survey and qualitative social assessment.

5) Safeguards:
- Initial environmental examination and environment management plan for the core subprojects to demonstrate adherence to ADB’s Safeguard Policy Statement (2009) and national law and regulations.
- Environment assessment and review framework, resettlement framework and indigenous people planning framework for the subsequent batches to guide environment and social impact assessments and safeguard implementation.

Services Provided
- Conduct due diligence of candidate subprojects in the Western Region Energy System, and short list candidate RE subprojects in the other remote grid energy systems
- Prepare draft feasibility study report (including resource assessment and grid stability study)
- Prepare Environment Assessment and Review Framework (EARF)
- Prepare initial Environmental Examination (IEE) incl. Environment Management Plan (EMP)
- Provide trainings on Asian Development Bank’s (ADB) procurement procedure, disbursement procedure and environment and social safeguards requirement
- Hold inception, midterm, and final workshops

Mongolia

Promotion of Renewable Energies in remote grid systems

Client
Asian Development Bank (ADB)

Duration
16/02/2017 - 20/08/2018

Personnel
- 1 internat. Team Leader (6 PM, RE Specialist)
- 1 nat. Deputy Team Leader (11 PM, RE Specialist)
- Pool of internat. and national STE (76 PM, Experts for PV, Wind-/Hydropower, Shallow Ground Heat Pump, Environment, Social Safeguards, Financial Management, Energy Economy, Procurement)