

## ROADMAP TO TRANSFORMATION BRIDGING THE ENERGY DEFICIT



### STRATEGIC OBJECTIVES

The past decade has registered an annual electricity demand growth well above 12% which had put considerable strain on the power system, specifically an generation which over the years had not been able to catch up to demand adequately. The supply of electric power (generation, transmission and distribution) over the coming years will need to expand to meet the growing demand. There will be broad mobilization for the diverse economy of the country. The vision: meet demand for 2016 and 2017. It is assumed to increase at a steady rate of 2,864.8 MW to 5,005.8 MW. The corresponding projected energy consumption are 23,578.1 GWh and 21,823.7 GWh.

The broad objective is to balance supply and demand based on the available power generation resources in the country. New transmission network construction, installation and refurbishments to improve power reach reliability on going while developing Oil & Gas fields to increase natural access to petroleum products.

**Oil & Gas**  
**Policy:** to ensure the sustainable exploration, development & production of Ghana's Oil & Gas. Significant achievements are being recorded in exploration and development rich sectors of the Petroleum Industry including the development of Oil & Gas infrastructure, and the participation of 121 indigenous companies. Government plans to ensure LNG usage in the country reaches 36% by 2020 in close with a total of 14,500 vehicles and cook stoves distributed to date.

**Power:** to increase installed power generation capacity to 5000 MW and increase electricity access from the current level to universal access by 2025 (Ghana remains a leading African nation in electricity access across its territory).

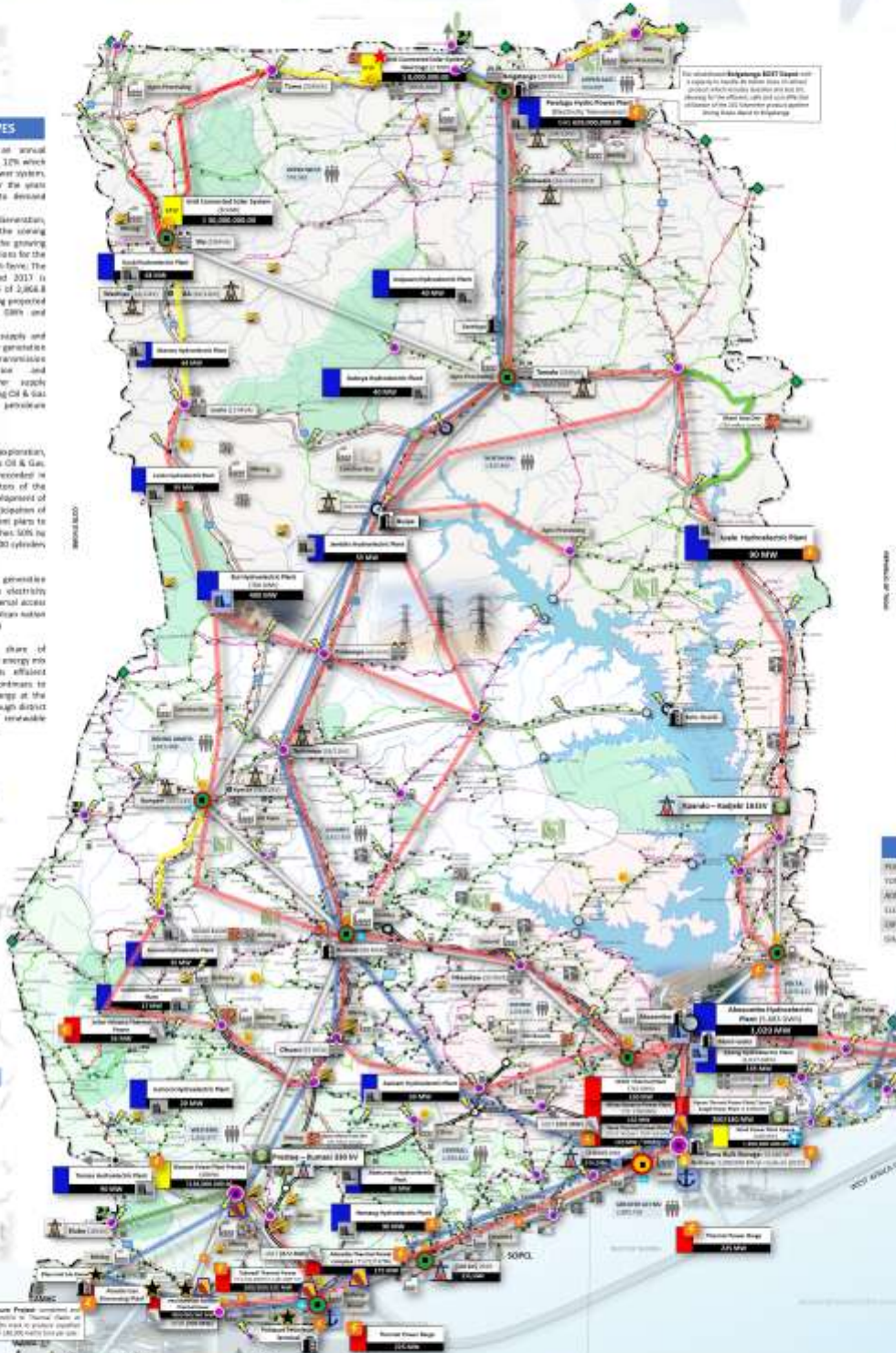
**Renewable Energy:** to increase share of renewable energy in the total national energy mix to 10% by 2020 and ensure its efficient production and use. Government continues to make tremendous efforts to put energy at the core step of the rural connectivity through district assemblies and to fully integrate renewable energy into the energy supply system.

### ACHIEVEMENTS

- 100% of the 1000 MW Volta Hydro-Electricity Project (VHEP) is now generating power.
- 100% of the 1000 MW Aboakye Hydro-Electricity Project (AHEP) is now generating power.
- 100% of the 1000 MW Bui Hydro-Electricity Project (BHEP) is now generating power.
- 100% of the 1000 MW Kpong Hydro-Electricity Project (KHEP) is now generating power.
- 100% of the 1000 MW Opong Hydro-Electricity Project (OHEP) is now generating power.
- 100% of the 1000 MW Sargrenti Hydro-Electricity Project (SHEP) is now generating power.
- 100% of the 1000 MW Tano Hydro-Electricity Project (THEP) is now generating power.
- 100% of the 1000 MW Yapeku Hydro-Electricity Project (YHEP) is now generating power.
- 100% of the 1000 MW Zongro Hydro-Electricity Project (ZHEP) is now generating power.
- 100% of the 1000 MW Aboakye Hydro-Electricity Project (AHEP) is now generating power.
- 100% of the 1000 MW Bui Hydro-Electricity Project (BHEP) is now generating power.
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### DEVELOPMENT ZONES

- 1. Volta Basin
- 2. Aboakye Basin
- 3. Bui Basin
- 4. Kpong Basin
- 5. Opong Basin
- 6. Sargrenti Basin
- 7. Tano Basin
- 8. Yapeku Basin
- 9. Zongro Basin
- 10. Aboakye Basin
- 11. Bui Basin
- 12. Kpong Basin
- 13. Opong Basin
- 14. Sargrenti Basin
- 15. Tano Basin
- 16. Yapeku Basin
- 17. Zongro Basin



### LEGEND

- 1. Aboakye Basin
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### 2016 OUTLOOK

PLANT CONSTRUCTION TARGET (2016)	8000 MW
TOTAL INSTALLED POWER CAPACITY	2,400 MW
AVOIDED CAPACITY (2016 - 20)	400 MW
ELC IN kWh/kWh	84%
EXPECTED ENERGY CONSUMPTION	23,578.1 GWh
GHANA SYSTEM PEAK DEMAND	2,864.8 MW

The Aboakye Gas Infrastructure Project (AGIP) is a 1000 MW gas-fired power plant located in the Aboakye Basin. It is a joint venture between the Government of Ghana and the private sector. The project is expected to be completed by 2016 and will provide a significant amount of electricity to the Ghanaian grid.

The development of Oil and Gas Fields in the Volta Basin is a key priority for the Government of Ghana. The Volta Basin is rich in oil and gas reserves and the development of these fields will provide a significant amount of electricity to the Ghanaian grid.



### BRIDGING THE ENERGY DEFICIT

POWER PLANT	YEAR	ESTIMATED CAPACITY (MW)
AGIP	2016	1,000
AGIP	2017	1,000
AGIP	2018	1,000
AGIP	2019	1,000
AGIP	2020	1,000
AGIP	2021	1,000
AGIP	2022	1,000
AGIP	2023	1,000
AGIP	2024	1,000
AGIP	2025	1,000
TOTAL		2,864.8