



## **POLICY BRIEF**

REFORMING THE AFGHANISTAN ENERGY SECTOR

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## **About Integrity Watch**

Integrity Watch is an Afghan civil society organization committed to increasing transparency, accountability, and integrity in Afghanistan. Integrity Watch was founded in October 2005 and registered as an independent civil society organization in 2006. The head office of Integrity Watch is in Kabul with provincial programmatic outreach in Balkh, Herat, Kapisa and Nangarhar provinces of Afghanistan.

Over the last decade, Integrity Watch's work focused on: Community Monitoring, Research, and Advocacy.

Integrity Watch focuses on citizens and community mobilization. Its noteworthy work in this area included development of community monitoring tools, mobilizing and training communities to monitor infrastructure projects, public services, courts, and extractives industries.

The organization's research work focuses on policy-oriented research, measuring trends, perceptions and experiences of corruption covering a wide range of related issues including in security and justice sectors, extractive industries, public finance and budget management, and aid effectiveness. The objective is to undertake new, ground-breaking empirical research that would help to set the future agenda, influence decision-makers, bring to the public attention non-documented and un-explored issues.

Integrity Watch has taken up a pioneering role in advocating for knowledge-based decision-making and informed public debate on corruption and integrity issues. The advocacy work includes facilitation of policy dialogue on issues related to integrity, transparency, and accountability. Integrity Watch's policy advocacy focuses on examining the accountability of the government and service providers to the communities they serve. Access to information; budget transparency and accountability; aid transparency and effectiveness; effective public service delivery, and anti-corruption have been examined to date.

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### Introduction

This policy brief is a sequel to the Integrity Watch Afghanistan (IWA) report entitled "Blackout – Assessment of the Electricity Sector in Afghanistan." The brief scrutinizes the implications of the new Presidential Decree, signed on the 23rd January 2020) that stipulates the splitting of Minister of Energy and Water (MEW) into two independent regulatory bodies (a Water Regulatory Body and an Energy

Regulatory Body, and making the project implementation and renewable energy departments part of Da Afghanistan Breshna Sherkat (DABS), the national power utility. The objective of the decree is to ensure an 'appropriate' foundation and 'effective' management of water and energy resources in Afghanistan. The decree is summarized in Box 1.

#### Box 1: Summary of the Presidential Decree for the Afghan Energy Sector

#### **Rationale**

- To facilitate effective management of water and energy resources
- To dissolve MEW into two independent regulatory authorities (a Water Regulatory Body and an Energy Regulatory Body)

#### **Dissolution and Integration**

 Departments under the Energy Deputy Ministerial Structure will be made part of DABS, the new Energy Regulatory Authority and the Technical & Vocational Education & Training Authority (TVET-A). The Independent Administrative Reform and Civil Service Commission (IARCSC) will prepare and implement the integration plan in consultation with relevant stakeholders within one month from the date of signing the Decree.

#### **New Organizational Structure**

- The IARCSC will prepare organizational structures for the two new regulatory bodies within one month, based on the following arrangements:
  - Energy Regulatory Authority
    - Regulation
    - Energy Policy
    - Energy Planning
  - DABS
    - Project Supervision and Implementation
    - Renewable Energy
    - Water and Engineering Power Company of Afghanistan (WAPECA)
  - o TEVT − A
    - Energy Vocational Training Center

### **Budget for the New Structure**

• MoF will manage salaries and benefits of all employees, administrative and logistical needs in the new structure until it is accommodated and reflected in the 1399 budget.

#### **Transfer of Assets, Goods and Documents**

 A commission chaired by MoF and comprised of the Ministry of Urban Development, MEW, and The High Office of Oversight will determine the distribution and transfer of assets, goods and documents of MEW to the two Water and Energy Regulatory Authorities.

### **Recruitment of Employees**

 Current employees will be evaluated and their integration and recruitment in the new organizations will be determined by the IARCSC, MoF and the regulatory authorities (Water & Energy). DABS will evaluate and recruit employees of MEW based on its human resources (HR) policies. The remaining (left out) employees not selected by DABS will be integrated into other organizations after assessment by the IARCSC.

#### **Transfer of Water Projects**

 Water dam projects that are currently under the Deputy Minister for Energy, will be gradually transferred to the Water Regulatory Authority with its manpower - those who are under water projects.

#### **Amendment of Laws**

 MoF and MoJ will amend and align all laws and regulations of the energy sector pertaining to this decree.

## Background

Afghanistan has one of the lowest per capita electricity consumption rates in the world, 100 to 186 kilowatt-hours (kWh) per person per year. This means that the average Afghan's total energy consumption is equivalent to powering a 50-watt light bulb about 5½ hours a day. Overall, 30%–34% of the population has access to electricity. In rural areas only 11% have access that is intermittent and of poor-quality voltage. The international community has spent more than \$4 billion in the electricity sector since 2002, albeit with less progress than expected. Current domestic power capacity is 519 megawatts (MW). Of this, 51% is thermal, i.e., diesel and gas, and 49% is hydropower, which is

seasonal and has a capacity factor of less than 40%. The national grid of Afghanistan currently imports 80% of its power from neighboring countries. The cost of imported energy has increased by 16 times, from \$16 million per year in 2007 to nearly \$270 million per year in 2019. Weak institutional and human capacity, overlap and contradictions in policies and mandates, ambiguity in the role of government ministries and international development partners, and the divergence and lack of integration between development partners' agendas and the Afghan government's needs are among the existing challenges facing the energy sector.

## The Lack of a Regulatory Framework in the Power Sector

The absence of a proper regulatory framework and an independent regulatory authority has badly affected the power sector. The inability to enact the Electricity Law on time and the failure to establish the regulatory authority were manifestations of the diminished institutional capacity of the Afghan power sector. Moreover, an obvious impact of not having a functional regulatory authority in the power sector is the absence of private sector participation, which is needed to achieve universal access to electricity in Afghanistan.

Ideally, the Electricity Law and the regulatory authority should have been in place in 2005 and 2006 and the private sector should have participated when DABS was restructured in 2008, but the Electricity Law approval took 7 years and the regulatory authority is still not operational. This was a key factor that impeded the participation of the private sector. Engaging the private sector in the past 3 years since the enactment of the Public—Private Partnership law is considered by sector experts as an ad-hoc solution that is unsustainable until and unless the Electricity Regulatory Authority (ERA) is established and becomes functional. It has been delayed by more than 12 years.

The evaluation report of the Afghanistan National Development Strategy (ANDS, 2013) highlighted that "there is a weak legal and regulatory infrastructure in place to support and monitor investments, and potential investors cite unclear policies and corruption as a barrier to investment". The report further states that "the majority of services that are provided by the 11 State-Owned Enterprises (SOEs) and three budgetary units that support energy operations could be implemented by the private sector in ways that are more cost-effective and technically efficient than by the SOEs." While most of the State-Owned Enterprises have been converted to State Owned Corporations, however, it is by

and large the government that deals with the electrification process rather than the State-Owned Corporations and overall progress seems to be slow and, inefficient.

With the dissolution of MEW, a large legal vacuity has been created and needs to be addressed as soon as possible by the Ministry of Justice and the other stakeholders outlined in the Decree. The custodian of the Electricity Law was the MEW which has been now abolished by the signing of this Decree. Moreover, the scope for the regulatory authority outlined in the Electricity Law does not include an energy policy or the energy planning to be undertaken by the regulator. How will the regulator function? Can one body undertake and combine the energy sector policymaking, planning and regulation? What would the composition of the regulatory authority be and who are they going to report to? What would be the relationship between the regulatory authority and DABS - which is currently the state-owned monopoly that operates the power system? The Decree does not provide answers to these questions and consequently has left the sector in an impasse. The decree was signed nine months ago and it stated that the implementation of the decree would be completed within one month. However, the implementation is still incomplete and the staff of the MEW, their ongoing projects official correspondence with other ministries and contractors are in total confusion and gridlock.

## Obstacles in the Implementation of the Decree

Although we are in the ninth month since the decree was signed, the establishment of the Energy Regulatory Authority (ERA) and the integration of the departments comprising the Energy Deputy Minister's office into DABS and TEVT-A have not been completed yet. The President so far has not assigned a person or a team to lead the ERA. The Director of the Water Regulatory Authority is appointed as a temporary caretaker of the ERA.

The Decree cannot be implemented without assigning a responsible person to lead the effort. Secondly, the legal vacuity and contradictions that emerged from the decree are impediments affecting all stakeholders in executing the integration of departments into three different organizations. The transfer of assets, properties and documents from the MEW to the newly founded department face technical and logistical roadblocks. The legal challenges should have been resolved prior to signing the decree and as a result it is still not finalized by the Ministry of Justice.

It appears that the decree was issued without consulting the important stakeholders including the MEW and donors, and the decision came as a surprise to all. By failing to carry out a wider consultation in abolishing the MEW, creating two new organizations and integrating several departments in other agencies have caused confusion among stakeholders. Moreover, decision makers and subordinates could not reach an agreement about the transfer of employees and this has resulted in a lack of interest on the part of employees in complying with the instructions. This may be the reason why the Decree has not been implemented in spite of nine months having gone by.

As has been experienced during the transition of DABM to DABS in 2008, the process of transferring assets, goods and documents from one entity to another is a lengthy, complex and time-consuming process. Furthermore, the reshuffling of hundreds of employees and obliging them to take part in various recruitment processes, will indeed be an exhausting exercise. More importantly, a large number of employees will be left out and they will be concerned about their fate. The Decree stated that the IRACSC will ensure that the employees left out will be recruited in other organizations that have job openings. This statement cannot be satisfactory to those employees whose jobs are at risk and thus they resisted the decision.

Perhaps the most challenging part of the transition is MEW's ongoing projects and the transfer of signed contracts from one organization to another. The MEW has active involving the construction contracts transmission lines, substations, distribution networks, and renewable energy projects. Thus, there will be significant delays in those projects while they are being transferred to the DABS. The Energy Regulatory Authority and the DABS could face legal and contractual ramifications i.e. penalties, cost and time overruns. The procurement and disbursements associated with these projects will most likely be affected by contract variances and modifications that will have to be reflected in the National Budget and in the MoF's performance and budget reports.

# Integration of three departments from the Energy Deputy Ministerial Structure into DABS

DABS is a state-owned power utility corporation that was established in 2008 and is responsible for the provision of power throughout Afghanistan. The reforms DABS is undergoing are intended to reduce its technical and commercial losses from the current 35%. These losses primarily result from overloaded, outdated and poorly maintained transmission and distribution networks, electricity theft, and improper metering. Poor performance in Billing and revenue collection are also part of the commercial losses, according to the DABS 2016 Business Plan. Unless these high losses are reduced significantly, it will be difficult for DABS to maintain its financial and operational sustainability, let alone achieve large-scale expansion in the future.

DABS faced serious challenges in its operation and maintenance (O&M), mainly because of its lack of technical expertise, including expertise in O&M. Contractors delivered projects to DABS with zero or at best little training given to the personnel at DABS, and on many occasions, O&M manuals were lost in project handover, which makes the operation and repair of equipment even more difficult.

DABS, with the help of a consulting firm, developed a business plan in late 2016. DABS's Articles of Association and Bylaws required a business plan that would provide strategic direction to DABS for its sustainable growth. The plan (DABS, 2016) acknowledged that "increased dependence on imported energy, lack of adequate generation capacity, poor O&M of its existing assets, inadequate access to electricity, high network losses, rampant theft, poor quality and reliability of power, and unmetered supply" were among the key challenges facing DABS.

The plan further stated that only 34% of Afghans have access to electricity, and 17 out of 34

provinces were yet to be connected to the grid or have power supplied via transmission lines. The document stated that technical and commercial losses were around 35%. The business plan estimated that the electrification rate would only increase by 11% in 2020, and technical and commercial losses would decrease from 35% to 25% by adopting initiatives of meter replacement and network augmentation. We are in 2020, DABS technical and commercial losses are still at 35%. Lack of a regulatory framework, sub-optimal revenue collection, outdated and poorly maintained equipment and 35% losses impede private sector participation competition in the sector.

DABS signed a partnership agreement with the MoF in November 2018 to reduce DABS's debt to the MoF as equity shares that are conditional on performance improvement. According to the World Bank report (2018), DABS's outstanding debt to the MoF was \$1.86 billion in principal and interest payments. The World Bank financial analysis of DABS indicated that "the working ratio of DABS increased from 84% to 108% while the operating ratio increased from 93% to 124% between FY2014 and FY2016, warranting urgent action to increase DABS's financial strength." This partnership agreement temporarily saved DABS from a precarious financial situation; a 2018 financial analysis showed that without the agreement DABS would not have been able to meet its operating and capital expenses.

This agreement of DABS with MoF contains 40 reform actions to be taken by both DABS and the MoF. These reforms have specific target deadlines in (i) Governance, ii) HR management, iii) Implementation and monitoring, iv) Customer services, v) Communication, vi) Finance and Accounting, vii) Reduction of technical and commercial losses, viii) Revenue collection, ix) Billing, and x) Restructuring of DABS debt, converting \$1.86 billions of DABS debts into the

equity of MoF. Most of the target deadlines are no later than December 31, 2020, according to the report (The World Bank, 2018).

DABS's revenue from sales of electricity have increased from 15.5 billion Afs in 2015 to 25.4 billion Afs in 2018 (DABS Audited Financial Statement, 2018). However, the cost of electricity and operating expenses versus the cost at which electricity is sold by DABS resulted in a loss. Numbers from DABS's 2018 financials show that it lost 4.7 billion Afs, and the cost of

electricity was 66% of its total cost. Looking at the past financials of DABS, this loss trend was not new; it has been building for years.

DABS has also performed poorly in receivables which is the balance of money due to DABS for electricity delivered to its clients but not yet paid. Receivables increased from 7.28 Billion Afs in 2015 to 12.99 Afs billion in 2017, with a slight decrease in 2018 to 12 Afs billion. DABS should be aware that the higher are its receivables the greater is its financial risk.

## The fate of Water and Engineering Power Company of Afghanistan (WAPECA) and the Renewable Energy Department in DABS

WAPECA is an engineering, survey, and design consulting firm working for the government that in the 1970s and 1980s provided electrical engineering services to MEW and DABM. WAPECA was fully government-owned and government-run. WAPECA has the needed expertise to survey and design distribution networks at the medium level voltage (0.4 kV to 20 kV). For more than 10 years, WAPECA has remained a part of MEW's structure and ideally should have been either transferred to DABS in 2008 or turned into an independent engineering design and consulting firm covering the power sector. Nonetheless, based on the new Decree, WAPECA will be merged as part of DABS' structure.

The decree also states that the Renewable Energy Department will become part of DABS. The Renewable Energy Department (RED) is responsible for overall policy, master planning and oversight of the renewable energy sector in the country, while The Ministry of Rural Rehabilitation and Development (MRRD) is in charge of off-grid project projects up to an installed capacity of 200 kW. It is unclear if the policy part of RED is also going to be transferred to DABS or should stay in ERA. The RED is still not transferred to DABS after 9 months.

## Policy Recommendations

The vision and strategic goals for the sector defined by the Afghanistan National Development Strategy (ANDS) in 2008 have not been achieved thus far. A strong recommitment by policymakers is needed to achieve the ANDS' goal to build "an energy sector that provides drivers of growth in the economy with a long

term reliable, affordable energy sector, based on market-based private sector investment and public sector oversight" (ANDS, 2014). In order to achieve this goal, we propose the following policy recommendations to sector leaders and stakeholders. The summary of is provided in Box 2 below.

### **Box 2: Summary of Recommendations**

- Clarify the roles and scope of work of government agencies in the energy sector and the national power utility. A clearly defined scope of work and mandate will prevent organizations from escaping accountability.
- Define scope and structure for the Electricity Regulatory Authority (ERA). Appoint a board to lead the ERA. All laws and regulations should be amended immediately to address any legal vacuity that has been created by the decree.
- Start to unbundle the national power utility (DABS). It is recommended that DABS should act as the power system operator and retain the transmission network on the basis of tariffs regulated by ERA, but allow Independent Power Producers (IPPs) to generate power on the basis of tariffs regulated by ERA. Moreover, it is advised to study the option of leasing or outsourcing the five major distribution networks in Kabul, Herat, Mazar, Kandahar and Nangarhar to private companies for 15 to 20 years, on the basis of tariffs regulated by ERA, while DABS retains ownership of the networks. Or DABS might privatize all major distribution networks and convert them into distribution companies on the basis of tariffs regulated by ERA. Both options require consideration and further study.
- Address the nonexistence of a unified and agreed upon development plan for the sector. Bilateral agreements with development partners negotiated with the Ministry of Finance often fail to successfully deliver national plans, as happened with the Afghanistan National Development Strategy (ANDS).
- Create an enabling environment for the private sector and offer incentives for investing in the
  energy sector. An enabling environment for the private sector requires the presence of a
  functional independent Electricity Regulatory Authority (ERA) that will ensure transparency
  and fairness in licensing, return on investments, and tariffs. Insecurity of staff and machinery,
  issues around land acquisition, high taxes and duties on imported equipment, and difficulties
  in obtaining approvals from government departments are among the major concerns of the
  private sector that the government needs to address.

### Clarify the roles and scope of work of government agencies and the national power utility, DABS, in the Afghan energy sector

For the sector to operate effectively, the existing overlap, confusion, and contradiction of mandates of actors have to be addressed. A clearly defined scope of work and mandate for each organization will prevent them from escaping accountability. The sector needs a clear mandate, to provide reliable and affordable electricity, and a framework of accountability for policy makers, executives, and sector leaders. Coordination among ministries in policy, planning, and project implementation is vital. Thus, mechanisms for coordination among relevant actors should be defined in all laws, policies, and regulations pertaining to the energy sector. Ambiguous coordination mechanisms in the sector will lead to overlap, less accountability, and delay in achieving sector goals.

### 2. Define the scope and structure of the Electricity Regulatory Authority

As discussed above, the scope of the Electricity Regulatory Authority has not been defined by the Decree. The Afghan government has to explain the role of the new body through a policy document and by amending the Electricity Services Law. Furthermore, the structure and hierarchy of the Electricity Regulatory Authority requires that it be led by independent experts (Board members or commissioners) who have the right to make the key decisions as defined earlier in this document. It should consist of about five experts, each named on the basis of an open competition and where decisions are reached where at least three of the five reach agreement. After creating the initial team, a new expert will be selected every three years in place of an existing expert. An existing expert for the three years the expert would remain in office would only be replaced earlier than this, if the expert is found to have violated ERA's rules or the laws in application in Afghanistan.

## 3. Commence to unbundle the national power utility (DABS)

There are various models for unbundling a monopoly national grid company like DABS. It is recommended that DABS should act as the power system operator and retain the transmission network, but that IPPs should be allowed to generate power in future power plants under regulations imposed by ERA. However, a study is required to make an informed decision about existing power plants. Should they be privatized for IPPs to operate or continue to be owned and operated by DABS?

Regarding the distribution networks across Afghanistan, two options are recommended: Lease or outsource the five major distribution networks in Kabul, Herat, Mazar, Kandahar and Nangarhar to private companies for 15 to 20 years while DABS maintains ownership, or convert all major distribution networks into private distribution companies, both subject to regulations imposed by ERA. By choosing the second option, more capital and investments can be brought into the sector, which will accelerate the electrification rate and bring efficiency in operation by reducing technical and commercial losses. The transition from DABS's current monopoly status would be to allow other stateowned or private companies to participate in expansion of the distribution network. By unbundling DABS, the O&M of the power system which is a major challenge for DABS, could become a localized responsibility of the distribution companies while DABS, as a power system operator, would focus on the O&M of the transmission network.

# 4. Address the absence of a unified, agreed-upon development plan and agenda for the sector

Most of the time, bilateral agreements of development partners with the MoF overlooked the national plans, as happened with the ANDS. It would be for the betterment of the sector for all development partners and relevant

government ministries to agree on a single national development plan for the energy sector. This would reduce time for budget allocation, prioritization, and project preparation and also omit overlap and confusion in the coordination of plans. The Self-Reliance through Mutual Accountability Framework and Afghanistan's National Peace and Development Policy Framework provides common ground on which the Afghan government and the international community can act.

The National Infrastructure Plan and the previous National Priority Programs (NPPs), also called the National Energy Supply Program, are considered national development plans for the Ministry of Finance's energy sector. On the other hand, MEW (now the ERA) and DABS have their own 5-year development plans. This is apart from the Power Sector Master Plan, which was owned by MEW, now by the newly established Electricity Regulatory Authority, and requires updates every 2 years. These plans require harmonization and internal discussion amongst government ministries so that a unified

development plan can be presented to international development partners.

### Create an enabling environment for the private sector and offer incentives for investment in the energy sector

An enabling environment for the private sector requires, first and foremost, the establishment of an independent Electricity Regulatory Authority, the ERA, which will ensure transparency and fairness in licensing, return on investments, and tariffs. Other major concerns to the private sector, that must be addressed, include land acquisition and fair, efficient processes to obtain approvals from government departments. The private sector expects to see some relaxation in taxes and duties on renewable energy equipment and energy efficient appliances and subsidies in land acquisition. More importantly, the Afghan government should pay attention to assuring the security of the private sector's staff, field workers, equipment, and plants.



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