

TOWARDS BUILDING A MODERN ECONOMY



DHAKA TUESDAY
FEBRUARY 20, 2018
FALGUN 8, 1424 BS

47

Where do we stand?

CONTINUED FROM PAGE 46

transportation from the ship anchored at the outer anchorage to the plant. Due to the very low draft around the plant, coal will have to be transported nearly 20km in small vessels.

Recently, the government declared that Payra will be a "power hub" where nearly 10,000 MW of power plants will be situated. Experts familiar with the siltation problems in Bangladesh consider this to be infeasible because

projects are usually costly, and the addition of the deep-sea port will make it even costlier. Moreover, it has faced inordinate delay in project implementation. Therefore, the financial obligations for Bangladesh are unknown. Here also the government has declared that this will be a "power hub" where more than 10,000 MW of coal and LNG-based power plants will be situated.

Matarbari is suitable for a deep-sea

faces numerous difficulties including financing and resistance from environmentalists. The long delay in implementing the project is bound to have an adverse effect on the cost of the project. Coal transport from outer anchorage to the plant and contract to source high-quality coal are also significant challenges. The reason high-quality coal would need to be imported is the sensitive nature of the ecosystem of the Sundarbans.

extensive transmission lines for evacuating the power from remote locations to the demand centres. For the first few projects of approximately 2,000 MW, the government will probably be able to find financing and partners but to achieve the 2030 target and beyond it will be the real challenge.

The other planned fuel and capacity diversification project is the nuclear power plant at Rooppur. Construction has started but it is well known that nuclear power plant construction is extremely sophisticated and difficult; cost overruns and delays are routine. Delays of as high as five years are not uncommon. The initially announced cost has been revised upward several times, and now stands at more than USD 13 billion for the 2,400 MW plant. Most experts believe that this will cross USD 15 billion and many unforeseen logistical hurdles are predicted.

POWER IMPORT

A great achievement was the import of power from India. The cross-border electricity trade initiated in the last two years is probably the biggest success of the present government. Had it not been for power import the only viable option for generating more power would have been increased oil-fired generation. The high-cost oil-fired generation would have put significant stress on the budget. Energy trade has great potential as this region is well-endowed with significant hydroelectric potential. Both Nepal and Bhutan in the near to medium-term are unlikely to be able to consume any significant quantity of electricity generated in their countries. In such a scenario, Bangladesh plays a very important role in developing energy trade in the region.

As an electricity-importing country, Bangladesh needs long transmission

lines and receiving stations need to be built here. If electricity is generated in Nepal and Bhutan, large substations to receive the electricity need to be constructed here. Depending on where electricity is transmitted within Bangladesh, one or more transmission lines originating from the receiving station would need to be constructed to transmit the electricity to various parts of the country. A station to receive 500 MW of electricity from the Indian grid is located at Bheramera. This is now being upgraded to receive 1,000 MW of power. The other entry point of 160 MW of power into Bangladesh is in Comilla. Here eventually 500 MW power would enter Bangladesh.

From the above discussion it is clear that the government's PSMP 2016 targets for 2021 will probably be met, but the 2030 targets are ambitious and are unlikely to be met. Since most of the energy will be imported, the impact on the tariffs of natural gas and electricity must be carefully managed.

Another issue is the demand for all the electricity planned. The peak demand served so far is 9,471 MW on May 27, 2017. According to PSMP 2016, the peak demand is projected to be more than 27,000 MW—nearly three times that of 2017. If all the planned projects are completed by 2030, the country will have to show remarkable economic progress to be able to consume all the power produced and imported. The last very important aspect of all these huge expenditures for the energy and electricity infrastructure is the pressure on the foreign exchange rate and debt servicing.

Dr Ijaz Hossain is Professor, Chemical Engineering Department, BUET and advisor to the government on energy efficiency and greenhouse gas emission mitigation.

Figure 3: Generation capacity in 2017

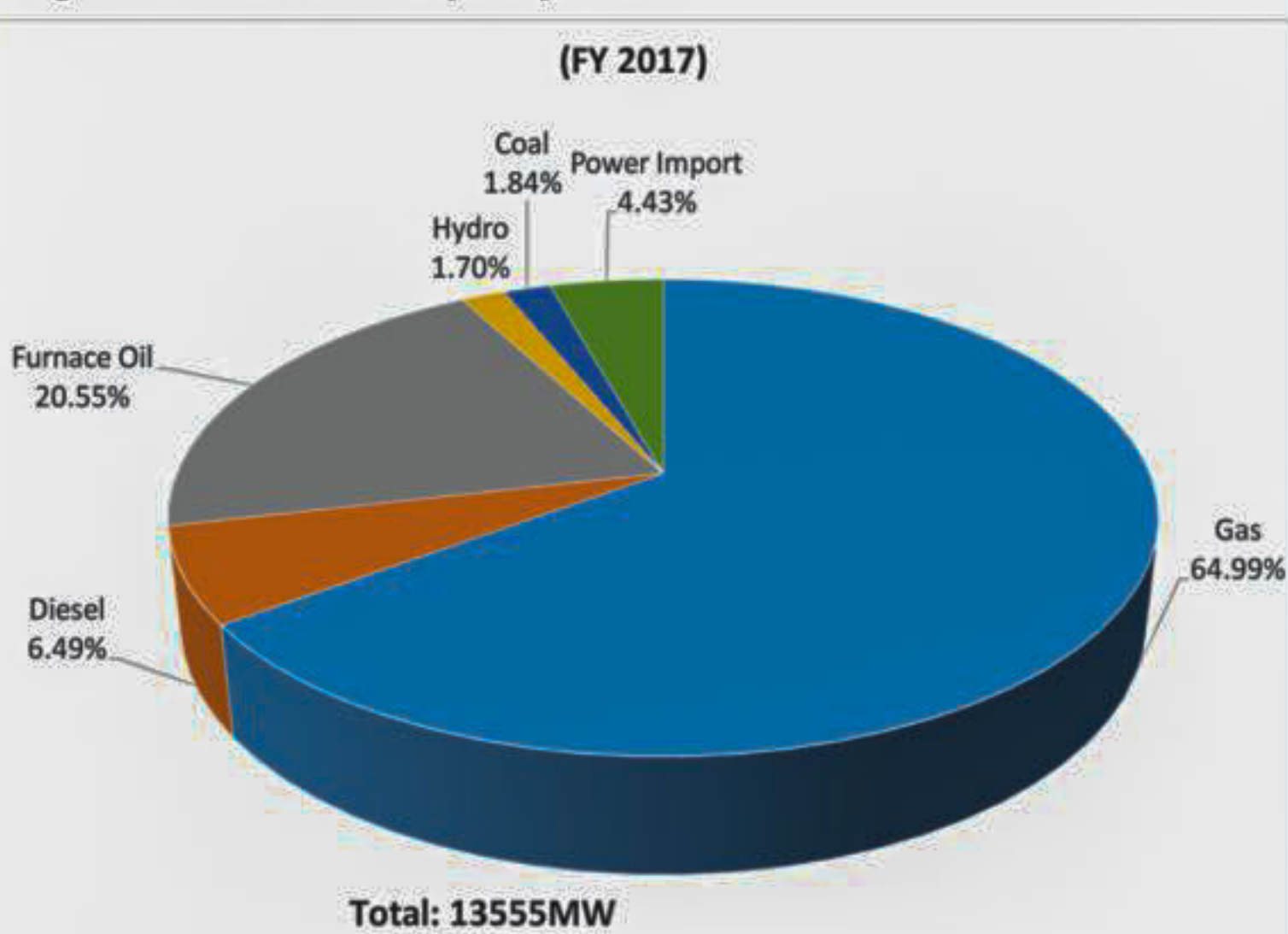
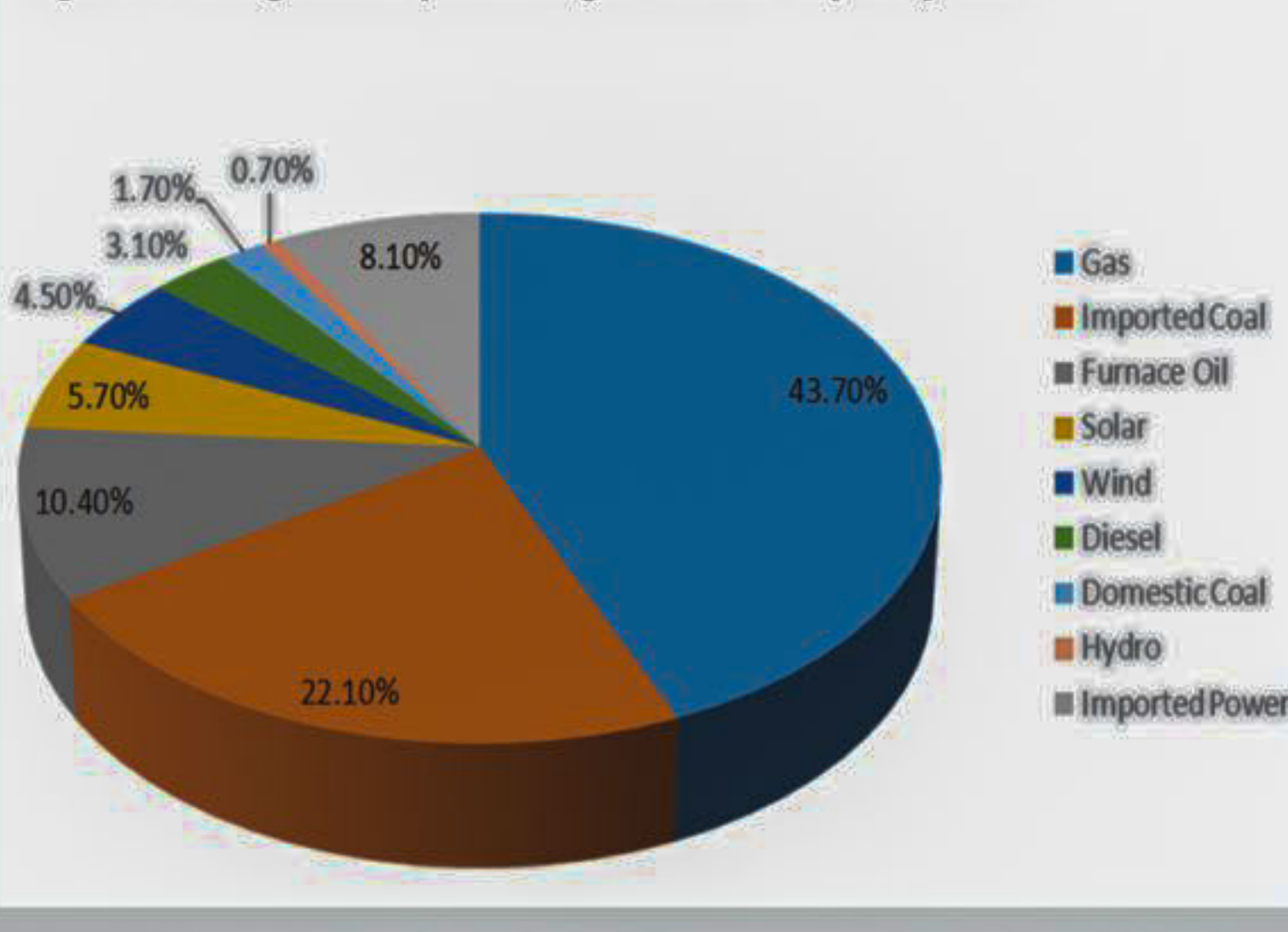


Figure 4: Bangladesh planned generation capacity 2021



SOURCE: BANGLADESH POWER DEVELOPMENT BOARD, IIEFA RESEARCH

large quantities of silt are regularly carried by the rivers and deposited at the mouth of the rivers in and around the Payra coast. They believe the cost of dredging to keep any deep-sea port in that area navigable will be prohibitive.

The temporarily shut down Matarbari Project has resumed construction. Here the project includes a deep-sea port for handling coal. The real concern here is the cost of the project and the resulting tariff. Japanese

port and can hence be made a power hub but what is unclear is the capacity of the proposed deep-sea port. Presumably, the port for the Matarbari Coal Project will have the capacity only to accommodate the power plant. If that is so, the deep-sea port for the power hub will have to be built, which remains a financial and logistical challenge.

The Rampal power plant is progressing but at a very slow pace. It

LNG-BASED CCGT AND NUCLEAR POWER PLANTS

The government has announced several plans for LNG-based CCGT (Combined Cycle Gas Turbines) power plants. But none of these have reached the Power Purchasing Agreement (PPA) stage. The infrastructure challenges for these power projects are regasification facilities, pipelines to transport the regasified LNG to power plants, the CCGT power plants, and finally the

www.fsiblb.com



দেশ জুড়ে আমাদের
শক্তিশালী ATM নেটওয়ার্ক



NOT JUST TEA
IT'S AN ARRAY OF VIRTUES

healthy
unadulterated
refreshing strong flavour
committed quality enriched
satisfying genuine aroma supreme
exhilarating vibrant simplicity
fairness accuracy dynamic clarity
perfect experience smooth authentic
extravagant pure joy moving finesse
richness enjoyment guaranteed
taste fresh vigour exquisite smooth
festive terrific stimulating

DUNCANS
PRODUCING TEA
SINCE 1865



DUNCAN BROTHERS (BANGLADESH) LIMITED
Camellia House, 22 Kazi Nazrul Islam Avenue, Dhaka 1000

www.duncanbd.com



ফার্স্ট সিকিউরিটি ইসলামী ব্যাংক লি:
FIRST SECURITY ISLAMI BANK LTD.