NORTON ROSE FULBRIGHT

Afghanistan Power Sector Guide

Norton Rose Fulbright LLP – November 2025

Part 1: Introduction and Market Overview

Sector Overview

Afghanistan's power sector is the cornerstone of the country's economic development agenda, underpinning ambitions of industrialisation, economic growth and improved living standards. Despite the abundant resources - including hydropower, solar, wind and gas - Afghanistan continues to face energy access challenges.

Per capita electricity consumption remains among the lowest in the world due to limited domestic generation capacity and underdeveloped infrastructure. Grid-based electricity currently reaches only 30-35% of the population, with access concentrated in urban centres such as Kabul, Herat and Mazar-e-Sharif. Rural areas remain largely underserved, with most households relying on traditional biomass or off-grid solutions. A growing pipeline of energy projects and promotion of both domestic and foreign investment in the country's power sector signal a pivotal shift toward greater energy self-sufficiency and long-term sustainability.

The Case for Investment in Afghanistan's Power Sector

Emerging from over 40 years of conflict, Afghanistan's power sector presents an attractive opportunity for investment as the country seeks to bridge the significant gap between supply and demand by expanding domestic power generation and enhancing transmission and distribution infrastructure through Independent Power Projects (**IPPs**) and Public-Private Partnerships (**PPPs**).

Afghanistan's mining sector stands out for its vast, largely untapped reserves of minerals, including lithium, copper, gold, iron, rare-earth elements, precious stones and oil and gas. Afghanistan has significant undeveloped natural mineral resources estimated by the US Geological Survey to be valued at over US$3 trillion. This has the potential to provide the foundation for a sustainable economy, especially considering that the global demand for these resources, particularly critical minerals used in advanced technologies, is on the rise. The development of the mining industry would not only generate substantial government revenues and employment but also stimulates growth in related sectors such as power and transport. Its untapped mineral resources position Afghanistan at the heart of the developing extractives race, with international investors keen to secure supply of minerals which are critical for the energy transition and technological advancement and adoption (especially the development of the artificial intelligence industry). Afghanistan has sought to capitalise on this opportunity, as demonstrated by its recent announcement that it has secured US$7 billion in investments in the mining sector from investors in China, Qatar, Türkiye and the UK.

The convergence of the development of its untapped mineral resources and commitment to infrastructure development (including in the power and transport sectors) signals substantial opportunities for investors in Afghanistan. Regional and international interest in Afghanistan's development is intensifying, with regional countries and global powers recognising the strategic and economic significance of the country's resources, location and investment potential. Regional players such as China, India and the Central Asian republics are increasingly engaged in infrastructure, energy and mining projects, seeking to secure favourable investment opportunities, access to mineral resources and trade and transit routes. Early investors will have

the opportunity to shape industry standards and establish long-term partnerships in a nascent market that is just beginning to realise its potential. Simultaneously, the influx of capital and economic growth is also catalysing industrialisation, as improved infrastructure and the expansion of domestic power generation lay the foundation for manufacturing and processing, with development of new factories, processing plants and industrial parks progressing at an unprecedented pace.

Afghanistan has long had the ambition of becoming a major trading and transit hub in the region (connecting Central Asia to South Asia, and ultimately to the Middle East and Europe), in line with its historical position as a key corridor along the silk road. Afghanistan aims to implement large-scale infrastructure projects in partnership with regional countries and international investors, such as rebuilding and expanding its transport network (including roads, railways, airports and dry ports). These efforts are central to the country's ambition to position itself as a key hub for regional connectivity and cross-border flows of goods and services, including the transmission of energy from Central Asia to South Asia. A notable example is the Lapis Lazuli Corridor - an international transit route inaugurated in 2018 linking Afghanistan to Türkiye via Turkmenistan, Azerbaijan and Georgia – with the potential to stimulate Afghanistan's economic growth and regional connectivity.

Figure 1 - Lapis-Lazuli Corridor[1]

Other regional projects currently underway or in early stages of development include:

- Uzbekistan–Afghanistan–Pakistan Railway Project;
- Wakhan Corridor, connecting Afghanistan to Xinjiang, China;
- Turkmenistan-Afghanistan-Pakistan-India Pipeline (TAPI), which is a 1,814 km natural gas pipeline originating in Turkmenistan and passing through Afghanistan and Pakistan to India; and
- Central Asia-South Asia power project (CASA-1000), which is a 1.3 GW transmission project for the export of surplus hydroelectricity from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan.

[1] https://www.azernews.az/analysis/230910.html

For forward-looking investors with the requisite risk appetite, investing Afghanistan's power sector offers the prospect of participating in the foundational stages country's development of its power sector and broader economic transformation, with the potential for substantial financial and strategic rewards.

Sanctions and Compliance

Whilst Afghanistan as a state and its ministries and agencies including Da Afghanistan Breshna Sherkat (**DABS**), the state-owned utility responsible for the generation, import, transmission and distribution of power, are not currently designated as sanctioned entities, investors must navigate any applicable targeted sanctions and export controls imposed by the United Nations (UN), United States of America (USA), European Union (EU), United Kingdom (UK) and others. For example, while the USA does not impose comprehensive sanctions on Afghanistan, it enforces targeted measures against the Taliban, the Haqqani Network and associated individuals and entities. The UK and EU have similar sanctions regimes, although there is licensing framework for otherwise prohibited activities as well as humanitarian exemptions.

To the extent necessary following compliance sanctions, compliance due diligence and tailored advice, investors may be able to rely on the available licensing mechanisms and humanitarian exemptions which are particularly relevant to power and infrastructure projects as they support humanitarian needs and are likely to constitute essential civilian services. Whether such licenses or exemptions apply should be determined on a case-by-case basis.

Other challenges that investors may encounter when considering investment in Afghanistan's power sector include any de-risking measures implemented by financial institutions, restrictions imposed on the Afghan Central Bank and applicable anti-money laundering and terrorist financing regulations. Moreover, certain equipment, technologies, or services - particularly those with potential military or dual-use applications - may be subject to trade sanctions and export controls. Accordingly, investors should undertake comprehensive legal and compliance due diligence, encompassing the screening of counterparties against applicable sanctions lists and a thorough review of relevant export licensing requirements.

While Afghanistan presents a complex compliance environment, foreign investment in the country's power sector remains viable subject to enhanced due diligence by investors and, to the extent necessary, reliance on available humanitarian exemptions and licensing mechanisms.

Market Structure and Key Players

The power sector is governed by the Ministry of Energy and Water (**MEW**) and operated by DABS. The sector's institutional landscape is complex, involving multiple ministries, DABS as well as international agencies and partners. The Inter-Ministerial Committee for Energy (**ICE**) has a coordinating role, but sector governance remains dispersed and institutional capacity constrained. The power system is divided into the following four main networks:

- North East Power System (NEPS), consisting of a grid linking 17 load centres (Kabul, Mazar-e-Shariff, Jalalabad, among others) with Uzbekistan and Tajikistan (HVTL 220kv, 110kv and 35kv);
- South East Power System (SEPS), consisting of Khandar, among other provinces, linking Kajaki (HVTL 110kv);
- Herat Zone System, linking Herat with Iran and Turkmenistan (HVTL 110kv); and

- Turkmenistan System, linking Herat, Faryab, Jawzjan, Sar-e-Pul and Andkhoy (HVTL 110kv).

These networks are not fully interconnected, resulting in a fragmented grid and regional disparities in supply.

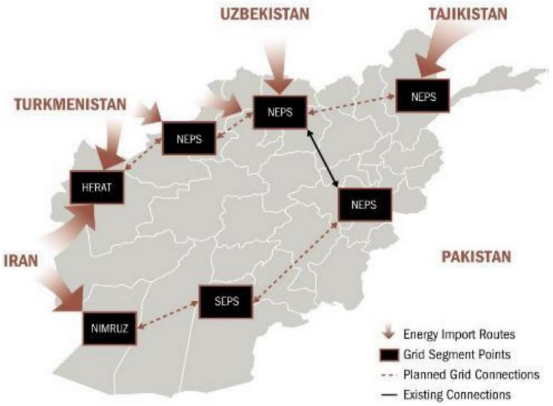


Figure 2 - Electricity Networks in Afghanistan[2]

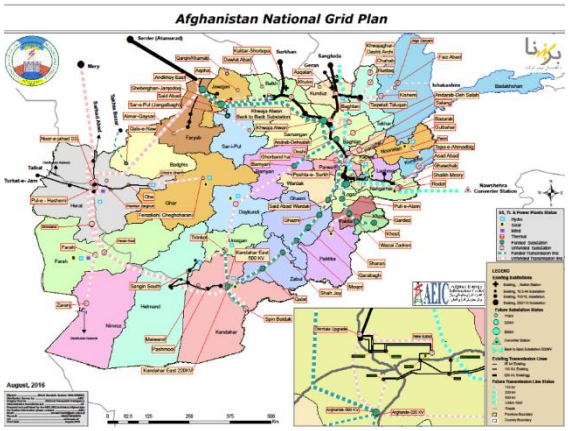


Figure 3 - National Grid of Afghanistan[3]

Supply, Demand and Investment Trends

Afghanistan's installed generation capacity is approximately 600 MW, with hydropower accounting for over half and the remainder coming from thermal, solar and small diesel generation. However, domestic generation is insufficient to meet demand and imports constitute up to 77% of total consumption. There is, therefore, considerable scope for an increase in domestic power generation. Demand is forecasted to grow at 8-10% per annum, driven by urbanisation, population growth and industrial development, particularly in the mining sector. Investment is guided by the Power Sector Master Plan (developed by Fitchner) and policies, including the Afghanistan Renewable Energy Policy, with a focus on expanding domestic generation, rehabilitating and extending transmission and distribution and increasing private sector participation (especially through IPPs and PPPs).

[2] Islamic Republic of Afghanistan, Afghanistan Energy Sector: https://unece.org/fileadmin/DAM/energy/se/pp/eneff/7th_IFESD_Baku_Oct.2016/ESCAP_Elec_CIS/1_W.Aria_AVG.pdf.
[3] Islamic Republic of Afghanistan, Afghanistan Energy Sector.

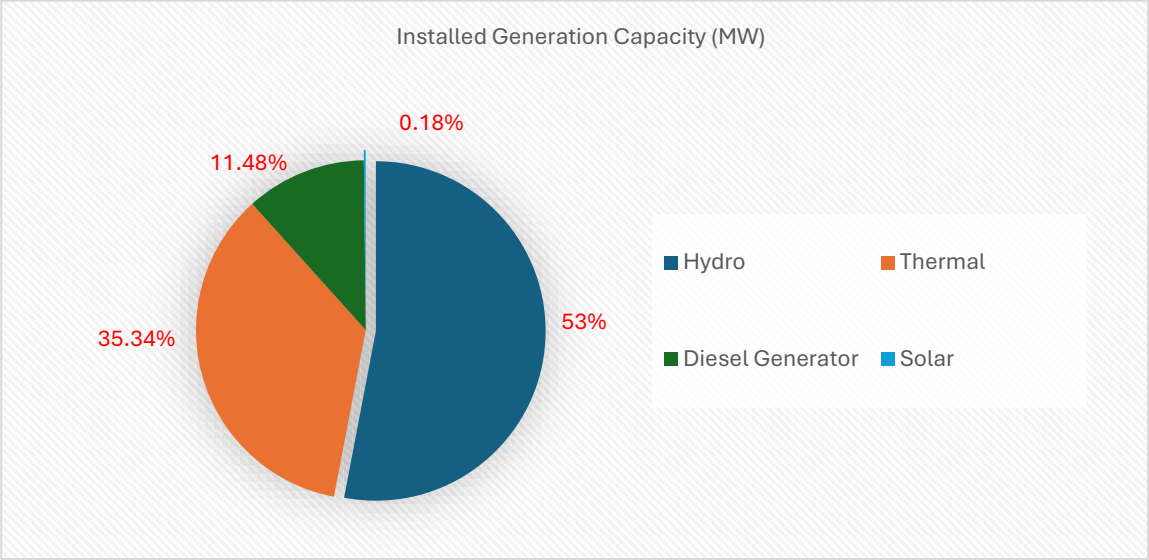


Figure 4 - Core Generation Capacity (as at 2016)[4]

Renewable Energy Resources

Afghanistan has abundant and diverse renewable energy resources, offering significant potential to address the country's electricity supply challenges and support long-term economic development. The country's diverse geography and climate provide favourable conditions for a range of renewable energy technologies, including hydropower, solar and wind. However, realising this potential requires continued legal and regulatory reform, targeted investment and a coordinated effort among relevant ministries and other agencies, the private sector and international partners.

Afghanistan has recognised the strategic importance of renewable energy and has set a target to supply at least 10% of forecasted electricity demand (350-500 MW) from renewable sources by 2032. A range of policies and strategies have been adopted to promote renewable energy development, including the National Renewable Energy Policy (NREP) and the Afghanistan Rural Renewable Energy Policy (ARREP). These frameworks aim to encourage private sector participation, facilitate PPPs and provide incentives for investment in renewable energy projects.

However, the legal and regulatory environment remains in a state of evolution. Key challenges include the need for a clearer framework for power purchase agreements (**PPA**s), streamlined permitting processes, defined roles and responsibilities among ministries and agencies and effective mechanisms addressing the grant of land rights and offtaker risks. Further, the establishment of an independent energy regulator and a "one-stop shop" for project approvals are among reforms which have been recommended to create a more enabling environment for private sector investment in the country's power sector.

Hydropower

Hydropower has historically been the cornerstone of Afghanistan's domestic electricity generation. The country's mountainous terrain and extensive river systems yield an estimated recoverable hydroelectric potential exceeding 23 GW, with the majority located in the north-east on the Amu Darya, Panj River and Kokcha River. Notwithstanding this vast potential, actual

[4] Data from: Investment Opportunities in Energy Sector in Afghanistan, First Energy Investment Forum (October 2016)

exploitation remains relatively limited, with installed capacity as of 2024 standing at approximately 468 MW.

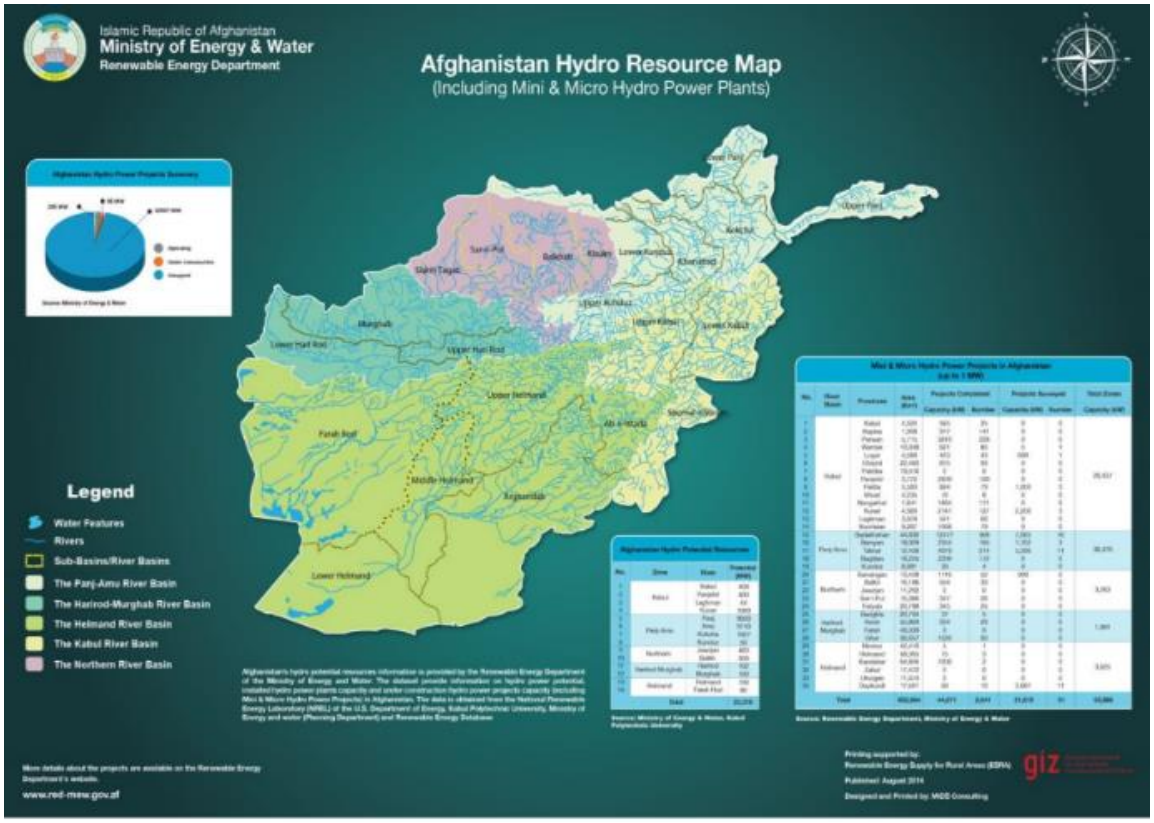


Figure 5 - Hydropower Resource Potential[5]

Most existing hydropower plants are run-of-river with minimal storage, making them vulnerable to seasonal variations in water flow and climate change impacts. Large-scale hydropower projects are under development, but face technical, financial and environmental challenges, as well as the need for updated feasibility studies and a robust legal framework. The non-exhaustive table below shows a number of the operational and planned hydropower projects in the country.

Project Name	Location	Capacity (MW)	Status
Naghlu	Kabul	100	Completed
Mahipar	Kabul	66	Completed
Sarobi	Kabul	23	Completed
Daronta	Kabul	11.5	Completed
Kajaki I & III	Helmand	33	Completed
Salma	Herat	42	Completed

[5] Islamic Republic of Afghanistan, Afghanistan Energy Sector.

Kajaki II (Addition)	Helmand	100	Planned
Baghdara	Panjshir	210–240	Planned

Solar Energy

Afghanistan benefits from high solar irradiance, with an average Global Horizontal Irradiance (GHI) of 6.5 kWh/m²/day and over 300 days of sunshine annually. In southern provinces, such as Kandahar, Helmand, Farah and Herat, there is particularly high solar potential and northern regions are similarly suitable for solar electricity generation. The total estimated national solar capacity, based on feasible land area, is approximately 222 GW. Solar energy has been widely adopted at the household and community level, especially in rural areas where grid access is limited. The cost of solar photovoltaic (PV) technology has declined sharply in recent years, making it increasingly competitive with conventional energy sources. However, large-scale grid-connected solar projects remain in the early stages of development, with ongoing efforts to identify optimal sites and integrate solar power into the national grid.

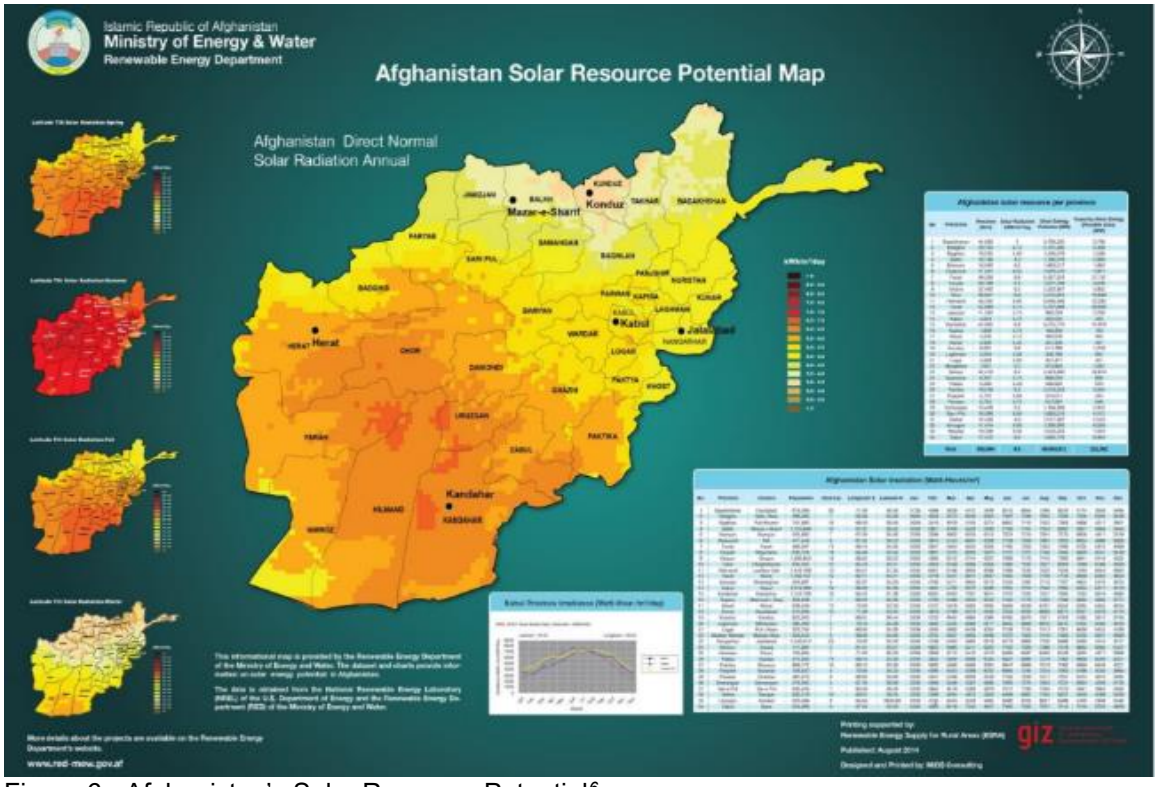


Figure 6 - Afghanistan's Solar Resource Potential[6]

DABS has continued to demonstrate its commitment to development of solar projects. For example, in 2025, DABS launched the construction of a 40 MW solar PV project in the Balkh and Nangarhar provinces - involving Turkish companies Solarestan and 77 - as part of a push to boost electricity generation in the country.

[6] Islamic Republic of Afghanistan, Afghanistan Energy Sector.

Wind Energy

Afghanistan's wind resources are substantial but highly localised. The greatest potential is found in the western and south-western provinces, particularly Herat, Farah and Nimroz, where average wind speeds routinely exceed the threshold for viable power generation. The total estimated wind capacity is around 150 GW, with approximately 66,700 MW considered exploitable. Installed wind capacity remains minimal, with only a handful of small-scale projects in operation. Further development of wind energy is hampered by the need for significant investment in transmission infrastructure to connect resource-rich areas to demand centres, as well as the need for detailed site assessment.

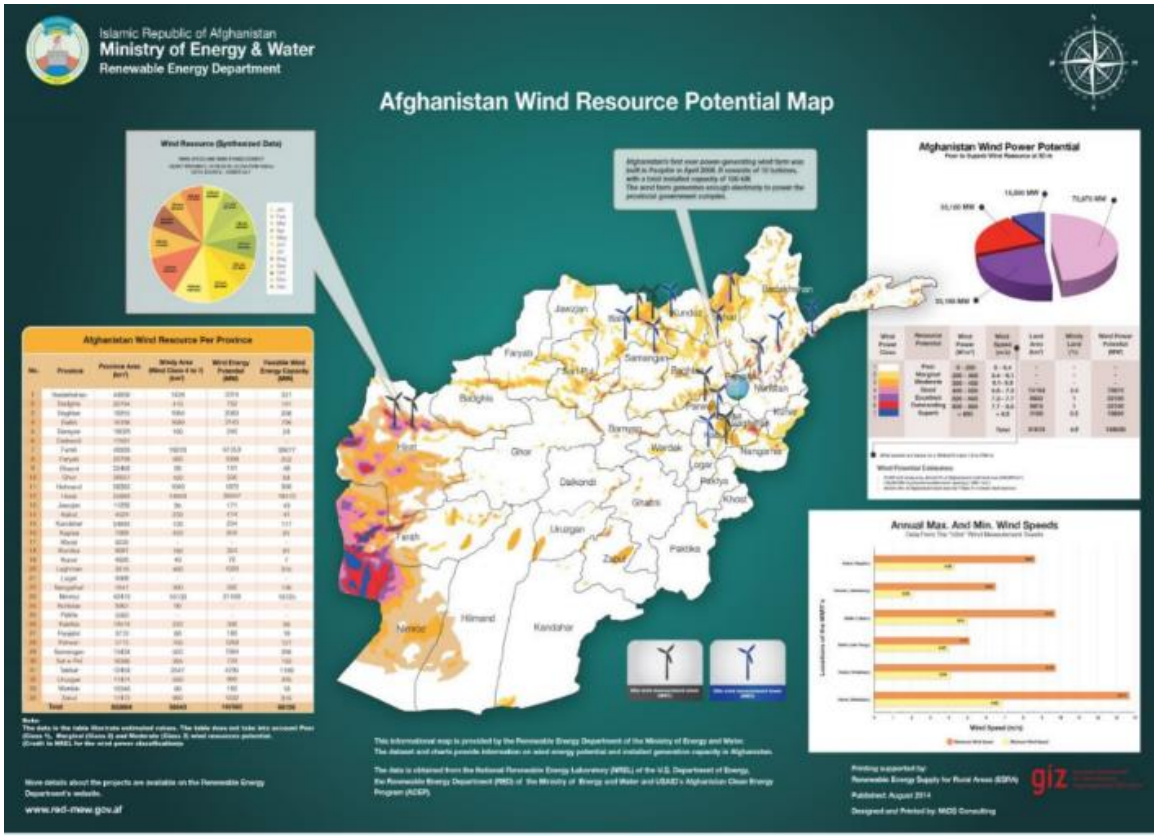


Figure 7 - Afghanistan's Wind Resource Potential[7]

Thermal Power Generation

Thermal power plays a significant, though secondary, role in Afghanistan's electricity sector, supplementing hydropower and electricity imports. Most of the country's thermal generation relies on diesel, with some use of heavy fuel oil, and there is growing interest in harnessing domestic natural gas and coal resources. The total installed thermal capacity is approximately 200-300 MW, accounting for roughly one-third of Afghanistan's domestic electricity generation. Thermal plants are particularly important for maintaining grid stability during the winter months and in regions which are not connected to the main grid. The table below sets out some of Afghanistan's existing and planned thermal power projects.

[7] Islamic Republic of Afghanistan, Afghanistan Energy Sector.

Project	Location	Capacity (MW)	Fuel Type	Technology	Status
Tarakhil Thermal Power Plant	Kabul	105	Diesel/HFO	OCGT	Operational
North-West Thermal Plant	Kabul	95	Diesel/HFO	OCGT	Operational
Kandahar Thermal Power Plant	Kandahar	36.27 (+10)	Diesel	OCGT	Operational
Lashkar Gah Power Plant	Helmand	2.10	Diesel	OCGT	Operational
Bayat IPP	Sheberghan	50 (Phase 1)	Natural Gas	OCGT	Operational
Mazar IPP	Mazar	50	Natural Gas	OCGT	Under Development
Sheberghan Gas Power Plant	Jowzjan	200 (planned)	Natural Gas	OCGT	Planned/Prep

Afghanistan possesses substantial reserves of natural gas, estimated at 440 billion cubic metres and over 70 million tonnes of coal, but these resources are not yet widely used for power generation. The 58.6 MW Mazar-e-Sharif IPP is a notable example of efforts to increase gas-fired power generation. Coal-fired power generation is also planned, mainly to support the mining sector.

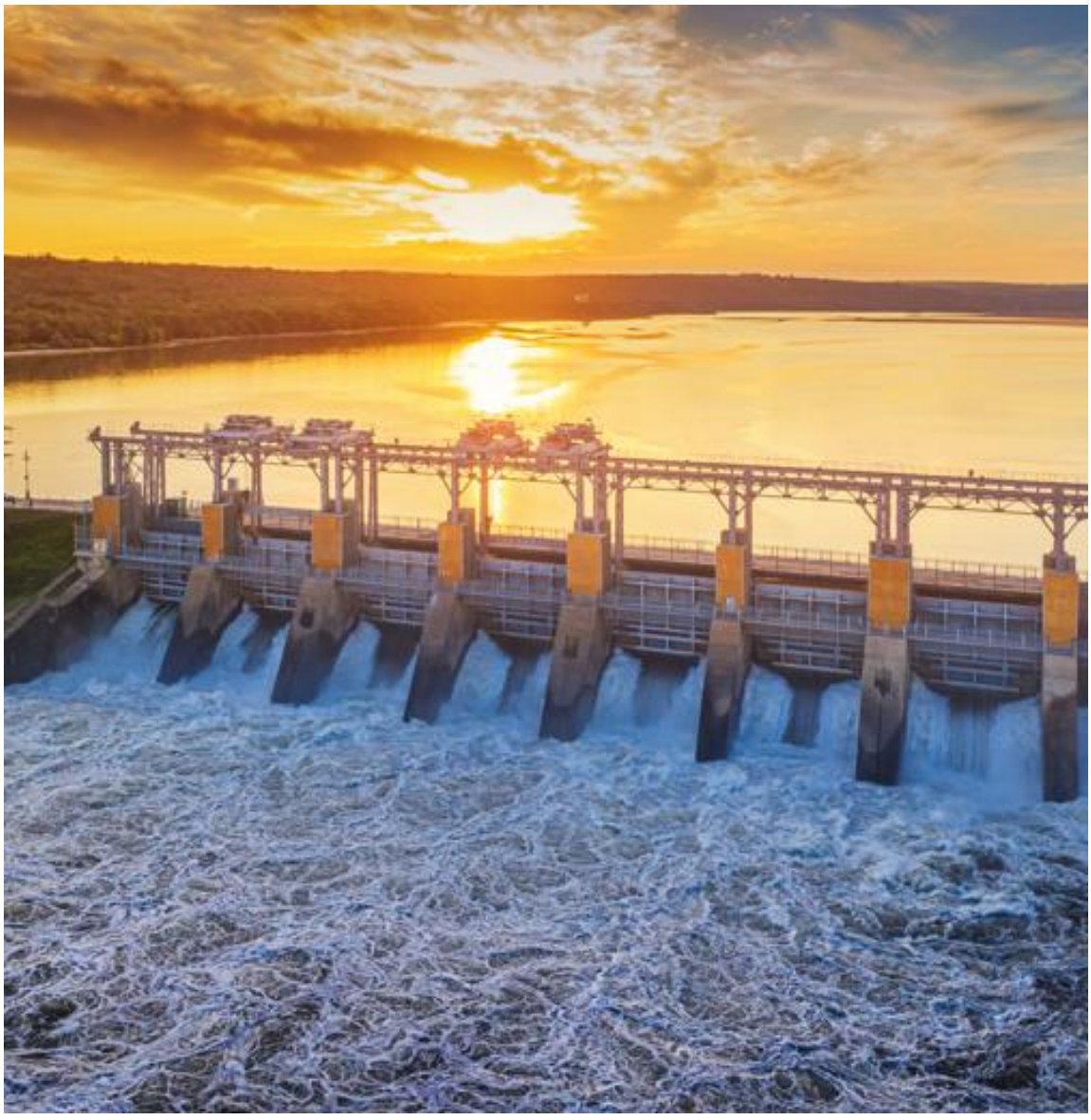
Diesel-based power generation is costly, with production costs ranging from US$0.21 to US$0.32 per kWh, and heavily dependent on fuel imports. This form of generation is not considered a long-term solution due to its adverse environmental implications. Accordingly, it is likely to continue to be reserved for emergency situations, peak demand periods and off-grid supply.

Policy is focused on expanding gas-fired generation using domestic resources, developing coal-fired plants to meet industrial needs and leveraging thermal generation to supplement renewable power generation. There is also an emphasis on upgrading existing thermal plants to improve efficiency and reduce emissions. Investment in thermal power projects is subject to standard licensing and environmental regulations and private sector participation is encouraged, especially for gas-fired IPPs.

The Mazar and Bayat IPPs demonstrate Afghanistan’s commitment to integrating private sector investment into the power sector, including by providing risk mitigation by way of contractual guarantees and procuring support from development finance institutions and multilateral agencies. These baseload projects are intended to serve as a bridge towards greater integration

of renewables, with generation from gas turbines providing essential backup and stability as the share of renewable power generation in the country's power mix increases.

While thermal power remains essential - in particular for backup generation and grid stability - the strategic direction of the country's power sector is towards the greater use of domestic gas, improved plant efficiency and increased integration of renewable energy sources to provide reliable and affordable power across the country.



Part 2: Electricity Laws and Regulations

Legislative Framework

Power Services Regulation Law (2016)

The Power Services Regulation Act 2016 is the principal law governing the generation, transmission, distribution and sale of electricity in Afghanistan. It establishes the legal framework for private sector participation in the power sector, providing for the licensing of operators, regulation of tariffs and the introduction of competition. The law provides for the establishment of the National Energy Services Regulation Authority (**NESRA**) within MEW as the regulatory authority to oversee the sector, but NESRA has yet to be established or operationalised.

Private Investment Law (2005)

The Private Investment Law 2005 (**Investment Law**) provides the overarching legal basis for private investment in Afghanistan's power sector. The Investment Law allows foreign and domestic investors to participate in infrastructure projects as well as power generation and transmission, all of which are designated as 'Permitted Investments'.

The Investment Law is designed to foster a secure, transparent and attractive environment for private capital, supporting the country's broader objective of increasing private sector participation in energy development. The Investment Law guarantees equal treatment of foreign and domestic investors, and sets out financial incentives for private investment, including accelerated depreciation, carry-forward losses and exemptions from export duties on goods manufactured or assembled in Afghanistan. Crucially, investors are permitted to open foreign currency accounts, use international banking facilities and repatriate capital and profits without unreasonable delay. Further, investors may lease land for up to fifty years and are entitled to employ foreign managerial and technical personnel.

As part of the legal protections provided under the Investment Law, expropriation is prohibited except in cases of public interest and only where it is lawful, non-discriminatory and accompanied by prompt, adequate and effective compensation. Compensation must reflect the fair market value of the investment and may be transferred abroad without being subject to tax. The Investment Law also provides access to international dispute resolution mechanisms, including under the rules of the International Centre for Settlement of Investment Disputes (**ICSID**) and UNCITRAL.

Public-Private Partnership Law (2016)

The Public-Private Partnership Law 2016 (**PPP Law**) intends to provide an enabling framework for the development and implementation of PPPs in Afghanistan, including in the power sector.

The PPP Law established the Central Partnership Authority (**CPA**), a body housed within the Ministry of Finance and responsible for overseeing PPP projects. The aim of the CPA, consistent with the PPP Law, is to attract private investment and expertise while safeguarding the public interest. To this end, it sets out clear procedures for project selection, procurement and contract management. Further, the CPA is responsible for providing technical support and reviewing project proposals.

Projects structured as a PPP require approval from the CPA and the High Economic Council. PPPs in Afghanistan's energy sector typically take the form of Build-Own-Operate (BOO) or Build-Own-Operate-Transfer (BOOT) models, where private entities finance, construct and operate power generation facilities, selling electricity to DABS under long-term PPAs.

Renewable Energy Policy (2015)

The Renewable Energy Policy 2015 sets out the country's strategy for harnessing the country's substantial renewable energy resources. The policy aims to promote private investment in renewable energy as a means to achieve energy security and economic growth. It envisages a two-phase approach to sector development: (i) focusing on the creation of an enabling environment for renewable energy generation through PPPs; and (ii) the full commercialisation of the sector, building on the experience gained in the initial phase. The policy also sets ambitious targets for renewable energy deployment and outlines measures to support private sector involvement, including financial incentives and a streamlined regulatory process.

Regulatory Institutions

The institutional framework of Afghanistan's power sector is characterised by a complex interplay of ministries, state-owned enterprises and coordination bodies, each with interrelated mandates. Effective governance and a clear delineation of roles are essential for the sector's development, particularly as the country seeks to expand access to electricity, attract private investment and transition to a more sustainable and commercially viable power sector. The principal institutions and their respective responsibilities within the power sector are outlined below.

Ministry of Energy and Water (MEW)

MEW is the central authority responsible for policy formulation, sector planning and regulatory oversight in Afghanistan's energy sector. MEW's mandate encompasses the development of national energy strategies, the drafting and implementation of sectoral policies and the establishment of legal and regulatory frameworks to guide the sector's growth. It is also responsible for coordinating support from the private sector and international partners, approving major infrastructure projects and ensuring sectoral activities are aligned with national development objectives. In the absence of an operational independent regulator, MEW retains significant regulatory powers, including the power to issue licences, approval of consumer tariffs and oversight of compliance with legal and regulatory requirements.

Da Afghanistan Breshna Sherkat (DABS)

DABS, the state-owned utility, is responsible for the operational management of Afghanistan's power sector. Established in 2008 as part of a broader sector commercialisation effort, DABS is responsible for the generation, import, transmission and distribution of electricity across the country. Its remit extends to maintaining and expanding the national grid, implementing investment projects and managing PPAs. DABS also plays a pivotal role in the day-to-day functioning of the sector by overseeing revenue collection, customer service and the technical operation of the electricity system. The company operates on a commercial basis, although it remains wholly state owned.

Inter-Ministerial Committee for Energy (ICE)

ICE functions as the principal coordination and policy harmonisation body within Afghanistan's energy sector. It brings together representatives from key ministries - including MEW, the Ministry of Finance and the Ministry of Economy - to ensure coherent policy development and inter-agency collaboration. Its responsibilities include aligning sectoral activities with national

priorities, coordinating assistance from international partners, monitoring the implementation of major projects and resolving cross-cutting issues that span multiple ministries or agencies. ICE is intended to serve as a forum for dialogue and joint decision-making, with a view to enhancing the effectiveness and efficiency of energy sector governance.

National Electricity Services Regulatory Authority (NESRA)

The Power Services Regulation Act 2016 provides for the establishment of NESRA within MEW to act as the regulatory authority for the power sector, but NESRA has yet to be established or operationalised. In the interim, regulatory functions continue to be exercised by MEW and, to an extent, DABS. NESRA is intended to enhance the power sector by separating the regulatory function from policy making and operational functions. Its mandate under the Power Services Regulation Act includes regulating licensing, setting tariffs, net-metering obligations, policy implementation in accordance with the country's priorities, facilitating coordination between key stakeholders such as foreign investors and MEW, setting and enforcing technical standards for energy systems and services and progressing the country's initiatives, goals and priorities in the energy sector.

Part 3: Licensing, Government Approvals and Tariffs

Licensing Regime

All electricity sector activities (including generation, transmission, distribution and supply) require licensing pursuant to the Power Services Regulation Law and associated regulations, except for projects of up to 100 kW in rural areas. Projects below this threshold are de-licensed to encourage small-scale and off-grid solutions. Transmission and distribution licences are required for entities operating networks, with DABS currently holding the majority. Retail supply licences are also required for entities supplying electricity to consumers.

Licences, including generation licences, are issued by MEW. The process involves the submission of detailed project documentation, technical and financial feasibility studies, environmental and social impact assessments and evidence of land rights.

Government Approvals and Permitting

The grant of appropriate land rights is essential for ensuring the successful implementation and bankability of IPPs and PPPs in the power sector. The Renewable Energy Policy provides a structured framework for land acquisition and leasing, with MEW and the Afghanistan Land Authority (**Arazi**) responsible for reviewing and approving land use proposals. The policy encourages private sector participation through simplified licensing procedures and access to land under transparent terms.

Additionally, projects must comply with the Environment Law 2007 and obtain environmental clearance from the National Environmental Protection Agency (**NEPA**). For large-scale projects, Environmental and Social Impact Assessments (ESIAs) are mandatory. Lastly, grid connection requires compliance with technical standards set by MEW and DABS.

Tariffs

In IPP and PPP projects the tariff is determined in the PPA, with appropriate risk allocation and indexation provisions. The tariff for imported power is agreed in the relevant intergovernmental agreement and power supply agreement. Tariffs payable by consumers to DABS are typically below cost and therefore require subsidisation by DABS.

The electricity tariffs payable by consumers in Afghanistan are governed by the Power Services Regulation Act 2015. This act aims to provide a framework for the supply, development and regulation of electricity services in the country, including setting fair prices for electricity to consumers. The Act ensures non-discriminatory access for service providers and that electricity tariffs are set in a way that allows for the recovery of costs associated with electricity generation, transmission and distribution, while also considering affordability for consumers.

Historically, electricity tariffs payable by consumers in Afghanistan were set by the government. The Power Services Regulation Law envisages the transfer of tariff-setting responsibilities to an independent regulator, NESRA. NESRA's duties under the Power Services Regulation Law include submitting electrical energy consumption tariffs for approval to the government after confirmation from MEW. However, as NESRA is not yet operationalised, MEW and DABS continue to set consumer tariffs.

Part 4: Risk Mitigation and Investor Protection

Political Risk and Investor Protection

Afghanistan is actively seeking to attract private sector investment in the country's power sector through PPP and IPP projects, but security and political stability concerns, legal and regulatory risks (including change in law risk), foreign-exchange convertibility and transfer risks, the creditworthiness of DABS (as the primary offtaker) and sanctions-related constraints continue to hinder investor appetite.

However, various well-established risk mitigation measures adopted in other similar emerging markets could be deployed to structure bankable projects in Afghanistan. These could include sovereign guarantees, partial risk guarantees from DFIs - such as the World Bank and Asian Development Bank (ADB) – and political risk insurance from agencies such as MIGA and OPIC. Further, "regulation by contract" - where the PPA and other project agreements comprehensively set out the rights and obligations of the parties - offer a viable solution to mitigating investor and lender risks, including change-in-law protection, step-in rights, a clear termination payment regime and payment security (enhanced through offshore escrow and revenue accounts, liquidity reserves and standby letters of credit).

Further, the Investment Law guarantees non-discrimination, protection against expropriation, repatriation of profits and access to international dispute resolution. Investors are entitled to fair and equitable treatment and may own, operate and transfer energy assets, helping to mitigate some of the most significant political risks. In addition to statutory protections, investor protection is further reinforced through contractual mechanisms as indicated above.

The country's commitment to PPPs and IPPs is evident in its strategic vision and private sector funded and financed power projects will inevitably have a pivotal role in Afghanistan's objectives of achieving reliable access to power and ultimately energy security. This could present an attractive opportunity and first-mover advantage for private sector developers and investors with the corresponding risk appetite.

Dispute Resolution and Arbitration

Most project agreements provide for international arbitration (e.g., ICC or UNCITRAL) seated outside Afghanistan, mitigating investor concerns in relation to local courts. Further, the Investment Law envisions parties submitting to arbitration under ICSID or using UNCITRAL rules.

Afghanistan is a party to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, enabling the enforcement of arbitral awards in Afghanistan and abroad. The country has also entered a number of bilateral investment treaties that may offer additional protections as well as access to international arbitration.

While the legal framework supports arbitration, investors should be mindful of practical challenges in enforcement due to the country's complex legal and political environment.

Part 5: Incentives and Taxes

Fiscal and Financial Incentives

The Afghan government offers a range of incentives to attract investment in the electricity sector, particularly for renewable energy and PPP projects. These include tax holidays, exemptions from customs duties and sales tax on imported equipment and accelerated depreciation for qualifying projects. Long-term land leases for energy farms and project sites are available, as well as subsidies, attractive tariffs and long-term PPAs with provisions for indexation and risk mitigation.

Further, grants and concessional financing may be available from international donors, development banks and the government for priority projects, particularly for renewables and rural electrification projects. Blended finance, using donor funds to de-risk projects, is also promoted.

Local Content and Capacity Building

The Renewable Energy Policy encourages local manufacturing and the assembly, repair and maintenance of equipment, with incentives for domestic value addition. Training and technical assistance for local staff and institutions is also encouraged. However, there are no mandatory local content requirements.

Tax Regime

The tax regime for energy projects is evolving, with efforts to harmonise incentives, reduce administrative barriers and ensure compliance with international standards. Investors should seek up-to-date advice on applicable taxes, duties and available incentives.

Part 6: Typical Project Structure

Power projects in Afghanistan are typically structured under the PPP model on a Build-Own-Operate (BOO) basis and implemented by utilising a special purpose vehicle. The project is situated on government-owned land and leased to the project company under a site lease agreement (25 years is a typical term).

Financing and Sponsors

The financing structure mobilises private capital, with equity investors comprising of local and international sponsors, together with DFI financing and a suite of World Bank Group instruments, such as a partial risk guarantee and political risk insurance.

Contractual Structure

The project's contractual framework is comprehensive, reflecting the absence of a fully developed regulatory regime in Afghanistan. The principal agreements include:

- **PPA:** The PPA (with a term of 20 to 25 years) on a take-or-pay basis with DABS as the sole offtaker. DABS is obliged to purchase the annual contract quantity, which mitigates dispatch risk and ensures revenue certainty for the project company. The PPA provides for a tariff structure that is both cost-reflective and designed to ensure the financial viability of the project. The electricity tariff is set in the PPA and is indexed to the US Producer Price Index for certain components. The tariff is structured to cover capacity payments (for net dependable capacity, adjusted for availability), energy payments (for net electrical output). For thermal projects, fuel (e.g. gas) payments as a pass-through of the cost of natural gas under the Gas Supply and Purchase Agreement and supplemental payments for other pass-through costs. Fuel payments are made in local currency and are fully pass-through, while energy payments and capacity payments are indexed to US CPI and paid in US dollars. This structure is designed to ensure that the tariff remains cost-reflective over the life of the project, while also providing protection against currency and inflation risks.

- **Implementation Agreement (IA):** The IA is entered into between MEW, the Ministry of Finance (**MoF**), the Ministry of Mines and Petroleum (**MoMP**) and the project company (as well as the Afghan Gas Enterprise (**AGE**) for gas-to-power projects). The IA sets out the Governments undertakings, including support for project implementation, facilitation of permits and provision of security assistance at the project site.

- **Gas Supply and Purchase Agreement (GSPA):** The GSPA is concluded between the MoMP, AGE and project company. It provides for the supply of natural gas at a fixed price per MMBTU, with pass-through arrangements for gas costs under the PPA. Then government responsible for ensuring reliability of supply.

Risk Mitigation and Security Structure

The project incorporates a robust risk mitigation framework to address the political, commercial and operational risks inherent in Afghanistan:

- **Government Guarantee:** The MoF provides a guarantee covering DABS' payment and performance obligations under the PPA, as well as AGE's obligations under the GSPA. In addition, the Government Guarantee provides for a put option whereby the government may purchase the plant in the event of termination of the PPA.
- **World Bank Group Support:** The project benefits from a Partial Risk Guarantee (PRG) to backstop the government's obligations, as well as political risk insurance for eligible foreign equity investors. The IFC was involved as a lender and provider of transaction advisory support.
- **Security Arrangements:** The government has undertaken to provide security assistance for the project site.

Such a contractual structure and risk mitigation approach, supported by the World Bank Group, demonstrates the viability of private sector-led power generation in a challenging environment.

Part 7: Concluding Remarks

Afghanistan's power sector presents unique challenges as well as substantial opportunities for developers and investors with the requisite risk appetite. The legal and regulatory framework is broadly supportive of private sector participation, with clear provision for licensing, investor protection and financial incentives. The typical project structure set described above demonstrates that, with robust contractual frameworks, risk mitigation instruments and international support, project-financed IPPs are viable in Afghanistan. However, legal and regulatory risks, fragmented governance and persisting political and security risks remain key barriers.

In the last year, Afghanistan's power sector has focused on addressing electricity shortages caused by disruptions in imports from neighbouring countries. The country has negotiated new supply agreements. In spite of investments in domestic power generation, particularly solar and wind projects, the country is still heavily reliant on imports and the country is in much need of private sector investment in the power sector.

With an enabling environment, Afghanistan's abundant energy resources can be harnessed to drive sustainable growth and development. However, the success of Afghanistan's power sector is heavily dependent on improvement of the country's political situation as well as continued legal and regulatory reform, capacity building and the establishment of effective regulatory institutions, including the operationalisation and efficacy of NESRA as a regulator. Currently, the multiplicity of agencies involved - MEW, DABS, ICE, NEPA, Arazi and CPA - requires careful coordination.

For developers and investors, success in Afghanistan's power sector requires careful navigation of the legal and regulatory landscape, proactive risk management (including mitigation of political risks), including drawing on support from DFIs and multilateral institutions.

Recently, a series of new investments in domestic energy generation, aimed at reducing the country's dependence on power imports, have been announced. Most notably, Azizi Energy, led by Mirwais Azizi, Chairman of the multi-billion-dollar Dubai-based Azizi Group, has entered into an MoU with the Government to invest an unprecedented US$10 billion investment to develop 10GW of new power generation capacity across the country. Additionally, Kam Energy has committed to invest US$2 billion in the country's power sector. Regional countries have also made commitments to Afghanistan's energy development. For example, the Government of Uzbekistan has agreed with DABS to invest US$250 million to building new power lines and substations, as well as a further US$243 million to facilitate the export of 1 GW of electricity to Afghanistan.

If successfully implemented, these investment commitments could pave the way to further investment by demonstrating the viability of large-scale power projects in Afghanistan, enhancing investor confidence, establishing a track record of successful IPPs and PPs in the country's power sector and encouraging other domestic and international developers and investors to enter Afghanistan's power sector. Whilst currently a complex setting for investment, Afghanistan's power sector presents an attractive opportunity for developers and investors with the appropriate risk appetite seeking to secure a first-mover advantage in a market with substantial investment opportunity as it embarks on the long-road to self-sufficiency in domestic power generation.

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