

## PROJECT PREPARATORY TECHNICAL ASSISTANCE

1. The main objective of the proposed project preparatory technical assistance (PPTA) is to prepare the Renewable Energy Development (Biomass Cogeneration) Project (the project) and assist the executing agency in undertaking advance procurement.

### A. Justification

2. The PPTA is necessary on the following grounds:
- a. The project needs to be prepared in a timely manner to meet the investment needs in Azerbaijan.
  - b. While the government has a plan to invest in the project, there is a need to prepare a feasibility study to undertake due diligence required to process a loan for the project, and to prepare tender documents for the procurement.
  - c. There is a need for expertise from a competent international consulting firm to prepare the project and to assist the tender process, considering the technical complexity of the project.

### B. Major Outputs and Activities

3. The PPTA is expected to be implemented over an 18-month period starting June 2013 with two phases. In the first phase, the consultants will conduct a detailed feasibility study to assess the viability of the proposed renewable energy investment projects, with particular focus on the fuel flexibility of the conversion technology and the security of affordable biomass supply. Subject to the discussions with the government, the identified investment project will be further developed and optimized in the second phase with due diligence assessment in accordance with ADB and the government's requirements. The major outputs and activities are summarized in Table A4.1.

**Table A4.1: Summary of Major Outputs and Activities**

Major Activities	Expected Commencement Date	Major Outputs	Expected Completion Date
<b>Phase I (Jun –Dec 2013)</b>			
1. Project Scope	Jun 2013		Aug 2013
<ul style="list-style-type: none"> <li>- Gather relevant data and information</li> <li>- Conduct biomass resource assessment and energy yield estimation</li> <li>- Recommend biomass conversion technology considering flexibility to available fuels</li> </ul>		<b>Inception Report:</b> including work plan and preliminary framework, biomass resource assessment and technology selection report	
2. Technical Design	Aug 2013		Dec 2013
<ul style="list-style-type: none"> <li>- Assess sustainability of biomass sources and supply</li> <li>- Design an appropriate set of policies and regulatory framework</li> <li>- Prepare detailed cost estimates, financing plan, procurement plan, and implementation schedule</li> <li>- Conduct economic and financial analyses, and financial management assessments</li> <li>- Assess corporate management structure and procurement capacity</li> <li>- Propose and define technical specifications</li> </ul>		<b>Interim Report:</b> including feasibility study, economic and financial analysis, draft policy and regulatory framework, capacity assessment	

<b>Phase II (Jan – Dec 2014)</b>		
3. Due Diligence Assessment	Jan 2014	Dec 2014
<ul style="list-style-type: none"> <li>- Assess environmental impacts and conduct public consultations.</li> <li>- Prepare initial environmental examination (IEE) with environmental management plan (EMP).</li> <li>- Conduct poverty, social and gender analysis and social safeguards due diligence and prepare due diligence report</li> <li>- Climate Change Assessment and workshop be conducted in parallel with the Safeguards assessment;</li> <li>- Develop GHG monitoring -reporting -verification plan for the projected emissions reductions</li> <li>- Prepare draft Project Administration Memorandum (PAM)</li> <li>- Assess fund flow and disbursement mechanism</li> </ul>		<b>Draft Final Report:</b> including refined reports on feasibility study, economic and financial analysis, policy and regulatory framework, capacity assessment, IEE, social safeguard assessment, and draft PAM
4. Advance Procurement	May 2014	Dec 2014
<ul style="list-style-type: none"> <li>- Prepare bidding documents for the main works</li> <li>- Evaluate the bids and prepare evaluation reports</li> <li>- Assist contract negotiations</li> </ul>		bidding documents, bid evaluation report
5. Preparation of Final Report		<b>Final Report and its summary</b>
Source: Asian Development Bank		

### C. Cost Estimate and Proposed Financing Arrangement

4. The PPTA is estimated to cost \$1,200,000 equivalent, of which \$1,000,000 will be financed on a grant basis by the multi-donor Clean Energy Fund<sup>1</sup> under the Clean Energy Financing Partnership Facility (CEFPPF), administered by ADB. The government will provide counterpart support in the form of counterpart staff, office space and other in-kind contributions. The detailed cost estimate is presented in Table A4.2.

**Table A4.2: Tentative Cost Estimates**  
(\$'000)

Item	Total Cost
<b>A. Multi-donor Clean Energy Fund<sup>a</sup> under the Clean Energy Financing Partnership Facility</b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (28 person-months)	630.0
ii. National consultants (15 person-months)	70.0
b. International and local travel	50.0
c. Reports, communications, and translations	20.0
2. Workshops, training, seminars, and conferences <sup>b</sup>	50.0
3. Vehicle <sup>c</sup>	20.0
4. Surveys	50.0
5. Miscellaneous administration and support costs	10.0
6. Contingencies	100.0
<b>Total</b>	<b>1,000.00<sup>d</sup></b>

<sup>a</sup> Contributors: the Governments of Australia, Norway, Spain and Sweden, administered by ADB.

<sup>b</sup> Workshops, training, seminars, and conferences: Stakeholder consultations/training in Azerbaijan.

<sup>c</sup> Vehicle: Rented vehicles will be required for consultants during fielding in Azerbaijan and for site survey.

<sup>d</sup> The government will provide counterpart support in the form of counterpart staff, office space, and other in-kind contributions. The value of government contribution is estimated at \$200,000.

Source: Asian Development Bank.

<sup>1</sup> Contributors: the Governments of Australia, Norway, Spain, and Sweden.

## D. Consulting Services

5. A consulting firm or consortium of firms will be engaged by ADB under its *Guidelines on the Use of Consultants* (2010, as amended from time to time). A simplified technical proposal format and the quality- and cost-based selection method (90:10 ratio)<sup>2</sup> will be used.

6. The PPTA consultants need to undertake necessary due diligence for processing the loan for the project, and assist the pre-implementation works. The PPTA will also adequately address the following aspects relating to the ensuing loan project: (i) improved policy and regulation framework for promotion of biomass cogeneration investment projects; and (ii) detailed loan executing agency capacity assessment, and suggested remedial action plan to build the executing agency and the implementing agency capacity to minimize procurement and financial management risks.

**Table A4.3: Summary of Consulting Services Requirement**

<b>International Name of Positions</b>	<b>Person- months</b>	<b>National Name of Positions</b>	<b>Person- months</b>
Biomass generation specialist/Team leader	6.0 2.0	Biomass engineer Regulatory and policy expert	6.0 2.0
Biomass feedstock market specialist			
Regulatory and policy specialist	3.0	Heating supply design expert	2.0
Heating supply specialist	4.0	Economic and financial expert	2.0
Economic analysis specialist	2.0	Environment/social safeguard expert	3.0
Financial analysis/Financial management Specialist	2.0		
Environment safeguard specialist	3.0		
Social development/ resettlement specialist	3.0		
Procurement specialist	3.0		
<b>Total inputs</b>	<b>28.0</b>		<b>15.0</b>

Source: Asian Development Bank estimates.

7. The outline terms of reference for the PPTA consultants are summarized below:
- (i) The team leader will be a biomass generation specialist responsible for overall project design, preparation, and development of Renewable Energy policy and regulation framework.
  - (ii) Biomass feedstock market specialist will lead the biomass resource assessment and energy yield estimation including recommendations for viable long-term biomass supply agreements/contracts.
  - (iii) Regulatory and policy specialists will evaluate key policy and regulatory issues, and design an appropriate set of policies and regulatory framework.
  - (iv) Heating supply specialists will conduct a power and heating demand analysis and propose design and configuration, controls and instrumentation of the cogeneration system and heating supply.
  - (v) Economic and financial specialists will conduct cost estimate, economic and financial analysis, and financial management assessment.
  - (vi) Environmental safeguard specialists will prepare an IEE for the project components.
  - (vii) Social development and resettlement specialists will undertake social, resettlement, and poverty impact assessments as required.
  - (viii) Procurement specialist will be primarily engaged in assisting bidding process.

<sup>2</sup> The project involves complex technology requiring highly competent consulting firm, therefore a 90:10 ratio will be applied.

## E. Implementation Arrangements

8. The SAARES will be the executing agency for the overall implementation of technical assistance. A PMU established within SAARES with sufficient resources and qualified personnel will implement the project. The PMU will be headed by a Project Coordinator, and will closely coordinate with the consultants. SAARES will assist the consultants on data collection, site visit, survey, and provide other administrative support as necessary. All disbursements under the PPTA will be made in accordance with Technical Assistance Disbursement Handbook (2010, as amended).

9. The executing agency will assist the consultants in data gathering, preliminary analysis, and report writing. The executing agency will provide all necessary assistance to the consultants in liaising with other government ministries and agencies. The consultants, on the other hand, will be responsible for personal computers and other facilities for producing reports.

10. The executing agency will provide and make available to the consultants, free of charge, the following facilities, services, equipment, materials, documents and information as they are required by the consultants for carrying out the technical assistance.

- (i) counterpart staff/technical support;
- (ii) office space: sufficient office space for the consultant team, and has national and international telephone lines, electricity and air conditioning/heating, and internet connections;
- (iii) office furniture: desks, office chairs, book shelves/cabinets adequate to accommodate the full complement of international and local consultants; and
- (iv) organizational support: assistance in all arrangements for workshops, meetings, and field visits and access to required data, maps and other relevant information.

11. The proposed technical assistance processing and implementation schedule is listed in Table A4.4.

**Table A4.4: Proposed Technical Assistance Processing and Implementation Schedule**

<b>Major Milestones</b>	<b>Expected Completion Date</b>
RFP issuance	Apr 2013
Evaluation of proposal	May 2013
Contract signing	Jun 2013
Inception mobilization	Jun 2013
Interim report (draft feasibility study)	Dec 2013
Draft final report	Apr 2014
Final report	Dec 2014

RFP = request for proposal.  
Source: Asian Development Bank.