**Bangladesh Clean Energy Sector Assessment**

**Scope of Work**

**Context**

In recent decades, South Asia has experienced unprecedented economic growth and benefitted from an international technological transition that now renders clean energy cost-competitive. However the region is not without its challenges, including electricity shortages, lack of reliable power and regional connectivity, financially weak utilities, health impacts from air pollution, environmental impacts from rapid infrastructure development, and water and food insecurity. Improving the health of the region’s energy sector and increasing private-sector investment will be foundational to the region’s future economic growth, self-reliance and resilience. It lags behind most regions of the world in energy trade and regional integration. There are a range of issues that are common throughout the region, including poor energy access, power shortages, limited energy diversity, inefficient power systems, limited use of electricity markets, limited power sector reforms, low private sector investment, low regional connectivity, and environmental pollution.

Historically, Bangladesh has had one of the lowest per capita energy consumption rates in the world. However in recent years, Bangladesh’s rapid economic, industrial, and urban growth has led to increased energy demand and consumption. As of May 2019, Bangladesh has a power generation capacity of around 19 megawatts (MW). Around 80 percent of the population has access to electricity and the Government of Bangladesh (GOB) has set a target of 100 percent access by 2021. Bangladesh’s real energy issues, however, lie in the future. There remains a gap between energy supply and increasing energy demand in the peak seasons that constrains economic development and undermines achievement of the country’s development goals. To obtain 100 percent reliable coverage by 2021, the GOB recognizes the importance of diversifying its fuel mix with low-cost options, noting the role renewable energy and energy efficiency must play in meeting the country’s energy demands while meeting the country’s United Nations Framework Convention on Climate Change (UNFCCC) targets. The country will need an estimated 34,000 MW of power by 2030 to sustain its current economic growth rate of over seven percent and the government plans to invest an estimated $70.5 billion to reach this goal. To meet this burgeoning energy demand, Bangladesh has begun importing electricity from neighboring countries, importing liquefied natural gas (LNG), and expanding the use of renewable resources such as solar and wind. The GOB has set an ambitious target of 10 percent of energy production from renewable energy resources by 2021. The government also plans to reduce dependence on natural gas and move towards coal and nuclear generation. Coal currently accounts for only 3.3 percent of power generation but, according to the seventh 5-year plan published in 2015, 50 percent of total electricity will be generated using coal-based power plants by 2030. A large portion of the coal partnerships are with China and India. Bangladesh is also developing a nuclear power generation facility in partnership with Russia, which is expected to add 2,400 MW of power. Additionally, Bangladesh is planning to import 9,000 MW of power from Bhutan, Nepal, Myanmar, and India by 2041.

**USAID’s energy programming in the South Asia region**

The United States Agency for International Development (USAID) focuses on expanding access to modern energy services to power economic and social development, worldwide. Today, many developing countries are in the process of creating policy, legal and regulatory frameworks necessary to attract private investment in clean energy, increase energy efficiency, and expand access. USAID works with these countries across all aspects of the energy sector to build strong systems that can power global economic and social development.

USAID’s energy programming in the South Asia region falls under the Asia Enhancing Development and Growth in Energy (Asia EDGE) initiative. This whole-of-government Asia EDGE initiative was announced in July 2018, as a key component of the United States Government (USG)’s Indo-Pacific strategy (IPS). Asia EDGE is a regional energy cooperation platform that aims to address four key issues confronting the region, through (1) strengthening the energy security of regional partners; (2) creating open and transparent energy markets; (3) improving free, fair and reciprocal energy trading relationships; and (4) expanding access to affordable, clean and reliable energy.

USAID Mission in Bangladesh (hereto referred as “Mission”) aims to grow sustainable and secure energy markets across the South Asia region and level the playing field for private sector firms, in line with the goals of the U.S. Indo-Pacific Strategy. The Mission also aims to support the energy sector of Bangladesh by mobilizing private investment, modernizing technologies and practices, and expanding market opportunities. The Mission would like to draw on the expertise of multiple USG agencies, private sector entities, and international financial institutions, and seeks ongoing collaboration with like-minded governments, non- governmental organizations, think tanks and private sector that are dedicated to sustaining equitable economic progress throughout the region. Besides South Asia’s self-reliance and security advanced through expanding energy markets, there are major implications for the U.S.’s relationship with countries throughout South Asia, including Bangladesh. The Mission focuses assisting Bangladesh in their journey to self-reliance and thereby attaining higher degree of energy security. This would consist of building the country’s capacity, strengthening infrastructure and creating enabling environments for businesses to invest in.

Previously, USAID/Bangladesh supported the country’s energy sector development for energy security, economic growth, and climate change mitigation through several activities. Over the past seven years, USAID has been collaborating with a number of stakeholders, both in-country and within the South Asia region, to increase adoption of renewable energy technologies and energy efficiency measures, to strengthen the regulatory climate of the energy sector in Bangladesh, promote clean energy development through technical assistance, capacity building, and incentive programs and promote regional energy security in South Asia.

The Mission would like to conduct a comprehensive assessment on the clean energy sector of Bangladesh, focusing on two key components of the Asia EDGE and the IPS- private sector engagement and regional energy integration. The Mission aims to expand public-private partnerships, foster business-to-business connections, and help partner governments set transparent, market-based, and best-value energy policies. The Mission also intends to catalyze private capital by partnering with firms and international financial institutions on pooled finance, insurance and risk mitigation, commercial advocacy, and project development.

**Purpose:**

This assessment will provide USAID/Bangladesh, its partners and other stakeholders with a comprehensive assessment on the clean energy sector focusing on private sector engagement and regional energy integration and identify investment opportunities for USAID to support energy sector development in Bangladesh.

**Deliverables & Specific Tasks:**

1. Comprehensive assessment on Bangladesh’s clean energy sector focusing on opportunities and challenges for private sector engagement and regional energy integration **– [**not to exceed 50 pages, excluding summaries and annexes]
2. Recommendation paper highlighting opportunities and best use of USAID’s limited funding to enhance private sector participation and regional energy integration to support energy sector development in Bangladesh – [not to exceed 10 pages, no annexes]
3. Presentation of assessment to key stakeholders – [One half-day workshop and one two-hour briefing meeting]

Detailed Description of Deliverable 1:

Comprehensive assessment on Bangladesh’s clean energy sector focusing on opportunities and challenges for private sector engagement and regional energy integration

Through research, analysis, and consolidation of existing literature and data, and through meetings, key informant interviews (KII), and focus group discussions (FGD), the consultant(s) are expected to provide a *single* report incorporating the following sections:

1. Overview (not to exceed 5 pages with a 1 page executive summary) - Overview of the challenges and opportunities identified by private sector firms in clean energy development in Bangladesh, recommendations and way forward to ensure private sector participation to the extent practicable, overview of challenges and opportunities identified for Bangladesh on cross-border energy (electricity and gas) trade and regional energy integration.
2. Assessment body (estimated 45 pages, excluding annexes) - Deep dive on achievements, limitations, opportunities and resources available on the sectors listed below and their impact and potential impact on the economy of Bangladesh as it aims to achieve middle income status by 2021. In the analysis, the report should identify the impact the sector will have on youth unemployment, paying particular attention to inclusive development, namely opportunities for gender diverse communities. It should also identify and policy or regulatory limitations, slowing growth within that sector.
3. Annexes – As needed

The following clean energy sectors should be addressed in the assessment:

* + Utility scale Renewable Energy (Wind and Solar)
	+ Distributed RE (Wind and Solar)
	+ Grid Integration of Renewable Energy
	+ Regional (South Asia) Energy Market Integration
	+ New and advanced energy systems
	+ Utility modernization
	+ Transparent, best value procurement
	+ Strategic Energy Planning
	+ Smart Incentives
	+ Industrial Energy Efficiency
	+ Enabling regulatory frameworks and policies
	+ Innovative business model development
	+ Transaction services and analysis
	+ Capacity building and institution strengthening

Detailed Description of Deliverable 2:

Opportunities and best use of USAID’s limited investment funding to engage with the private sector to support energy sector development in Bangladesh

1. Recommendation Paper (maximum 10 pages, no annexes) - In order to help shape and inform future programming design and current program implementation in the clean energy sector, the consultant(s) will create examples and provide a series of prioritized recommendations and way forwards at the end of this consultation to USAID/Bangladesh. The recommendations should be practical in nature with a focus on sustainable interventions and should prioritize sectoral interventions where USAID could have the most impact.

Detailed Description of Deliverable 3:

Presentation of assessment to key stakeholders

1. Before submitting the final reports under Deliverable 1 and 2, the consultant(s) will organize a half-day workshop inviting key stakeholders including private sector companies, relevant government agencies, academic and research institutions and think-tanks to share the findings of the assessment thus far, refine the findings, develop a common understanding and identify differences in opinions. All these are expected to provide the consultant(s) one final opportunity to enhance the two final reports under Deliverable 1 and 2.
2. After submitting the two final reports, the consultant(s) will schedule a two-hour meeting to present findings from the assessment to the USAID/Bangladesh Mission. This meeting will be hosted by USAID/Bangladesh.

**Level of Effort (LOE):**

The estimated LOE necessary to provide the deliverables is expected to be approximate 100 days, from July 07, 2019. Domestic travel may be required. The consultant(s) will gather any data and conduct communication remotely or within the Mission.

**Estimated Timeline:**

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| **Deliverables**  | **Timeline**  | **Delivered product** |
| 1st Progress update to USAID | 25 days  | Consultant(s) will meet with USAID at USAID offices to provide a progress update and receive feedback. |
| 2nd Progress update to USAID | 45 days  |
| 3rd Progress update to USAID | 65 days  |
| ***Half-day workshop*** | 75 days | Workshop conducted in-person |
| ***Draft comprehensive assessment*** report under Deliverable 1 | 90 days  | ***Draft comprehensive assessment*** report under Deliverable 1, submitted to USAID for review |
| ***Draft Recommendations Paper*** under Deliverable 2 | 90 days | ***Draft Recommendations Paper*** under Deliverable 2, submitted to USAID for review |
| ***Final comprehensive assessment report*** under Deliverable 1 | 100 days  | ***Final comprehensive assessment report*** under Deliverable 1, submitted to USAID for approval. |
| ***Final Recommendations Paper*** under Deliverable 2 | 100 days | ***Final Recommendations Paper*** under Deliverable 2, submitted to USAID for approval. |
| ***Out-brief meeting with USAID*** | TBD | Out-brief meeting with USAID conducted |

**Application Format:**

* + - 1. A proposal, no more than five (5) pages (excluding annexes and CVs), describing how the assessment objectives will be met through every stage within the specified timeframe, including methodology and technical approach;
			2. Technical qualifications of the team /individual including CVs and references for all proposed personnel and demonstrated awards or recognition of aptitude to be submitted with the proposal;
			3. Contractors proposed work schedule and timeline;
			4. Budget including description of costs for personnel, travel (domestic only, international travel will not be required), logistics, workshop, and report presentation costs.

**Proposal Evaluation:**

USAID will evaluate proposals based on the following criteria:

* + - 1. Technical quality and feasibility of the approach to conduct the assessment under the proposed deadlines will be a factor in the evaluation of all proposals. Proposals should include a description of the proponent’s proposed methodology to perform the study. (50%)
			2. The capacity of organization will be a factor in the evaluation of all proposals. Specifically, proposals will be evaluated as to whether the individual/organization itself has experience and capacity in respect of personnel and equipment, finance and experience to Bangladesh to perform this type of work. (20%)
			3. Experience and qualifications for conducting high quality study of similar nature in developing countries and prior experience in Bangladesh. (30%)

**Procurement Method:**

This procurement to engage a consultant or consulting group will be made through simplified acquisition in accordance with FAR part 13.

**Submission of technical and cost proposal to:** **dhakaprocurement@usaid.gov** **by Close of Business 23 June, 2019.**

**Note:** Consultants proposed for this work must have work permits or otherwise be authorized to work in Bangladesh.