ISLAMIC REPUBLIC OF AFGHANISTAN

Ministry of Mines and Petroleum (MoMP)

Executive Summary of

Environmental and Social Management Framework

For the

Afghanistan Gas Project (AGASP)

First draft

November ٢٠١٩

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Executive Summary

Without accelerated reform and an improved security situation, growth in Afghanistan is likely to remain slow with limited progress in reducing poverty from the currently high levels. Reforms are required immediately to both improve general investment confidence and mobilize existing economic potential. Aside from agriculture, extractives and energy are the only areas that harbor significant economic growth potential for Afghanistan.

Accelerated development of extractives and energy sectors is needed for the following reasons: (i) by diversifying sources of electricity supply, more Afghans can be provided with access to the electric grid. This will enable Afghans to lift themselves out of poverty, by allowing them to engage in more productive uses; (ii) diversifying electricity sources will also provide for more stable supply for those who already have access to the electric grid; (iii) increasing the supply of gas-fired power will help technically stabilize the electricity grid as the Government is advancing a ٢,٠٠٠ MW solar energy program (compared to ٥٢٢ MW domestic power currently installed) as part of a wider green growth agenda; and importantly (iv) over the next ١٥ years, extractives is the only sector that has the potential to generate exports and revenues at scale, and is able to generate foreign exchange thus providing for greater fiscal stability.

It is well recognized that gas power plants by independent power producers (IPPs) with medium to long term power purchase agreements (PPAs) can serve as an anchor for gas sector development. IPPs also serve as an effective on-the job capacity building opportunity in support of the expansion of gas-based power generation. However, Afghanistan has yet to demonstrate a fully integrated "proof of concept" investment to develop and deliver natural gas. Against this background, the Government of Afghanistan has requested the World Bank Group's support on a dedicated gas-to-power development program, which includes three inter-related initiatives aimed at jump-starting the extractives sector through a combined push-pull strategy.

The "push" for the development of the gas sector is provided for by a targeted project helping develop specific gas supply infrastructure and improve the governance of the gas sector, the Afghanistan Gas Project (AGASP). Simply put, this project ensures that enough gas can be supplied. It is to be financed by an IDA (grant). The "pull" is being provided by two small-size gas-fired power plants which will create the cornerstone market for the gas from Sheberghan: (i) a ٤٠ MW gas-fired independent power producer (IPP) at Sheberghan to operate in the short term and sited near the existing gas fields (the Sheberghan Gas-to-Power Project); and (ii) a ٥٨,٦ MW gas-fired IPP to operate over a ٢٠-year timeframe located at Mazar-e-Sharif (the Mazar Gas-to-Power Project).

The World Bank Group will support the first project with an IDA guarantee. The second project will be supported by IDA and MIGA guarantees, an IFC loan, and IDA PSW and other risk-mitigating instruments. The gas demand of these two projects requires the optimization of gas field facilities, including adequate dehydration, compression and desulfurization capacity, and the completion of construction of the Sheberghan – Mazar Pipeline (SMPL). These pieces of infrastructure are being funded under AGASP.

Notwithstanding the substantial risks, the proposed course of action is robust under the prevailing conditions of uncertainty. The approach has been tested using “robust decision making”, in which one does not attempt to specify the probability of uncertain future events but uses statistical techniques to examine patterns and factors of vulnerability of choices in a wide range of futures. Using a scenario discovery method, Gencer et. al. (۲۰۱۸) demonstrate that the decision to proceed with a gas-fired power plant for use of the Sheberghan gas is robust with respect to the main uncertainties over a very wide range of futures.

۱. Project Description

The objective of the World Bank supported Afghanistan Gas Project (AGASP) is to facilitate a sustainable supply of gas through targeted investments in gas infrastructure and enhanced gas sector governance, which entails social and environmental impacts at various levels. The project has three components as follows:

۱,۱ Project Development Objective

The project objective as stated in the project document is:

“to facilitate a sustainable supply of gas through targeted investments in gas infrastructure and enhanced gas sector governance”.

The project is part of the commitment of the World Bank's continued support to the hydrocarbons sector development of Afghanistan.

۱,۲. Project Components

The project has three components as follows: Component A – Sustaining Gas Supply; Component B - Strengthening Gas Sector Governance; and Component C - Project Management. A detailed summary of each of the components is provided below.

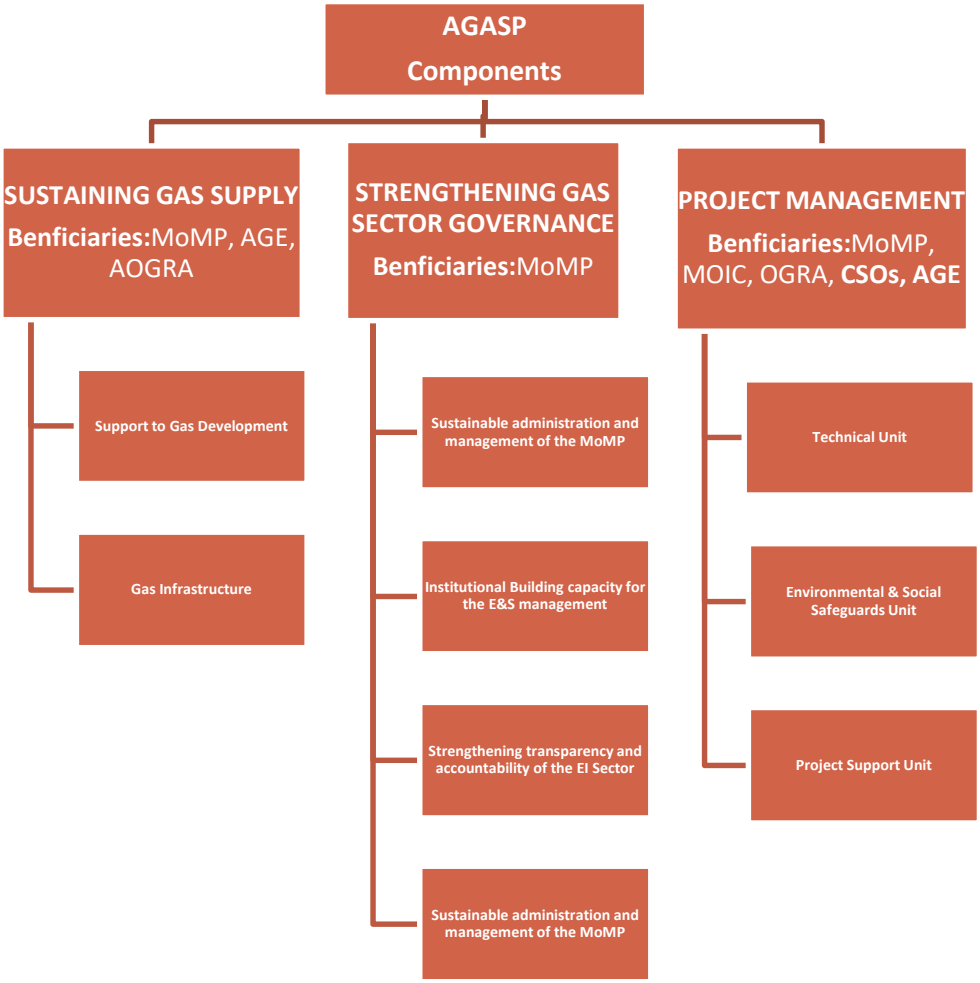


Figure ١: AGASP Project Components (٢٠١٨)

COMPONENT A: SUSTAINING GAS SUPPLY The objective of this component is to support the sustained supply of commercial quality natural gas for Sheberghan and Mazar IPP power generation and industrial uses through (a) targeted technical assistance and transaction support to hydrocarbons related investments in the near and mid-term, and (b) support to the construction and installation of natural gas infrastructure, including a pipeline and gas processing facility. The IPPs are not part of the AGASP. **Subcomponent A١. Operationalizing private sector gas development opportunities.** The Bank is not investing in upstream field development, rather this subcomponent will provide transaction and technical advisory support to the GoA on preparation of the tender process and award of contracts for the development of the Totimaidan gas block. This sub-component will support the following activity: (i) Provide technical, legal, financial, environmental and social, and transaction support on contractual issues related to private investment in gas sector development, including support for the international tender of the Totimaidan gas block; (ii) support the MoMP and AOGRA build capacity to monitor the contractual and regulatory compliance associated with Totimaidan gas blocks; and iii) support the MoMP and

other relevant stakeholders to building their capacity to monitor and report on the implementation of environmental and social management plans associated with gas development activities at Totimaidan. It is expected that most capacity building efforts under this activity will focus on practical on the job training, which may have broader applications across the sector.

Subcomponent A٢. Gas Infrastructure. The objective of this subcomponent it to provide technical support to MoMP and AGE to ensure sustainable natural gas deliverability including the development and optimization of upstream field facilities, midstream transport and downstream distribution value chain, initially in compliance with supply commitments assumed by the government with the Sheberghan and Mazar IPPs and, eventually, for the use of domestic natural gas for industrial, commercial, residential and transport use. The IPPs are not part of the AGASP. The activities of this component must comply with the Environmental, Health and Safety Guidelines (EHSGs) for Onshore Oil and Gas development. Specific activities under this sub-component will include**:**

A٢,١. Technical assistance and equipment for the construction of New SMGP , will finance the following activities: i) Procurement of equipment necessary for the construction of the pipeline based on an assessment carried out by the supervision engineer during project preparation; (ii) Engineering survey and detailed design in accordance with international standards and engineering practices; iii) Quality Assurance / Quality Control (QA/QC) and supervision engineer in the construction and maintenance of the gas line; and iv) Capacity building to MoMP, AGE and other relevant stakeholder on environmental and social management and monitoring associated with the gas-line. The civil works aspects of the gas line construction will be undertaken by Afghan Gas Enterprise who have been assessed to have the skills and the resources to carry-out this role. As such this proposed project will not finance civil works for the construction of the gas line. Rather, this subcomponent will focus on providing technical assistance, capacity building, and equipment to ensure that the SMGP is built and maintained in compliance with quality and safety assurance standards.

A٢,٢. Equipment, TA, and Capacity Building for the Operations and Maintenance of Gas Processing Field Facilities. This activity will finance the following sub-activities: i) Procurement, installation, and commissioning of the new Amine Plant in Yatimtaq gas field; ii) Technical assistance to AGE, through international experts, to optimize existing field facilities, including gathering, dehydration, compression, processing (existing amine plant); iii) Trainings and capacity building to AGE, including assessment of technical skills gaps in field facility and pipeline construction, operations, maintenance and control, and gas metering and processing systems; iv) Procurement and installation of metering equipment, Supervisory Control and Data Acquisition (SCADA) Systems. This activity will finance procurement of consultants (for technical assistance and capacity building), equipment, civil works, and training.

A٢,٣. Technical Assistance and Capacity Building to AGE on Yatimtaq Gas Fields, to supply Shebergan and Mazar IPPs. This activity provides capacity building and technical assistance to AGE to prepare and assess field development plans, focusing on the Yatimtaq gas field, where AGE already has a program to drill wells to sustain existing gas supply, but is doing so without proper data and planning. Support will also address environmental and social issues associated with field development planning, including

the preparation of an ESIA or environmental audit of existing impacts if necessary. Field development planning will allow AGE to optimize the use of government funds.

COMPONENT B: STRENGTHENING GAS SECTOR GOVERNANCE. The objective of this component is to address the institutional, contractual and regulatory gaps that persist in the management of Afghanistan's hydrocarbon resources, thereby improving predictability, transparency and functionality of the sectors. Emphasis will be given to the MoMP upstream role as policy-maker, as well as establishment of sector regulatory bodies such as the AOGRA (created ۲۰۱۸). Geographic focus will include field offices responsible for licensing, regulatory monitoring including occupational health, safety and environment.

Subcomponent B۱ Strengthening the MoMP in the management of the gas sector. Building on support provided under SDNRP۲ and its lesson learned, this subcomponent will provide advisors to the MoMP, support capacity building of staff, improve licensing processes, sharpen technical skills, build IT infrastructure including systemization of contracts management, revenue collection and administration. This component will provide ongoing support to MoMP as needs are further identified. Specific activities financed through Subcomponent B۱ include the following:

B۱,۱. Sustainable administration and management of the MoMP, leveraging to the Ministry in its participation of the Tackling Afghanistan's Government HRM and Institutional Reforms (P۱۶۶۹۷۸, TAGHIR) program this activity will provide i) limited human resource capacity building initiatives aimed at facilitating the development and sustainability of staff and skills, including through initiatives such as the establishment of a gender-balanced young professional's program within the MoMP; iv) capacity building to the Gender Unit of the MoMP to develop a gender policy for the ministry that aims to ensure gender equity in the recruitment and management of its staff; and iii) ad hoc requirement of specialized advisors with in the Ministry as necessary.

B۱,۲ Building capacity for the environmental and social management of the sector, to ensure that sector development is guided by (a) good international industry practices and applicable performance standards, and (b) technical capacities to implement, review, and monitor E&S instruments under the ESF. Activities may include i) establishment, functioning and staffing of an Environmental and Social Unit within the MoMP; ii) design and implementation of an Environmental and Social Management system (with a long-term objective to link to the Transparency Portal), iv) support to the Gender unit of the MoMP to develop code of conduct for resource developers to implement gender-based violence prevention in the extractives sector; v) (Re)-Establishment and implementation of Grievance Redress Mechanism (GRM) for broader implementation of the AGASP, including capacity building, training and social mobilization activities for GRM Committee members, relevant communities, and the relevant ministries; and vi) development and implementation of Citizen Engagement and Social Accountability Initiatives to ensure that all stakeholders effectively understand sector development issues.

C۱,۳ Implementing a transparence and accountability initiatives, including director support to AEITI.**,**

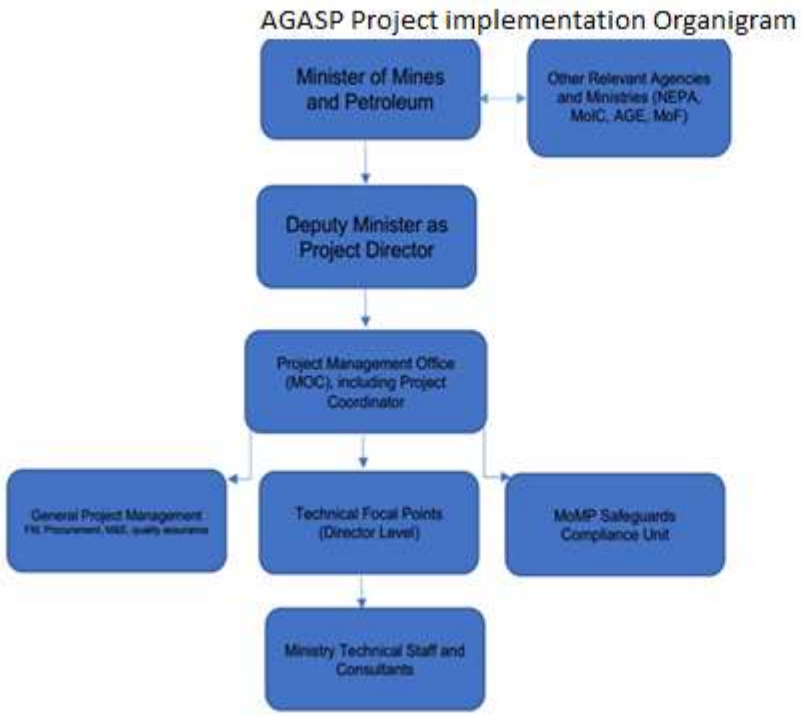
Subcomponent (C۲). Strengthening regulatory and monitoring institutions governing sector activities. As set out in the Government Mining Sector Roadmap, the regulatory functions of the MoMP in the

hydrocarbons sector have been devolved to the newly established Afghan Oil and Gas Regulatory Authority. AOGRA is new and require significant technical assistance and capacity building for effective implementation. This subcomponent will support the following:

B٢,١. Technical assistance and capacity building to AOGRA and MoMP to regulate the hydrocarbons sector. This subcomponent will provide support to: i) preparation and finalization of regulations for the hydrocarbons sector according to the new Hydrocarbons Law (٢٠١٨); ii) design of a private-sector-enabling regulatory and contractual framework that progressively leads to an integrated sector development approach; and iii) operationalization of AOGRA, with clear staffing criteria and regulatory parameters, (vi) monitoring of gas investments, contractual compliance, and sustaining gas infrastructure. This activity may finance consulting services and advisors as necessary, small equipment supporting establishment of the office, and training.

COMPONENT C: PROJECT MANAGEMENT. This component will provide support at implementation to the MoMP undertake project management, in accordance with the World Bank's fiduciary and other guidelines, including incremental operating costs, equipment, training on fiduciary and project management issues, project audits, and engagement of technical advisers to provide technical expertise on project performance monitoring and planning. This component will also finance the cost of recruiting a project management firm to support the MoMP in the effective management and implementation of the project. The firm is expected to focus on the job training and capacity building to project staff/ The staff are all assigned to work on the AGASP project by the MoMP.

Figure ٢: Proposed Project Management Structure



٢. Rationale and Objectives of the Environmental and Social Management Framework

The AGASP project comprises various regional sub-projects in the gas sector, ranging from transaction support to hydrocarbons related investments in the near and mid-term, and support to the construction and installation of natural gas infrastructure, including a pipeline and gas processing facility to sustained supply of commercial quality natural gas for the Sheberghan and Mazar IPPs. The details and exact physical location of all activities are not known in advance, which prevents an Environmental and Social Impact Assessment (ESIA) and an associated Environmental and Social Management Plan (ESMP) to be developed at this stage. Instead, this Environmental and Social Management Framework (ESMF) has been developed. The ESMF is a standard instrument used to define principles, rules, and procedures to screen, assess, manage and monitor the mitigation measures of environmental and social impacts in cases where the impacts and physical location of a project-related activity are not known in advance. In the case of AGASP, final alignment of the Sheberghan-Mazar-e-Sharif Gas pipeline has yet to be selected and will only be determined during the detailed design and engineering work supported through sub-component A(b) of

this project. In addition to this, the downstream impact associated with technical assistance activities are not yet known.

The overall environmental and social risk rating for this project is substantial at this stage. The key social risks and impacts include; the downstream TA activities will cause limited impacts associated with land acquisition and resettlement. Other social impacts and risks include, labor influx risks-the gas infrastructure and the downstream TA activities will involve some skilled and unskilled labors- unskilled labor will be locally recruited, GBV related risks- this AGASP is determined to be moderate risk at this stage, including capacity constraint. The key environmental impacts include pollution from gas activities (air, surface and ground water and land pollution, Acid Rock Drainage (ARD) and Metal Leaching (ML), use of explosives, noise and vibration, explosions, land subsidence, terrestrial and aquatic biodiversity risks, high occupational, health and safety (OHS) risks and high community health and safety risks, and HIV/Aids. The World Bank ESF applies also to all Technical Assistance (TA) activities leading to outcomes or operations that may have significant environmental and social implications going forward, such as feasibility studies, technical designs or other activities directly in support of the preparation of future investment projects.

The ESMF examines the potential environmental and social issues and impacts of a project and/or series of subprojects, when the environmental and social impacts cannot be determined until the program or subproject details have been identified and prescribes procedures for the development of subproject level screening, Environmental and Social Impact Assessments (ESIAs), and Environmental and Social Management Plans (ESMPs). ESMF ensures that timely measures are taken to:

- Avoid or minimize any harm to human health;
- Avoid, reduce, mitigate or compensate any loss of livelihood;
- Avoid, minimize, mitigate or compensate for any environmental degradation as a result of the interventions by projects;
- Enhance positive environmental and social outcomes;
- Ensure compliance with Afghanistan's legislations as well as with the World Bank's Environmental and Social Framework (ESF) and the World Bank Group General Environmental, Health and Safety Guidelines (EHSG), Onshore Oil and Gas Development and Gas Distribution Systems and potentially others depending on the future activities.

When the details and locations of individual sub-projects have been clarified, each will be subject of ESIAs and ESMPs and the related plans as per the prescriptions of the ESMF.

The proposed AGASP project has been classified by the World Bank Environmental and Social Framework (ESF) as a substantial Risk Project from an environmental and social perspective. This means that it is expected that adverse impacts might arise from the activities pertaining to Project components. Key factors considered include substantial Environmental and Social (E&S) risks and impacts and Occupational Health and Safety (OHS) risks, low regulatory and institutional capacity, and low technical capacity of the ministry to manage social and environmental risks and impacts. The project activities will apply the following Environmental and Social Standards (ESSs): ESS ١. Assessment and Management of Environmental and Social Risks and Impacts, ESS ٢. Labor and Working Conditions, ESS ٣. Resource

Efficiency and Pollution Prevention and Management, ESS ٤. Community Health and Safety, ESS ٥. Land Acquisition, Restriction on Land Use and Involuntary Resettlement, ESS ٦. Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS ٨. Cultural Heritage, ESS ١٠. Stakeholder Engagement and Information Disclosure. ESS ٧. Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities and ESS ٩. Financial Intermediaries don't apply. Furthermore, a standalone Resettlement Framework (RF) is developed for AGASP activities.

Regulatory Framework

The Hydrocarbon Law (٢٠١٧) is the primary law that regulates the development and appropriate use of the oil and gas resources of Afghanistan. The Law includes clauses relating to consideration of health and safety measures in the workplace, human rights, use of water, environmental protection and the safeguarding of affected communities. The law also insists on cultural heritage protection or other natural values, welfare of vulnerable communities. Other pertinent laws to the project are Environmental Law (٢٠٠٧), Land Acquisition Law (٢٠١٨), Land Management Law (٢٠١٨), National Land Policy (٢٠١٨), the Law on Preservation of Afghanistan's Historical and Cultural Heritage (٢٠٠٤), the Labor Law (٢٠٠٧) and nineteen international conventions on forced labor, child labor, and health and safety, to which Afghanistan is signatory.

Citizens Engagement (CE)

Citizen engagement is an important pillar of the AGASP project as it relates to gas sector development. It accounts for transparency, effectiveness and accountability of the public institutions. CE for this project will include stakeholder consultations, beneficiaries' feedback regarding potential resource development and benefit sharing in gas sector opportunities, and a multi-level Grievance Redress Mechanism (GRM). Consultation with affected people will take place during all stages of project implementation and beyond. Emphasis will be placed on seeking the views of vulnerable groups, especially women and other marginalized groups. There is a stand-alone Stakeholder Engagement Plan (SEP) prepared, which includes Communications Strategy to inform key stakeholders, including the affected communities, to effectively understand, engage in and support the development of hydrocarbons resources as a source of economic growth and to increase access to energy in the country. In order to gauge the citizen engagement in the AGASP project, the following indicators are suggested;

- ٧٠٪ of the project related grievances are timely addressed
- In the project-related consultation meetings, ٥٠٪ of participation is from non-governmental entities such as communities, private sector, Civil Society Organization etc.
- Community Development Agreement (CDA) on benefit-sharing with local community satisfactory implemented at least in one site.

٣. Summary of Potential Environmental and Social Impacts and Risks

The project has potential to strengthen the existing social and environmental safeguards policies and capacity of the Ministry, and to bring improvements to the local infrastructure such as electricity and

create employment opportunities for local communities. Component A (b) (construction and installation of natural gas infrastructure) of the AGASP project may result in potential adverse environmental and social impacts and risks that will be largely localized spatially, short in duration and can be managed through implementation of appropriate mitigation measures. However, some of the impacts particularly related to environmental and land acquisition could be significant and long-term in nature. The Resettlement Framework (RF) specifically addresses the mitigation and compensation of adverse impacts on project affected peoples and their livelihood.

Some of the downstream impacts associated with TA for the development of the gas fields and possibly as a result of the construction of the gas pipeline could include the following:

Soil erosion may be caused due to exposure of soil surface to rain and wind during site cleaning, earth moving and excavation activities. Improper grading of land may also cause drainage and erosion problems. Similarly, air pollution associated with the release of dust generated from land clearing, excavation and movement of earth materials, cut and fill operations, contact of construction machinery with bare soil and exposure of bare soil and soil piles to wind. The use of construction equipment and power generators is expected to release noise pollution and exhaust related pollutants such as carbon dioxide (CO_2), nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter (PM) and hydrocarbons (HCs) which will have direct impact on the health of nearby residents, workers and natural habitats and also, flare gas can add to GHG effect.

Noise pollution and vibration may be caused by the operation of pile drivers and demolition machines, explosions, earth moving and excavation equipment, generators, concrete mixers, cranes, heavy vehicles crossing villages as well as fuel oil tank erection and pipe laying works. The increased noise level will have adverse impact on construction and other workers and nearby residential areas. Solid and liquid wastes will be generated during construction and operation of extractive activities, non-toxic wastes can be disposed in nearby landfills, and hazardous wastes, such as used oils need to be disposed in an environmentally sound manner.

Acid Rock Drainage and Metal Leaching can cause groundwater and surface water pollution causing health risks to nearby communities. Surface water pollution may result from uncontrolled discharges into freshwater or brackish water rivers and, polluted runoff from polluted areas and sediment transport. The latter impact is particularly significant when construction activities occur within or in close proximity to surface water. Polluted water flowing into surface water bodies could impact the aquatic life and affect the quality of water for the downstream water users. Aquatic life may also be adversely affected by a reduction in photosynthesis due to high turbidity.

Occupational health and safety as well as Community Health and Safety issues are major concern in all forms of hydrocarbon and gas exploitation activities, and are connected to respiratory diseases, contamination, and physical safety. The MoMP and its relevant departments will ensure there are needed Safety Regulation in place and properly implemented. Contractors will be responsible for health and safety measures of worker at the construction sites, as described in the Health and Safety Guidelines for the project. The preparation and implementation of Occupational Health and Safety Plans (OHS Plans)

by the contractors and mining companies, will be supervised by the environmental and social safeguards unit of the AGASP project, as well as by the Supervising Engineers. The MoMP and its relevant Department/Gas Companies will establish institutional and implementation arrangements for the construction and operational stages of the overall gas sector as well as for individual facilities and pipelines and associated facilities such as power transmission lines and etc, will prepare and update regularly as needed Safety Plans for ensuring OHS as well as community health and Safety in Gas Projects and facilities, implement the National OHS Regulation and the IFC/WBG EHS Guidelines including the OHS Guidelines, the Good International Industry Practices (GIIP) and the Sector specific Guidelines, the relevant Department/Gas Companies operating the facilities will be having trained Focal Points with ToR and line of reporting.

The Safety Plan should ensure to regularly identify potential leakages, vulnerable parts of the relevant gas facilities and weather corrosion problems via regular surveys and inventories and making corrective actions when needed. The relevant Department to have proper Regulation and oversee its implementation and the Gas Companies to apply the regulation and plans for undertaking the above-mentioned regular inventories and surveys, keep record of all reports of surveys, identified problems in the gas facilities, pipelines, plants, distribution system, minutes of meetings, decisions, corrective actions and etc. The use of the IFC/WBG EHS Guidelines is mandatory in the project and here a link is provided to the website: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

Activities involving civil works under the project, such as installation of gas infrastructure may generate a number temporary and permanent job opportunities for the local people. However, if adequate measures are not put in place, there will also be some potential negative socio-economic impacts for local communities, especially related to loss of land and involuntary resettlement. There is also a potential risk relating to influx of external workers, including foreign workers, and increased risk of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA), as well as transmission of sexually transmitted diseases, such as HIV/Aids.

Overall the social risk factors and challenges of the AGASP project will be: (i) land acquisition and resettlement impacts; (ii) labor influx risk under component A(a & b), where the proposed activities may require labor from outside the project's area of influence - GBV, WSH and SEA risks; (iii) work conflicts and disputes for work between local people and people from other parts of the country and/or outside the country; (iv) security challenges, as some of the areas are insecure.

While the project will not be providing direct support to gas activities (exploration or production), the large-scale gas sector can potentially interfere with sites of cultural, religious or historic importance (e.g. family and community cemeteries and other sacred places). Upon discovery of graves, cemeteries, cultural sites of any kind, including ancient heritage, relics or anything that might or are believed to be of archeological or historical importance during any stage of project development, such findings must be

immediately reported to the MoMP in order to ascertain the measures to be taken to protect such historical or archaeological resources

٤. Environmental and Social Screening of Sub-Projects

The following steps will be applied to conduct preliminary social and environmental screening of sub-project activities:

Step ١: Screening of sub-project activities and identification of potential social and environmental impacts and risks, as per screening lists;

Step ٢: Determine appropriate Social and Environmental Instruments, including stakeholder consultation on draft TORs of the proposed safeguards studies;

Step ٣: Preparation of the required Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs); and

Step ٤: Stakeholder consultation on draft studies (ESIA, RAP, ESMP and the related plans);

Step ٥: Relevant Occupational Health and Safety as well as Community Health and Safety Regulations and updated needed plans of surveys and inventories are in place, properly owned and implemented by the trained staff of the relevant MoMP Department/Gas Companies and keep record of all documents.

Step ٦: Clearance of the safeguard documents by National Environmental Protection Agency (NEPA), World Bank and other institutions as relevant. These studies will be also subject to disclosure in the relevant sites.

٥. Environmental and Social Management Plan, and Monitoring Requirements

Detailed site-specific C-ESMPs, OESMPs and DESMPs will be prepared and implemented by the Contractors. In an ESMP, various mitigation measures are organized into a well-formulated plan to guide the planning, design, construction and operation of the planned interventions, considering the context of Afghanistan. An effective ESMP will precisely set out measures that need to be taken to ensure that impacts are dealt with in the following hierarchical order;

- **Avoidance**: avoiding activities that could result in adverse impacts. Avoiding resources or areas considered as sensitive;
- **Prevention**: preventing the occurrence of negative environmental and social impacts and/or preventing such an occurrence from having negative environmental and social impacts;
- **Preservation**: preventing any future actions that might adversely affect an environmental and social resource. Typically achieved by extending legal protection to selected resources beyond

the immediate needs of the project;

- **Mitigate**: limiting or reducing the degree, extent, magnitude or duration of adverse impacts. This can be achieved by scaling down, relocating, redesigning elements of the project;
- **Rehabilitation**: repairing or enhancing affected resources, such as natural habitats or water sources, particularly when previous development has resulted in significant resource degradation;
- **Restoration**: restoring affected resources to an earlier (and possibly more stable and productive) state, typically 'background / pristine' condition;
- **Compensation**: creation, enhancement or protection of the same type of resource at another suitable and acceptable location, compensating for lost resources.

The Environmental and Social Safeguards Unit within the AGASP Project Management Team at the MoMP will have the overall responsibility for coordinating and monitoring the implementation of the ESMF and all other assessment and management instruments prepared in the context of the project. The roles and responsibilities of the different stakeholders involved in the project's implementation are detailed in the ESMF implementation arrangements (Chapter ٦). They will have to conduct sensitization programs to inform stakeholders about the framework, how it works and what will be expected of them. They will also have to closely coordinate with other line ministries and organizations such as National Environmental Protection Agency etc. for effective implementation of the Resettlement Plan whose implementation will be supported under AGASP project.

٦. Training and capacity Building Requirements:

Training and capacity building is necessary for the key stakeholders to ensure that they have the appropriate knowledge and skills to implement the environmental and social management framework. A systematic needs assessment to identify specific institutional and human capacity-building program for environmental and social management will have to be conducted. Beneficiary institutions will be the MoMP, and relevant line ministries such as agriculture, public works, energy and water, health, education, Afghanistan National Disaster Management Authority (ANDMA). A detailed capacity-building program will be developed during implementation, with a focus on strengthening the local entities responsible for environmental and social management, as well as health and safety.

To deal with the various and complex issues related to communication, coordination, capacity building and institutional strengthening, qualified Environmental and Social Safeguard and Health and Safety (H&S) Specialists and Communication Officers will be appointed/recruited into the Environmental and Social Safeguards Unit.

Afghanistan Gas Project
Table ١: Safeguard requirements by component

Component	Sub-component	Scope of the sub-component	Specific activities	ESF Instrument	Proposed timing
Overall Project Level	All Components	All Sub Components	All Project activities	ESMF, RF, SEP, LMP, ESCP	Prepared, consulted, cleared and disclosed by appraisal
Component A: SUSTAINING GAS SUPPLY	Subcomponents A(a). targeted technical assistance and transaction support to hydrocarbons related investments in the near and mid-term	Transaction and technical advisory support to the GoA on preparation of the tender process and award of contracts for the development of the Totimaidan gas block	Technical assistance and capacity building	Gas companies will establish an ESMS for construction and operation, prepare ESIAs and ESMPs, RPs including related plans such as Labor Management plan, GRMs, Labor influx risk mitigation plan, GBV action plan, Emergency preparedness and response plan, occupational health and safety plan, Security plan, community benefit sharing plan.	prior to individual gas Field development
	A(b). support to the construction and installation of natural gas infrastructure, including a pipeline and gas processing facilities.	• Technical assistance and equipment for the construction of New SMGP. • Equipment, TA, and Capacity Building for the Operations and Maintenance of Gas Processing Field Facilities. • Technical Assistance and Capacity Building to AGE on Yatimtaq Gas Fields,	• Procurement of equipment • Engineering survey and detailed design • supervision engineer • TA & Capacity building to MoMP, AGE and other relevant stakeholder on E&S, OHS • Procurement, installation, and commissioning of the	• Safeguard instruments for completed segment (٤٤km) • Env & Soc Audit (ESA) and Ex-post social and environmental audit (EPSA) • Safeguard instruments for the remaining segment (٤٥km): • Consolidated ESIA for Amine Plant and Gas Pipeline, RAP, ESMPs with related plans such as, OHS, LMP, Labor Influx risk mitigation plan, work place sexual harassment prevention plan etc.	• Prepare and approve by Board • ٣ months prior to construction of the remaining part of the gas pipeline

			new Amine Plant in Yatimtaq gas field		
COMPONENT B: STRENGTHENING SECTOR GOVERNANCE	Subcomponent Strengthening institutional, contractual and regulatory gaps that persist in the management of Afghanistan's mineral and hydrocarbon resources.	• Building capacity for the environmental and social management of the sector • Implementing transparency and accountability initiatives Technical assistance and capacity building to AOGRA and MoMP to regulate the hydrocarbons sector.	Technical Assistance and Capacity Building	Specific safeguard instruments are not applicable but there is need to develop capacity development plan for E & S and OHS Management.	
Component C:	Project Management, monitoring and evaluation	Firm to be hired to conduct to focus on the job training and capacity building to project staff. The staff are all assigned to work on the AGASP project by the MoMP	Project management, in accordance with the World Bank's fiduciary and other guidelines, including incremental operating costs, equipment, training on fiduciary and project management issues, project audits, and engagement of technical advisers to provide technical expertise on project performance monitoring and planning	N/A	N/A

٧. Estimated Implementation Budget:

The itemized budget (refer to table below) for implementing the ESMF, RF and respective ESIAs, ESMPs (with the associated plans, such as LMP, labor influx risk mitigation plan, the employee code of conduct), RAP, as well as monitoring, evaluation, auditing and capacity building is estimated to be US $١,٠٥ million.

Table ٢: Estimated Implementation Budget

Description	Cost -USD
Afghanistan National Environmental, social, health and safety Guidelines, basic concept surrounding environmental & social impact assessment, Labor management, regulations, policies etc.	٤٠,٠٠٠
World Bank Safeguards Awareness Training of Environmental and Social Standards	٤٠,٠٠٠
Citizen Engagement Component (Events and workshops for community awareness in the Project areas)	٤٠,٠٠٠
Set up functional Grievance Redress Mechanism in the sector	٢٠,٠٠٠
Monitoring Occupational Health and Safety (OHS) Leadership Management Safety performance assessment Hazard Analysis and Control Hazard Communication Program Effective Accident Investigation Conducting Health and Safety Audits Job Hazard Analysis Occupational Health Risk Assessment Work Stress Risk Assessment Electrical Safety Fire Safety Fall Protection Plan Fleet Safety Management	٥٠,٠٠٠
General Technical Assistance for ESF documents	٤٠٠,٠٠٠
Monitoring and Inspection (External Monitoring)	٤٠٠,٠٠٠
Training and Capacity Building in contract management and quality assurance of consultant deliverables	٤٠٠,٠٠٠
SEP implementation for Sheberghan Mazar e Sharif Gas Pipeline (for details, please refer to SEP)	١٩,٩٠٠
Total	**١,٤٠٩,٤٠٠**

٨. Gas Pipeline Project (Sheberghan Mazare Sharif)

In the absence of accelerated reform and an improved security situation, growth in Afghanistan is likely to remain slow with limited progress in reducing poverty from the currently high levels. Reforms are required immediately to both improve general investment confidence and mobilize existing economic potential. Aside from agriculture, extractives and energy are the only areas that harbor significant economic growth potential for Afghanistan.

Accelerated development of gas and downstream power sectors is needed for the following reasons: (i) by diversifying sources of electricity supply, more Afghans can be provided with access to the electric grid. This will enable Afghans to lift themselves out of poverty, by allowing them to engage in more productive uses; (ii) diversifying electricity sources will also provide for more stable supply for those who already have access to the electric grid; (iii) increasing the supply of gas-fired power will help technically stabilize the electricity grid as the Government is advancing a ٢,٠٠٠ MW solar energy program (compared

to ٥٢٢ MW domestic power currently installed) as part of a wider green growth agenda; and importantly (iv) over the next ١٥ years, extractives is the only sector that has the potential to generate exports and revenues at scale, and is able to generate foreign exchange thus providing for greater fiscal stability.

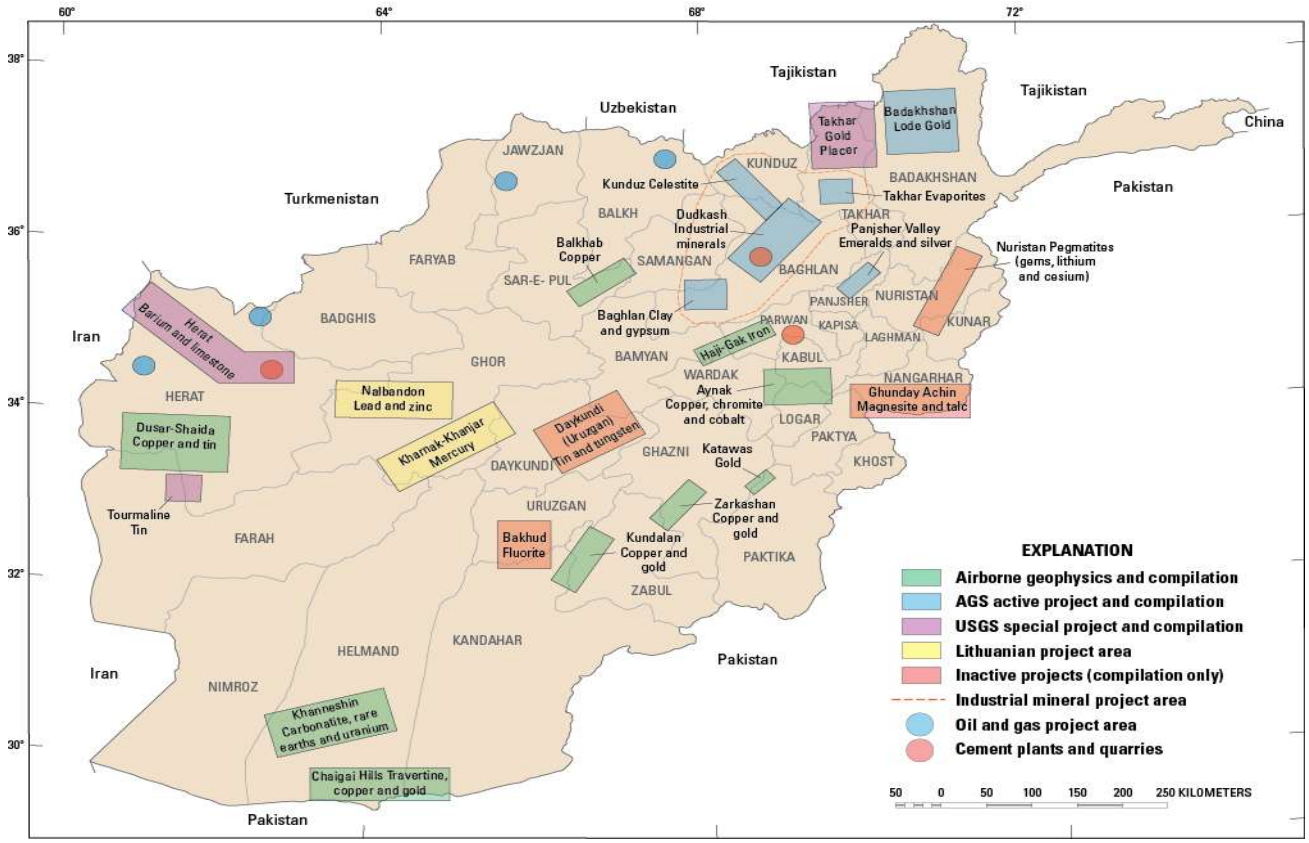
It is well recognized that gas power plants by independent power producers (IPPs) with medium to long-term power purchase agreements (PPAs) can serve as an anchor for gas sector development. IPPs also serve as an effective on-the job capacity building opportunity in support of the expansion of gas-based power generation. However, Afghanistan has yet to demonstrate a fully integrated "proof of concept" investment to develop and deliver natural gas. Against this background, the Government of Afghanistan has requested the World Bank Group's support on a dedicated gas-to-power development program, which includes three inter-related initiatives aimed at jump-starting the extractives sector through a combined push-pull strategy.

The "push" for the development of the gas sector is provided for by a targeted project helping develop specific gas supply infrastructure and improve the governance of the gas sector, the proposed Afghanistan Gas Project (AGASP, P١٧٢٠١٩) is a USD ٤٩,٥٥ million (SDR equivalent) IDA grant to the Government of Afghanistan. Simply put, this project ensures that enough gas can be supplied to the IPPs discussed below. The "pull" is being provided by two small-size gas-fired power plants which will create the cornerstone market for the gas: (i) a ٤٠ MW gas-fired independent power producer (IPP) at Sheberghan to operate in the short term and sited near the existing gas fields (the Sheberghan Gas-to-Power Project, P١٦٦٤٠٥); and (ii) a ٥٨,٦ MW gas-fired IPP to operate over a ٢٠-year timeframe located at Mazar-e-Sharif (the Mazar Gas-to-Power Project, P١٥٧٨٢٧).

The development of Afghanistan's hydrocarbon resources has been identified as a critical link for long-term energy security and diversification of fuel supply, economic diversification, growth and stability for the country. Over the short-term, indigenous gas resources offer opportunities for increased energy access and energy security, and create the space for the deployment of variable, intermittent renewable energy. Hydrocarbons development has the potential to meet a longer-term goal - to increase Afghanistan's integration into regional (Central/South Asia) development initiatives, including projects such as the TAPI (Tajikistan, Afghanistan, Pakistan, India) Pipeline and, eventually, through exports to neighboring markets.

Since ٢٠٠٢, the MoMP has been strengthening the enabling environment for private/commercial sector investments, targeting further development of currently producing and discovered fields in northern Afghanistan and exploration untapped potential in other prospective basins. Internationally competitive hydrocarbon tender rounds have confirmed investor interest, but unaddressed impediments to investment across the gas value-chain remain an obstacle to continued sector development.

Figure ١: Extractive Activities across Afghanistan - Areas of Interest (٢٠١٨)



Source: USGS,٢٠١٨

The proposed AGASP project is fundamentally designed to support the to facilitate a sustainable supply of gas through targeted investments in gas infrastructure and enhanced gas sector governance. The project incorporates the priorities set in the Roadmap which facilitate institutional strengthening and regulatory restructuring and building technical skills for resource development. The project design relies heavily upon citizen engagement and investor input. Key outcomes expected from the project are;

- Increase in supply capacity from Yatimtaq Gas Field;
- Construction and installation of gas infrastructure, including the Sheberghan Mazar Gas Pipeline (SMGP) and a new amine plant; and
- Strengthening the regulatory functions of the Afghanistan Oil and Gas Regulatory Authority (AOGRA).