

Afghanistan Energy Study

*Afghanistan Energy Study – Fourth Technical
Committee Meeting
November, 2017*



WORLD BANK GROUP
Energy & Extractives

Background and Rationale

Develop an understanding of the energy sector that will inform investments that aim to increase accessibility to affordable and sustainable energy.

A 3 year, five part series of complementary assessments and surveys:

Activity 1: Transactions Advisory and Knowledge Sharing

Activity 2: Financial, Economic and Community modality assessment

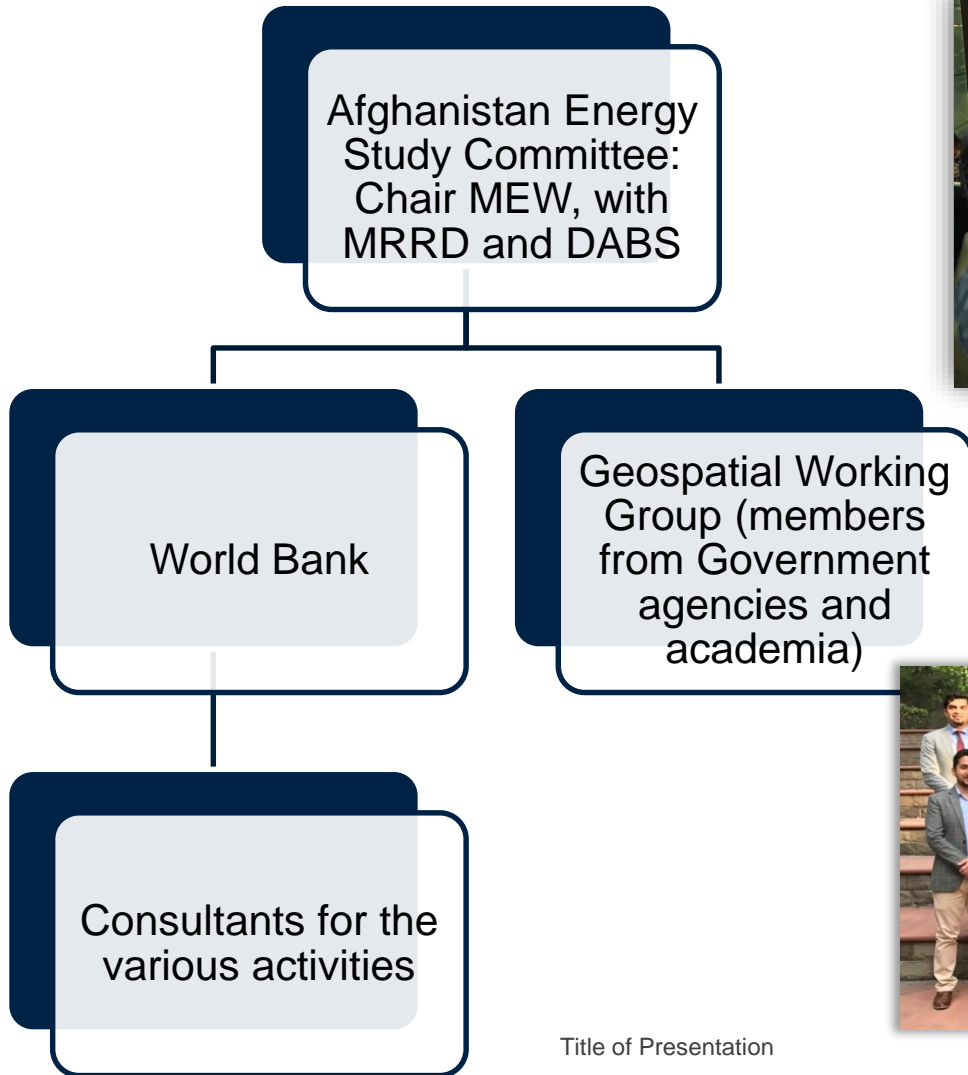
Activity 3: Household and Enterprise Energy Diaries

Activity 4: Development of a Least-Cost Electrification Plan

Activity 5: Institutional Assessment and Development

End-goal: Develop Project Prospectus for On & Off Grid Electrification of Afghanistan against which donors, private sector and government can pledge.

Institutional Structure for the Study



Title of Presentation

Activity 1: Transactions Advisory and Knowledge Sharing

Activity Summary

The objective of this assignment was to lay the groundwork for Activities 2 through 5 in terms of on-boarding the key officials of the responsible ministries (MEW and MRRD); preparation of Terms of References and undertake stakeholder consultations.

Current Status

The timeline envisaged for this Activity at the Concept stage was one year and key initiatives planned under this activity has been completed. The main outputs from this activity has been:

- Formation of Technical Committee
- ToRs for main components ready
- Gender Energy Note disseminated extensively and finalized
- Draft Energy Access and Consumption Note prepared.

Next Steps and Key Timeline

Activities under this component are complete.

Activity 2: Financial, Economic and Community Modality Assessment

Activity Summary

This Activity will be focusing on a sample of around 8000 ongoing and completed electricity sub-projects under the National Solidarity Program (NSP)/MRRD and use the same to carry out a financial and economic analysis to understand the (i) cost-efficiency in delivering electricity sub-projects through a community driven development type approach such as NSP; (ii) economic impact of micro-hydro power MHP, solar and mini and on-grid sub-projects; (iii) functionality, O&M needs, cost recovery and other factors that affect sustainability of these schemes. The analysis will also include an assessment of the community modalities necessary for modern energy service delivery, including to understand the (iv) effectiveness and sustainability of using a community led implementation modality for energy delivery and Operations & Maintenance; and (v) exploring community buy in for large scale infrastructure investments. The Activity is expected to be completed by December 2018.

Current Status

Two firms submitted proposals, and they are under evaluation.

Next Steps and Key Timeline

Selection of firm needs to be completed. We have a funding shortage, which needs to be addressed. Otherwise firm could be on board in December 2017.

December 2017

Activity 3: Household and Enterprise Energy Diaries

Activity Summary

This Activity will comprise of a comprehensive household and enterprise survey, whose main objective would be to assess energy consumption patterns of various fuels by rural and peri-urban households, community institutions and small scale enterprises and the financial implications and opportunities for scaling up energy services provision to the same. The survey tools to be used for collecting information from households, community institutions and small enterprises will be different – while traditional surveys will be used to gather information on community institutions and enterprises as well as demographic and socio-economic characteristics of households, a Diary method will be used to gather energy consumption and expenditure related information from households. The Activity will be completed by December 2018.

Current Status

Samuel Hall has been recruited to undertake the survey. They are finalizing the questionnaire to start the trial test for the survey in Kabul Province before the end of this year.

Next Steps and Key Timeline

Pilot surveys to be conducted.

Before the end of calendar year 2017.

Activity 4: Development of a Least-Cost Electrification Plan

Activity Summary

Based on a sound economic analysis of the different technology options, forecasted energy demand and energy resources' potentials, the proposed activity will use proven methodologies to spatially identify and prioritize areas that should be electrified either (i) by extension of the national grid, based on the national government's generation and transmission development plans (including plans for imports) or (ii) through the provision of decentralized energy systems such as mini grids (diesel, hybrid diesel-renewables or renewables -especially small hydro-) and individual systems (i.e. Solar Home Systems). This assignment is being carried out in two phases.

Current Status

The Phase 1 of the assignment was completed with a last geospatial working group meeting held in July 2017 in Dubai. Phase 2 terms of reference have been completed. The Geo-spatial working group – consisting of nominated representatives from MEW, MRRD, KPU, AGCHO, CRIDA and DABS – met in December, 2016, February, 2017, and July 2017. The Working Group has been trained on the ONSSET software in New Delhi in February, 2017, and in Dubai in July, 2017.

Next Steps and Key Timeline

- | | |
|--|-----------------------------|
| <ul style="list-style-type: none">- The launch of procurement of Phase 2 is linked to the availability of funds. Once these have been mobilized, Phase 2 can commence.- Operationalizing the geospatial committee to advise government on Kajaki electrification. | December 2017 /January 2018 |
|--|-----------------------------|

Activity 5: Institutional Assessment and Development

Activity Summary

The key objective of this Activity is to do a thorough institutional assessment of MEW and MRRD in order to understand their ability to expand energy supply to rural areas either via on or off grid endeavors and the institutional ability to technically support, finance as well as maintain such schemes. It will involve among other activities a technical skills assessment for future investment operations, develop a capacity building plan and associated roadmap for the medium to long term and the provision of trainings and knowledge sharing events across ministries and other relevant entities both locally and internationally and development of a capacity building roadmap for the sector. This activity is intrinsically linked with the outputs of Activities 2 – 4. The Activity will be completed by December 2018.

Current Status

The scope of work needs to be discussed with the Afghanistan Energy Study Committee. The study should benefit from the findings of earlier studies conducted under the overall program.

Next Steps and Key Timeline

<i>Finalize ToR and REoI</i>	March 2018
<i>Advertize EoI</i>	April 2018
<i>Selection of Firm and Signing of Contract</i>	August 2017

Next Steps

- Study runs till July 2018 – need to extend by 1 year to complete;
- Next Afghanistan Committee Meeting to be scheduled for March 2018;
- Micro/mini hydro learning tour to Nepal September 2018;
- Functionalize Geo-spatial working group to support project development (Kajaki);
- Raise further funds to complete activities and complete procurement.

THANK YOU

تشكر

