## **Ideas to Improve Bangladesh's Energy Infrastructure**

- Adopt and implement the Coal Policy on an urgent basis.
- Increase public investment in electricity.
- Encourage private power supply.
- Improving power sector efficiency by minimizing transmission and distribution (T&D) losses.
- Decrease cost of electricity production.
- Substitution of coal for gas as the primary fuel for generating electricity.
- Reliance on gas and liquid fuel until FY2018.
- Shift from domestic gas and imported liquid fuel to imported coal and LNG after FY2018.
- Increase reliance on IPPs based on large and efficient power supply.
- Accelerate the implementation of scalable power generation through renewable energy (mainly wind and solar power).
- Leverage potential of wind energy mainly in the coastal areas and offshore islands.
- Regional energy sharing: Expand trade with India and explore hydro-power import opportunities with Nepal and Bhutan.
- Maintain proper coordination of investment in T&D.
- Expansion/up-gradation of 90,000 km electric distribution line by BREB.
- Construction/Up-gradation of 385 sub-stations in rural areas by BREB.
- New consumer connection 4 million rural customers.
- Electrification of 4,000 villages by BREB.
- Replacement of 5 million digital meters by pre-paid meter in rural areas.
- Expansion of electric distribution line 1250 Km by DESCO and 2591 km by WZDC.
- Construction/Modernization of sub-station in urban areas.
- New consumer connection 426,000 by DESCO.
- New Pre-paid meter DESCO 1050,000 and WZDC 804,956.
- Reduce system loss 9% (DESCO) and 9.5% (WZDC).
- Adoption and implementation of a proper O&M strategy [presently, 22% loss with 2,200 MW).
- Upgrading the "dead simple-cycle gas power plants" as combined-cycle gas turbine (CCGT).
- Consider turn-key type investments to reduce IPP procurement problems.
- Implement a demand side management (DSM) policy to reduce peak capacity use by 440 MW.
- Design and implement a gas allocation policy.
- Prioritize LPG usage in domestic and CNG (mini cab) sectors.
- Minimize difference between LPG and pipelined gas tariffs.
- Consider biogas as the alternative of pipeline natural gas.
- Investment for on-shore exploration.
- Strike joint venture or "Strategic Partnership" between BAPEX and IOCs.

- Use of coal as coking coal.
- Export Barapukuria coal as coking coal or steam coal.
- Pursue LNG import with Qatar and Australia.
- Design and implement the coal center with the capacity of 12 million ton in Matarbari area.
- Substitution of low thermal efficient gas-fired power plants with more energy efficient plants.
- Incentives for adoption of improved fuel use.
- Promote use of energy conservation technology in industry.
- Conserving gas consumption by households through proper metering and pricing policy based on usage.
- Design financial incentives and regulatory schemes for improved cooking stove.
- Target energy subsidy in high priority sectors that maintains budgetary discipline.
- Capping the level of subsidy for primary energy at 1 percent of GDP.
- Proper coordination of investment in transmission and distribution.
- Ensure efficient O&M in running power plants.
- Scaling up production and usage of renewable energy sources through government support and subsidies.
- Making solar panels more affordable for rural households.

## **Ideas to Improve Bangladesh's Transportation Infrastructure**

- Construction of Padma Multipurpose Bridge by 2018.
- Construction of energy efficient buildings.
- Relocation of all markets, shopping malls, restaurant, and school at least 500 meters away from main roads.
- Extension of railway communication among big cities.
- Building feeder road alongside the main road for parking buses.
- Building flyovers in intersections.
- Ensuring super elevation where the road is curved.
- Removing illegal establishment i.e. hat-bazar alongside the main roads.
- Building road divider in risky zones to mitigate road accidents.
- Easily accessible public transport system.
- Establishment of a national driving training institute.
- Continue to repair, maintain, improve and expand existing roads on a priority basis.
- Construction of a tunnel underneath the Karnaphuli river in Chittagong.
- Conversion of important highways into four lanes starting with Dhaka-Chittagong.
- Continuation of investment to modernize railway.
- Construction of circular rail road track around Dhaka city.
- Construction of the 3rd Sea port at Payra in Patuakhali.
- Construction of a sea port and an LNG terminal at Moheshkhali.
- Strengthen fleet capacity in making Biman a profitable organization.

- Strict axle load control policy to reduce road damages caused by overloading.
- Adopt policies for strict roadside land use development and right of way (r.o.w) control.
- Shift from bituminous pavement to concrete pavement.
- Developing coastal embankment/polder infrastructures.
- Implement the MRT Line-6 project from Uttara to Motijheel.
- Construct a fly-over starting from Shantinagar crossing over the Buriganga.
- Development of an elevated rail-based mass transit (MRT) system in Dhaka.
- Introduce bus rapid transit (BRT).
- Giving autonomy to urban development authorities (UDA) for coordinated development of metropolitan cities and urban areas.
- Reclaim footpath from street vendors.
- Develop adequate pedestrian friendly walking and crossing infrastructures.
- Undertake double tracking of all major railway corridors by phases Dhaka-Chittagong, Dhaka-Sylhet, Dhaka-Khulna, and Dhaka-Parbatipur.
- Strengthening Trans-Asian railway connectivity.
- Railway modernization to an Electric Traction System (ETS) Chittagong Port to the hinterland.
- Connect large EPZ/SEZ mouth ICDs through container transport railway infrastructure.
- Implementing the STP (Strategic Transport Plan 2004-2024) and DHUTS (Dhaka Urban Transport Studies 2010-2050).
- Revamp the Dhaka-Sylhet railway communication.
- Establishing a container terminal either at Shayestagoni or Srimangal.
- Construct in phases the Dhaka-Mongla and Chittagong-Cox's Bazar rail lines.
- Enable railway transfer of coal from Matarbari to the coal-fire based power stations.
- Maintenance of navigable waterways through regular dredging.
- Facilitating flow of passenger and cargo by development of inland river ports.
- Develop inland container river port for transportation of containers by waterways to/from two sea-ports.
- Introduce mechanical equipment for handling cargo.
- Develop rural launch landing stations providing pontoon facilities.
- Digitize all the services provided by BIWTA introducing web based data base application.
- Restoration of the Buriganga and waterways around Dhaka city.
- Reducing port induced semi-trailer truck traffic by developing intermodal rail and river connectivity.
- Enhancing container storage port yard facilities at Karnaphuli.
- Increasing container handling capacity through expansion of terminal/yard facilities.
- Accelerate use of Mongla Port facility.
- Construct a deep seaport in Sonadia of Cox's Bazar.
- Set up coal transshipment terminal at the Matarbari port.
- Expansion of operational and passenger facilities of Hazrat Shahjalal International Airport.

- Development of Cox's Bazar Airport into international airport.
- Enhancement of Cargo aircraft parking facilities at Shah Amanat International airport (SAIA).
- Construction of a new airport at Southern region.
- Emphasis on operations and maintenance (O&M) spending.