

ATTACHED TECHNICAL ASSISTANCE

A. Introduction

1. Requested by the Government of Nepal, the attached technical assistance (TA) was included in Nepal's country operation business plan, 2014–2016.¹ After several missions, the government and the Asian Development Bank (ADB) agreed to implement the TA along with the proposed South Asia Subregional Economic Cooperation Power System Expansion Project. The TA will be implemented over 24 months from July 2015 to June 2017. The estimated cost of the TA is \$500,000, excluding the government's counterpart support. The TA will help the government promote renewable energy and rural electrification in a sustainable and programmatic manner.

B. Outputs and Key Activities

2. **Feasibility study for large-scale wind farm (minimum 1MW).** Nepal does not have any large-scale wind farms (minimum 1 megawatt). Under the ensuing project, five wind masts will be procured and installed at selected sites for collecting wind data. Based on the collected wind data, the TA will support a feasibility study for a large grid-connected wind farm, and recommend a proper tariff structure.

3. **Energy storage management scheme.** Energy storage systems are needed for solar and solar–wind hybrid systems. The TA will study the options of management of used batteries, including recycling the batteries, and support the government in implementing the scheme.

4. **Institutional capacity development.** To ensure appropriate institutional governance, the TA will support capacity development of the Ministry of Science, Technology and Environment (MOSTE) and the Alternative Energy Promotion Centre (AEPC). The capacity development will cover accounting and financial management, operations and maintenance, safeguards and gender, and community involvement. The TA will also support preparation of draft regulations for implementing the Renewable Energy Promotion Board (REPB) Act, as and when it is enacted.

C. Cost and Financing

5. The TA is estimated to cost \$500,000 which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V).

¹ ADB. 2013. *Country Operations Business Plan: Nepal, 2014–2016*. Manila.

Table 1: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	308.10
ii. National consultants	45.35
b. International and local travel	86.20
c. Reports and communications	2.00
2. Equipment ^b	3.80
3. Training, seminars, and conferences	
a. Facilitators	2.00
b. Training program	22.50
4. Surveys	5.00
5. Miscellaneous administration and support costs	2.00
6. Contingencies	23.05
Total	500.00

Note: The technical assistance (TA) is estimated to cost \$500,000, of which contributions from the Asian Development Bank (ADB) are presented in the table above. The government will provide counterpart support in the form of staff, office accommodation, and other in-kind contributions. The value of government contribution is estimated to account for 20% of the total TA cost.

^a Financed by the ADB's Technical Assistance Special Fund (TASF-V)

^b The equipment will include 1 printer, 1 scanner, 1 fax machine, and 1 digital video camera. The equipment will become the property of executing agency at the end of TA.

Source: ADB estimates.

6. The government will provide counterpart support in the form of staff, office accommodation, and other in-kind contributions.

D. Implementation Arrangements

7. The executing agency will be MOEST; the implementing agencies are AEPC and the Nepal Electricity Authority. AEPC will oversee day-by-day TA implementation. MOSTE and AEPC will help the consultants liaise with other government ministries and agencies, local authorities, and other stakeholders in the project areas, and obtain data and documentation from them. They will assign the counterpart staff to each area of expertise for on-the-job-training and skills transfer. AEPC will provide sufficient office space, furniture, and support facilities to the TA consultants in a timely manner.

8. An overview of the required consulting services is summarized in Table 2 and described in detail in the project administration manual.² ADB will engage the consultants in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time).

² Project Administration Manual (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

Table 2: Summary of Consulting Services

Area of Expertise	Duration (person-months)
A. International	
1. Renewable energy policy expert and team leader	4.0
2. Wind energy expert	2.0
3. Energy storage expert	1.0
4. Tariff expert	2.0
5. Financial expert	1.0
6. Environment expert	1.0
7. Social development expert	1.0
Subtotal (A)	12.0
B. National	
1. Renewable energy expert	4.0
2. Environment expert	3.0
3. Social development expert	3.0
Subtotal (B)	10.0
Total (A+B)	22.0

Source: Asian Development Bank