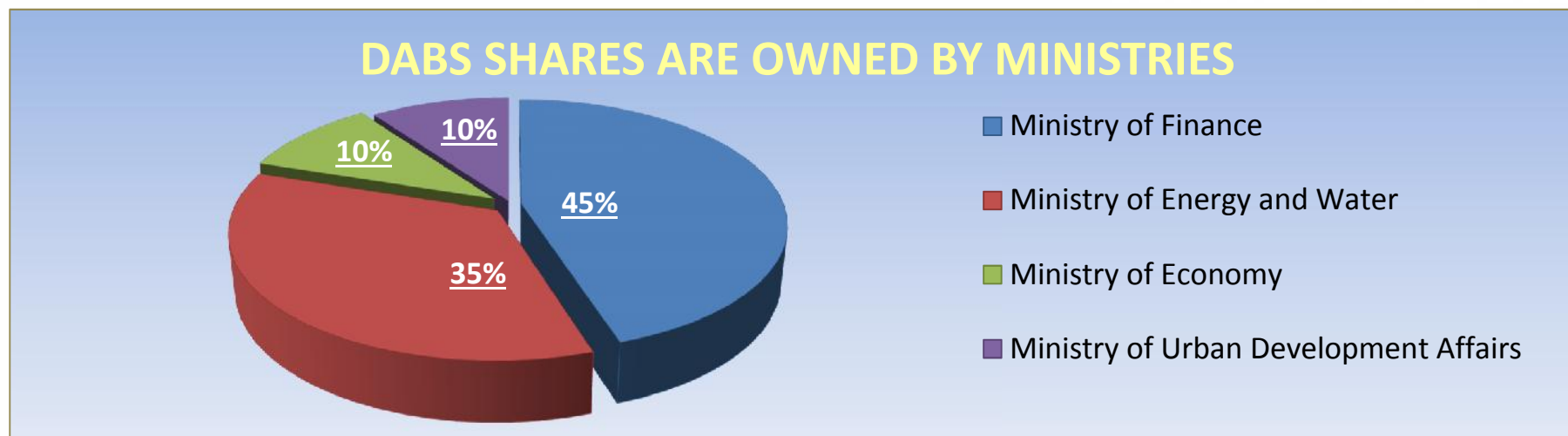


**12th MEETING
OF THE TASK FORCE ON
REGIONAL ENERGY COOPERATION IN CENTRAL
AND SOUTH ASIA**



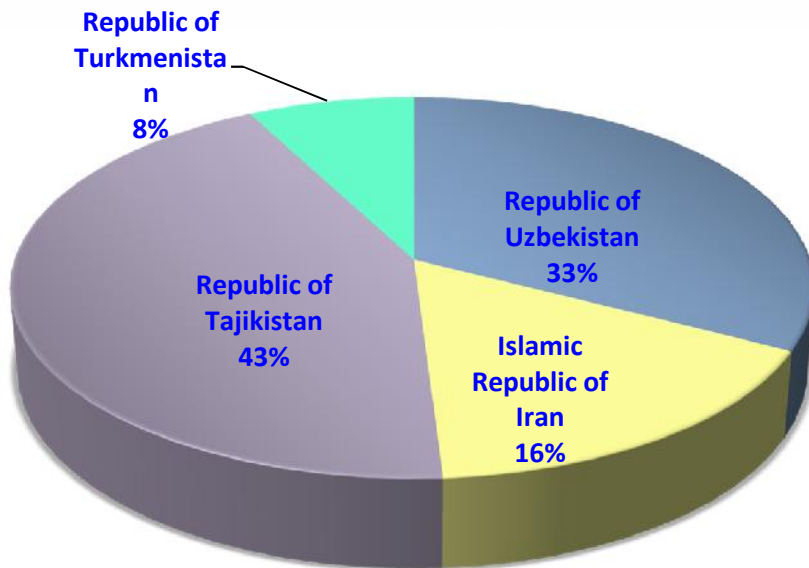
Afghanistan Energy Sector

- ❖ **The Government of Afghanistan corporatized the National Electricity Service Department Da AFGHANISTAN BRESHNA MOSSASA (DABM) into an independent state owned utility as such, all assets, staff and other Rights and Obligations of (DABM) were transferred to DA AFGHANISTAN BRESHNA SHERKAT (DABS).**
- ❖ ***DABS is an independent and autonomous 100% State-owned corporation, incorporated on 4th May 2008 (15 Saur 1387).*** DABS has been established under The Corporations and Limited Liabilities Law of the Islamic Republic of Afghanistan (IROA). DABS have sole authority to run its operations and appoint the required staff according to its legal framework (Articles of Incorporation, Bylaws)

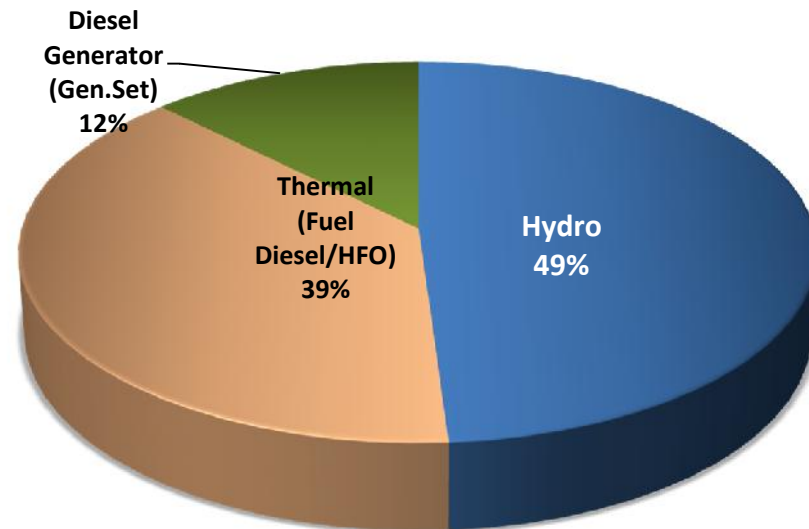


Afghanistan on Grid Generation / Transmission Profile

Transmission Lines Installed Capacity, Max in
895MW



Afghanistan Core Generation Installed Capacity in
700MW



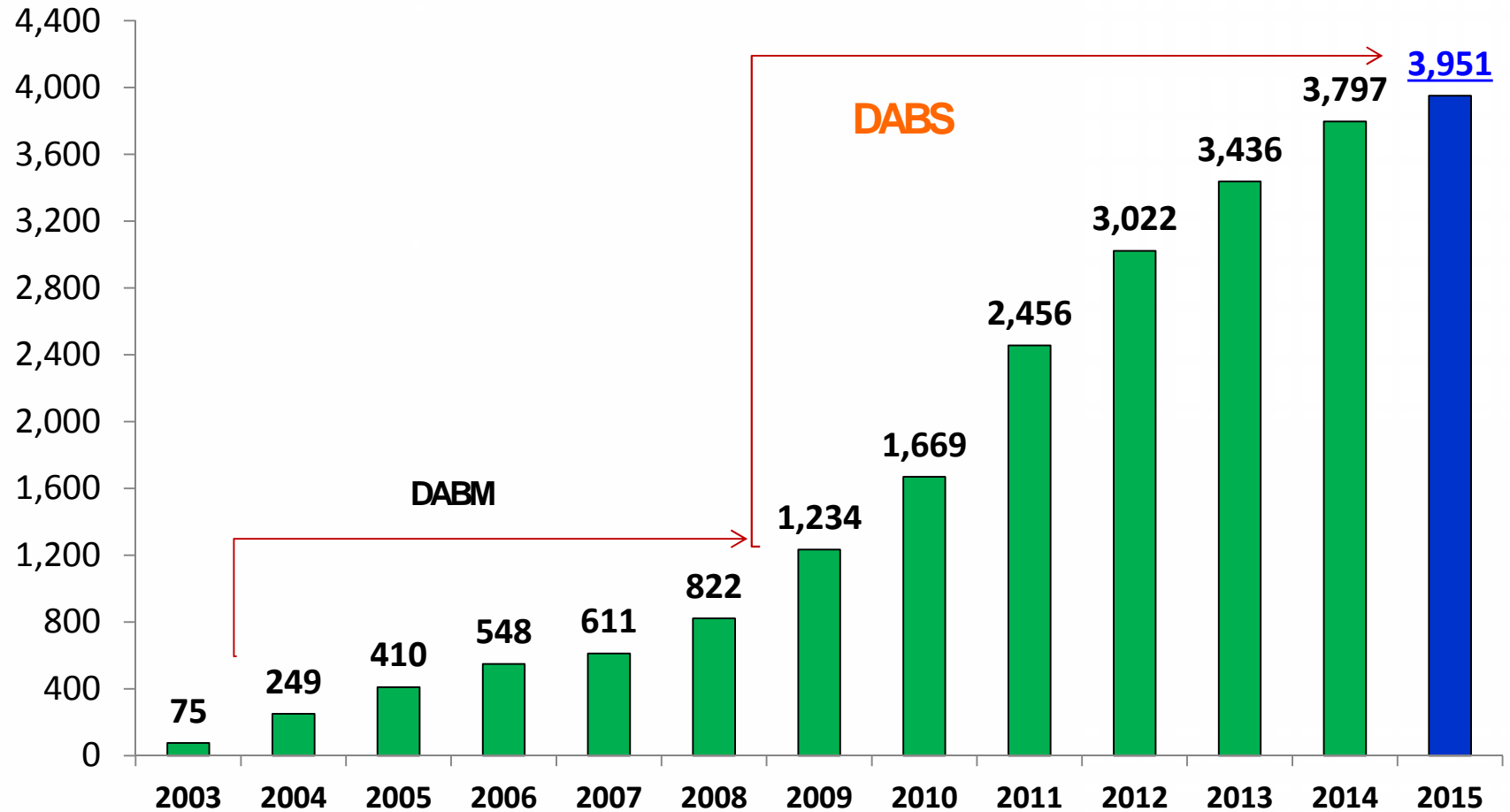
Afghanistan Electricity Generation Potential

- ❖ Afghanistan has unique untapped potential to generate enormous amount of Electricity from **Renewable Energy Resources**:
 - Solar Energy 222,000 MW
 - Wind Energy 67,000 MW
 - Hydro Energy 23,000 MW
- ❖ With the Regional Energy and Natural Resources Cooperation this potential can be harnessed timely for the benefit of the entire region.
- ❖ Enabling Policies Regulatory Framework and Matching investments are the need of the hour.

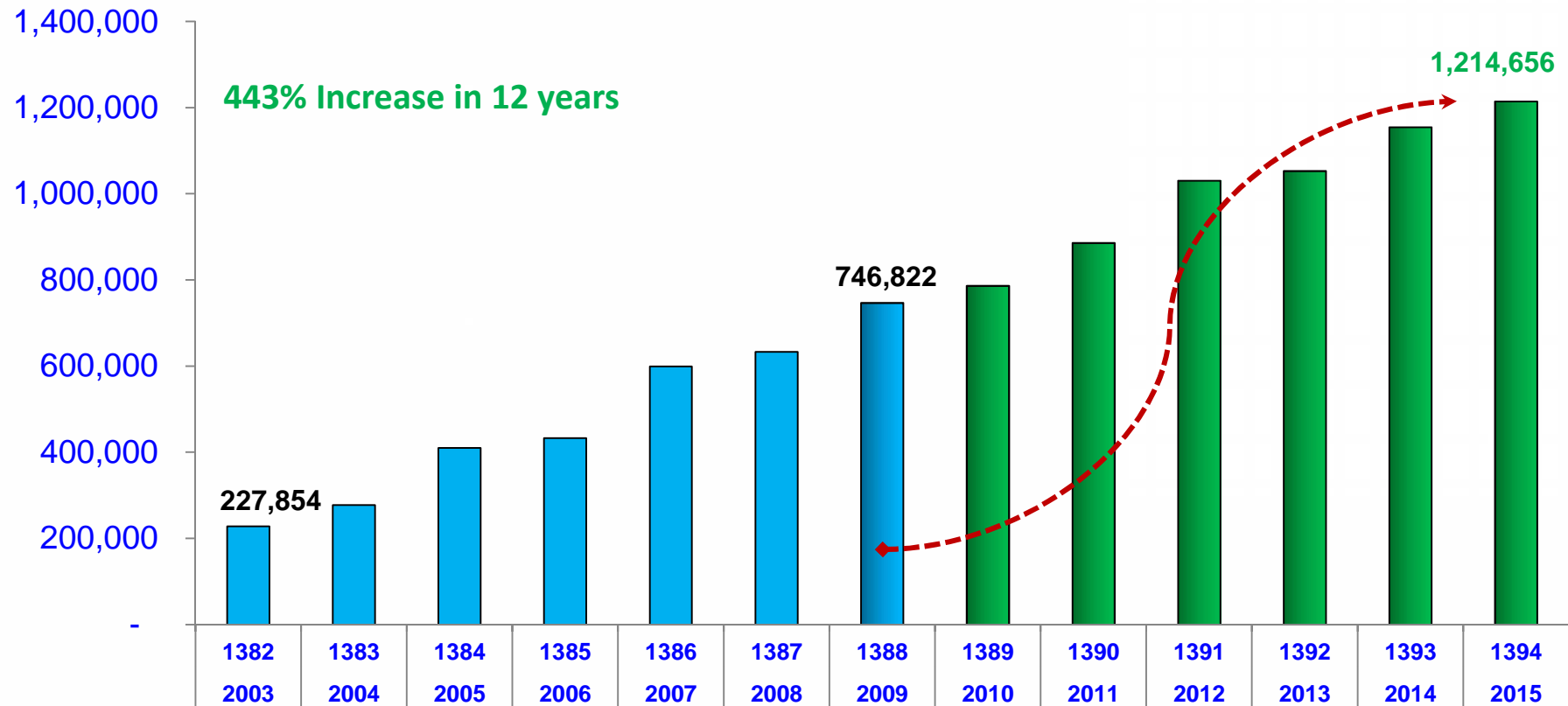


DABS Electrical energy import from Neighboring Countries

(Figures in million kWh)



DABS Growth of Customers



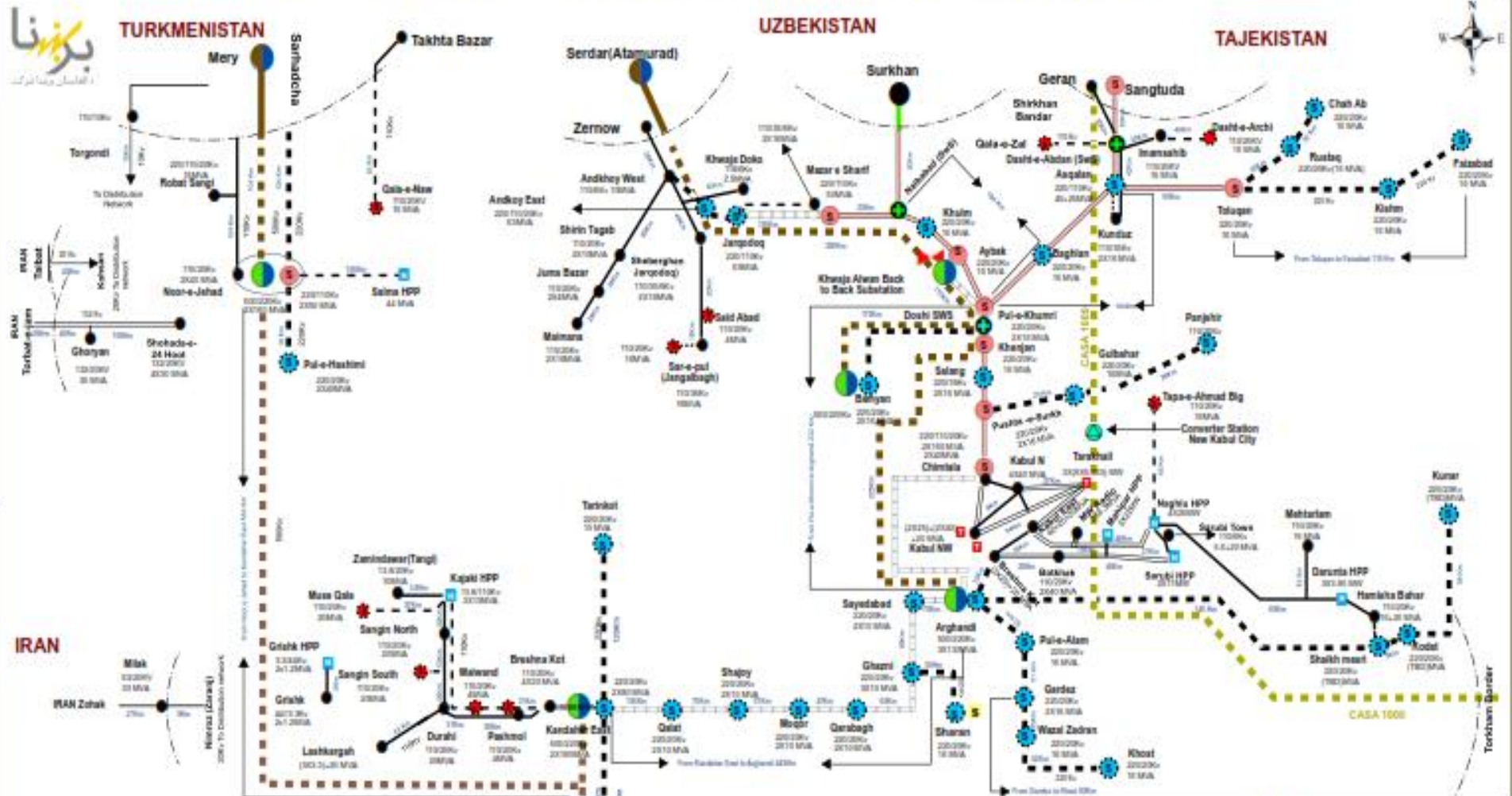
Residential	91.88%
Commercial	6.72%
Holy places	0.73%
Government	0.55%
Industries	0.11%

Afghanistan Power Grid

Afghanistan Power Network consists of 4 isolated system:

- i. North East Power System; (**NEPS**) consisting of a grid linking 17 load centers (Kabul, Mazar-i-Shariff, Jalalabad, etc) with Uzbekistan and Tajikistan (HVTL 220kv, 110kv, 35kv)
- ii. South East Power System (**SEPS**) consisting of Khandar, etc linking Kajaki (HVTL 110kv)
- iii. Herat system linking the Herat Zone with Islamic Republic of Iran and Republic of Turkmenistan (HVTL 132kv, 110kv)
- iv. Turkmenistan system linking Herat, Faryab, JawzJan, Sar-e-Pul and Andkhoy district. (HVTL 110kv)

AFGHANISTAN CURRENT AND FUTURE POWER SYSTEM



- 500 KV TL From Turkmenistan to Arghandi**
- Apina Border to Andkhoz 300km
 - Andkhoz to Sheberghan 40 Km
 - Sheberghan to Mazar e Sharif 135 Km
 - Mazar-e-Sharif to Dashti-e-Alesan 141 Km
 - Dashti-e-Alesan to Arghandi 225 Km
- CASA 1000 Tajikistan to Turkham Border**
- Imam Sahib to Gul Bahar 330 Km
 - From Gul Bahar to Turkham Border 240 Km

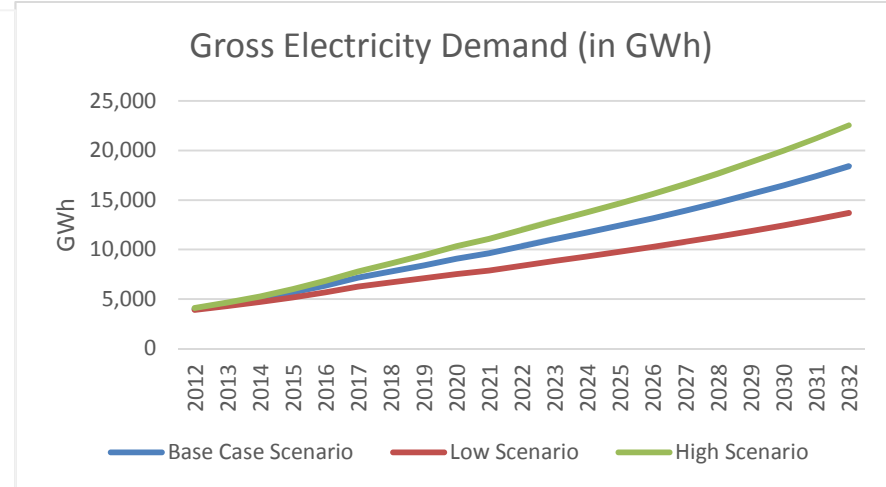
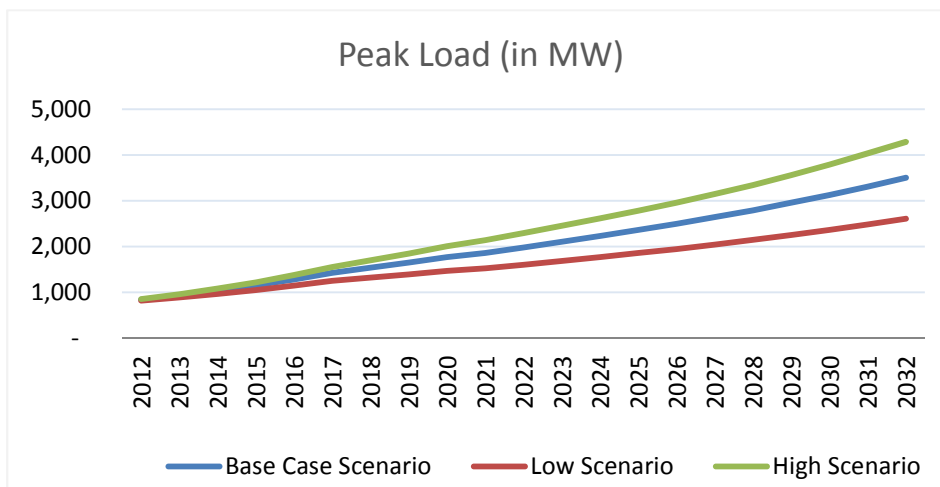
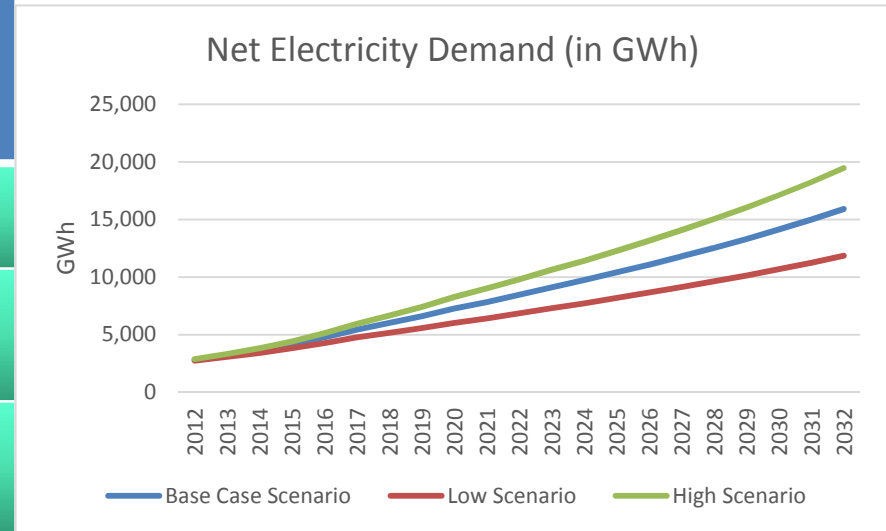
Aligned: World Geodetic System 1984 (WGS84)
 Distribution: Binary by AEIC
 Imagery Source: National Geospatial Intelligence Agency
 Administrative boundaries are: 3.4
 Proposed and published by the AEIC GIS Unit, Kabul, Kabul
 For Further Information please contact: AEIC
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 Web: www.aeic.af
 Print Date: June, 2016

NOTE: Not to scale or necessarily relative position
 Updated May, 2016 Based on current SLD
 and latest information from AEIC Office

LEGEND		
Existing Substation	Existing Transmission Line	Existing Power Plants
220 Kv	220 Kv	Hydro Power Plant
Switch Station	110 Kv Double Circuit	Thermal Power Plant
300 Kv	110 Kv	
Future Substation	220 Kv Double Circuit	
110 Kv	110 Kv Double Circuit	
220 Kv	220 Kv Double Circuit	
Switch Station	300 Kv (AC)	
300 Kv	500 KV (DC) CASA 1000	
Back to Back Substation		

Afghanistan Electricity Demand Forecast for 20 Years

Forecast Scenario 2032	Gross Demand	Net Demand	Peak Load
Base Case	18,409 GWh	15,900 GWh	3502 MW
High Scenario	22,534 GWh	19,474 GWh	4287 MW
Low Scenario	13,701 GWh	11,840 GWh	2607 MW



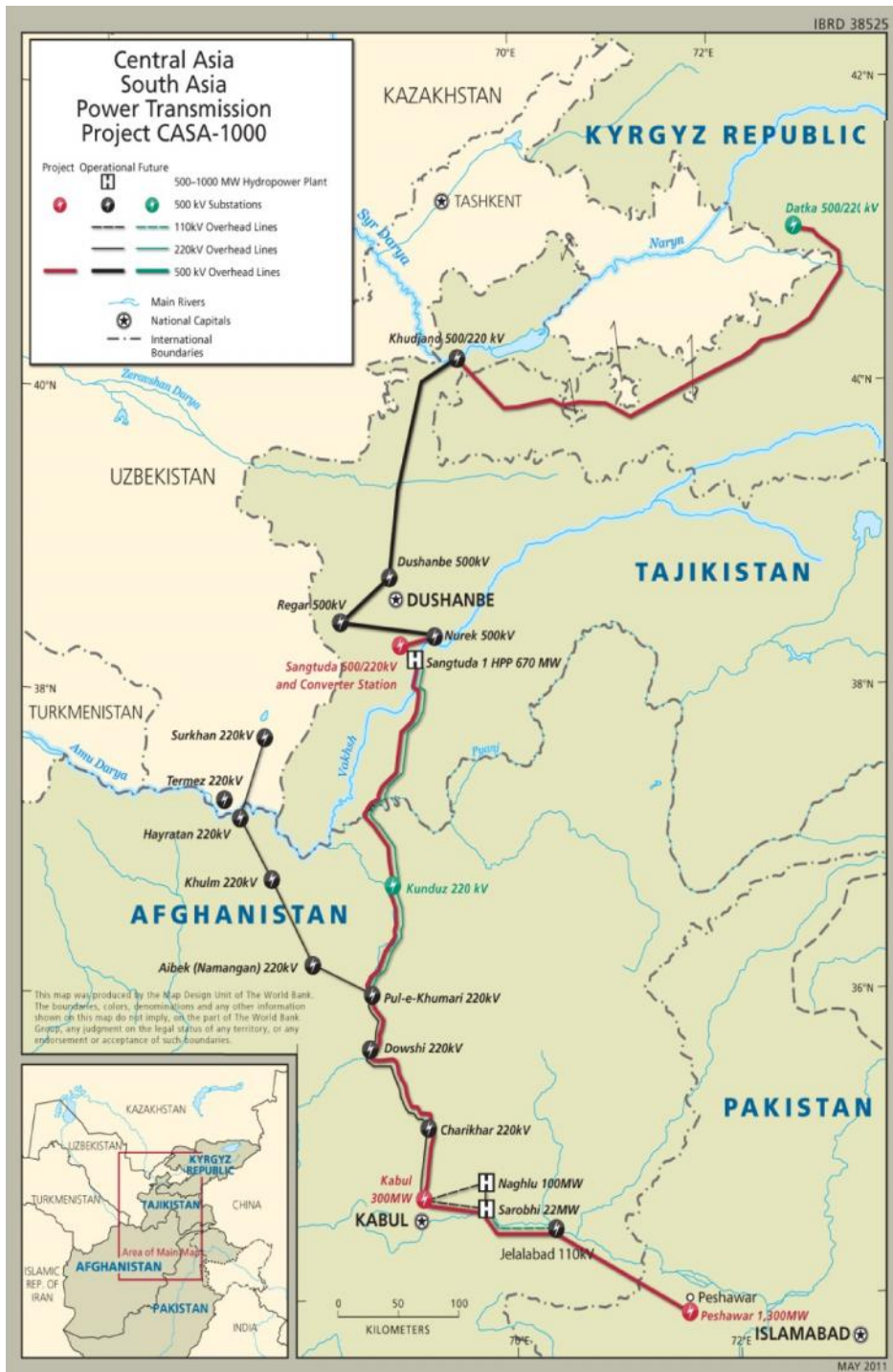
Investment Required to Meet demand Supply Gap

As per Afghanistan Power Sector Master Plan

Overview on Investment type	Subtotal by project	Stage A	Stage B	Stage C	Stage D
Generation development	\$ 7,329.50	\$ 327.60	\$ 348.50	\$ 981.50	\$ 5,671.90
Major transmission projects	\$ 1,725.90	\$ 595.00	\$ 676.00	\$ 212.90	\$ 242.00
Transmission development within the provinces	\$ 1,041.00	\$ 291.10	\$ 439.80	\$ 215.10	\$ 95.00
Total in Million USD	\$ 10,096.40	\$ 1,213.70	\$ 1,464.30	\$ 1,409.50	\$ 6,008.90

CASA → 1000

CASA-1000 Project





Thank You