TERMS OF REFERENCE FOR CONSULTANTS

1. The Government of Pakistan has requested ADB to support preparing a progress report on the key points identified in the Friends of Democratic Pakistan (FODP) report in 2010 and recommendations from this assessment. The 2010 FODP Integrated Energy Sector Recovery Report recommended 5 key areas of reforms and investments: (i) strengthen energy sector governance and regulation, (ii) rationalize pricing and energy subsidies, (iii) develop energy finance capability, (iv) mainstream energy efficiency into energy policy, and (v) fast track investment projects for energy security.

2. The consultants recruited under the knowledge and support technical assistance (TA) will analyze the progress made during 2010–2016 on the recommendations of the Friends of Democratic Pakistan (FODP) integrated energy sector recovery report, analyze the lessons learnt in relation to the changing global realities and propose recommendations as inputs for a new energy policy for the medium term (2018–2023). The findings will be designed to inform the government on the past progress and provide options for the future energy policies of the country. The consultants will support the development of an efficient and financially sustainable energy sector in Pakistan to overcome challenges posed by energy bottlenecks to growth and poverty reduction. The main outcome will be findings of the report fed into Pakistan's new energy policy by the newly elected government after May 2018 parliamentary elections.

The consultants will, in addition to building on existing information, undertake fresh 3. analysis, as required, of Pakistan's energy sector challenges, and investment and reform requirements. Individual consultants (international and national) will be recruited to take stock analysis and FODP report and prepare a revised action plan on the energy sector. The consultants will also analyze the recent technological and energy related developments globally vis drop in fossil fuels prices, shale revolution, and improvements in renewable energy technologies (solar and wind) to reduce prices, among others; and how would these changes impact energy policy of the Government of Pakistan. The consultants will work under the overall guidance of ADB and the Government of Pakistan. A consultative process will be followed in producing the deliverables. This will ensure that all relevant members of the development community and the government of Pakistan are fully on board and own the analysis and recommendations of the report and the action plan. The final draft report is expected in May 2018. The Team Leader will be responsible for overall coordination, quality of analysis and output, individual task supervision and synthesis of analysis in the shape of a final report and an action plan. Individual consultants will be responsible for providing quality analysis in their respective area of expertise, a sub-sector report and contribute to the final report accordingly.

A. Consultants Engaged by the Asian Development Bank¹

1. **Energy Economist** (international, 5 person-months)

Location: Islamabad. The consultant is preferred to have a Masters degree in relevant field with at least 15 years of international experience in energy sector analysis and projects implementation. The consultant will:

(i) Be the Team Leader and provide overall guidance to the consultants in finalizing the report;

¹ The number on input / person-months can be altered and adapted to suit and match the requirements, implementation and progress of the assignment as well as feedback received from stakeholders

- Undertake all necessary gap analysis and consultations relating to Pakistan's energy sector as required for putting together a forward looking and practical action plan and the report;
- (iii) Analyze power sector tariff structures and existing subsidies in the sector from the point of view of financial sustainability. Recommend measures necessary to ensure long-term sustainability of the sector;
- (iv) Assess Pakistan's investment requirements in the energy sector keeping in view the required trend economic growth to create jobs and reduce poverty. Enumerate these requirements in the action plan and the report;
- Provide research and analysis support on all aspects of the preparation of the action plan and report; including due diligence on least cost generation plan, ensuing transmission requirements and distribution planning;
- (vi) Undertake other duties as they arise during the TA implementation period.

2. **Power/Energy Sector Specialist** (international, 5 person-months)

Location: Islamabad. The consultant is preferred to have a Masters degree in relevant field with at least 12 years of international experience in power sector analysis and projects implementation. The consultant will

- (i) Provide support to the team leader by contributing insight and knowledge of the power sector to the preparation of the action plan and the report;
- (ii) Collect and collate information and analysis about Pakistan power challenges through establishing contact with all local stakeholders including Government agencies, power companies, and the private sector; and analyze existing take or pay generation contracts and critique institutional structure of energy sector
- (iii) Undertake writing of specific parts and chapters of the action plan and the report;
- (iv) Provide requested support to other team members by making use of local contacts to schedule appointments and meetings; and
- (v) Undertake other duties as assigned by the team leader.

3. Energy Finance/Regulatory Expert (national, 8 person-months)

Location: Islamabad. The consultant is preferred to have a relevant university degree with at least 10 years of pertinent experience. The consultant will:

 Provide support to the team leader by contributing local insight and knowledge of the financial aspects of energy sector in Pakistan for the preparation of the action plan and the report; with a particular focus on circular debt and its reduction measures;

- (ii) Collect and collate information and analysis about financial challenges faced by Pakistan energy sector through establishing contact with all local stakeholders including Government agencies, power companies, and the private sector including, and as needed, review of most current audited and/or unaudited financial statements of energy sector entities to assess (a) historical financial performance, (b) retail tariff levels, (c) capital structure, and (d) sufficient generation of internal funds to ensure sustainability of ongoing operations (i.e., self-finance a reasonable percentage of capital expenditures and service existing debt)
- (iii) Identify all risks to revenues and costs and conduct relevant sensitivity analysis;
- (iv) Analyze the economic subsidies involved in the current tariff structure and the extent of cross-subsidization between major consumer groups and regions; and review the appropriateness of the existing lifeline tariff block;
- (v) Update existing estimates of costs of unserved energy due to unreliability of the system; and develop several scenarios for the load growth forecast;
- (vi) Undertake writing of specific parts and chapters of the action plan and the report;
- (vii) Provide requested support to other team members by making use of local contacts to schedule appointments and meetings; and
- (viii) Undertake other duties as assigned by the team leader.

4. **Hydrocarbon Expert** (national, 8 person-months)

Location: Islamabad. The consultant is preferred to have a relevant university degree with at least 10 years of pertinent experience. The consultant will:

- (i) Assist the team leader in efficient assessment and critical analysis of country's hydrocarbon sector (oil and gas);
- Review ongoing policy reforms in the hydrocarbon sector and assess the progress made since 2010 and recommend a policy matrix into the ensuing sector development program;
- (iii) Analyze investments roadmap and pipeline and conduct a thorough analysis of the recommendations made in 2010 FODP report with way forward suggesting remedial action plan, if required.

5. Energy Efficiency and Renewables Expert (national, 8 person-months)

Location: Islamabad. The consultant is preferred to have a relevant university degree with at least 10 years of pertinent experience. The consultant will:

(i) Assist the team leader in efficient assessment and critical analysis of country's energy efficiency and renewable energy (wind and solar);

- Review ongoing policy reforms in the energy efficiency and renewable energy sector and assess the progress made since 2010 and recommend a policy matrix into the ensuing sector development program;
- (iii) Analyze investments roadmap and pipeline and conduct a thorough analysis of the recommendations made in 2010 FODP report with way forward suggesting remedial action plan, if required.

B. Reports

6. The consultants, including members of development partners of Pakistan's energy sector, government ministries and other stakeholders will be an essential part of information exchange, consultative process of dialogue, and sector assessment. Regular progress meeting will be held to share progress and output and receive feedback from stakeholders. The following reports, in English, will be submitted by the consultants to the government and to the Asian Development Bank:

- (i) **Inception report.** Within 15 days of startup of TA, the consultants will prepare a report that includes the proposed work plan until May 2018, priority actions, key stakeholders to meet and participate, methodology and cost-effective scheduling to meet terms of reference.
- (ii) Monthly progress reports. These should be submitted within the first 15 days of the following month. The reports will (a) show the progress based on the consultants' terms of reference, work plan, and other initiatives; and (b) identify barriers, recommendations and revised action plans to achieve TA outputs. These reports will be submitted to ADB and the Ministry of Water and Power.
- (iii) **Interim and Draft final report with Power Point Presentations.** This will be submitted by 31 December 2017 and 15 March 2018 to allow wider set of stakeholders to assess the progress and provide feedback.
- (iv) Workshops. Three consultative workshops in Islamabad to be scheduled during the course of TA from August 2017 through till May 2018. Key stakeholders including relevant government ministries and agencies, international development partners, media and civil society organizations will be invited. All feedback and input received need to be carefully analyzed and factored into the final report.
- (v) Final Report with Power Point Presentation. To be submitted by 31 May 2018 through CD-ROM, 200 hard copies as well as disseminated through final presentation at the ministerial level within 3 weeks of receipt of comments from the government, ADB and other stakeholders. The final report will cover the two outputs: (i) key energy analysis and recommendations for 2018-2023, and (ii) collection, analysis and incorporation of stakeholder views on 2013-2017 progress achieved in energy sector.