energy sector. Apart from virtually no gas exploration activity even the bleak forecast of the national committee on gas utilisation did not induce the government to look for viable alternatives to this fast depleting resource. Now it seems that apart from a miraculous discovery of massive new gas resources, there is no way the country's energy needs can continue to be met mainly by the gas sector.

According to the grimmest of three future projections of Petrobangla, the country will face 142 million cubic feet per day (mmcfd) gas shortfall in 2011, 341 mmcfd in 2014, 838 mmcfd in 2016 and 1714 mmcfd in 2019-20. This projection however did not take into cognisance that gas shortfall is already 200 mmcfd this year.

The best of these three projects included a potential gas discovery in the Bay of Bengal. But even that scenario leaves the country with a 166 mmcfd deficit in 2017 and a 814 mmcfd in 2019-20. To make matters worse, at the present trend of consumption growth, the gas demand will spiral up to 4567 mmcfd by 2019-20. This is enough reason to push the panic button and look for new energy strategies.

Petrobangla has already declined confirmation of gas supplies to a number of upcoming power projects. This means, the government cannot go ahead with its planned power projects without reconfiguring how these will run. Petrobangla has already advocated for allocating future gas only to industries (such as fertiliser factories) and domestic consumption for which there are no importable substitutes. The local energy giant has also suggested that future power projects should be coal-fired or imported fuel based.

According to the PDB, till 2025 if Bangladesh's GDP remains as low as 5.5 percent, the country needs to add 19000 megawatts of additional power and if the GDP is as high as 8 percent, it needs 41000 mw power. It is unanimously agreed by the government that by 2020, the country would need to generate 20,000 mw power to serve all of its population. Such a target would be impossible to achieve if the national focus sticks to gas based energy.



Shopping centres carry on business in darkness most of the time.

So what are the costs of alternative sources of energy?

While power plants will need billions of dollars of investment, the government would also have to consider different types of costs of generic average power production of such alternatives. Presently the world consumes 5000 gigawatts a day. Most of it is being generated from coal, followed by natural gas, oil and nuclear technology. A very insignificant part of the world's power generation comes from renewable solutions like wind and solar.

On an average, coal fired power costs US 5 to 6 cents per kilowatt hour, nuclear power also costs the same, gas 6 to 7 cents, wind 8 cents and solar 30 to 35 cents globally. Although solar power is the costliest solution, energy experts in recent years, have lauded it as the best solution to the energy crisis as it is renewable, environment friendly and very flexible to install. Power giants such as General Electric are investing heavily in developing solar power to make it cheaper in the future. GE predicts a surge in global consumption of 10000 gigawatts a day before 2030 and there is no way any country could rely on a single source for generating such enormous power.

Research and trials have shown that Bangladesh is not suitable for wind power. Importing power or gas from neighbouring countries like Myanmar, India and Bhutan requires mutual understanding and willingness to cooperate. The government cannot just rely on such concepts unless the neighbours are willing to export energy to Bangladesh.

Fortunately new strategies are being thought of. Energy adviser to the prime minister Dr. Towfiq-e-Elahi Chowdhury has so far come up with two new ideas to deal with the current scenario. The first is to make all upcoming