



# The Energy Roadmap to Help Achieve Vision 2041

Nasrul Hamid, MP

With the blessings and strong leadership of the Prime Minister, the MPEMR has taken brilliant initiatives to accomplish the Vision 2021. Besides the physical infrastructure in line with the Roadmap, we have taken initiatives to address the governance issues and customer satisfaction. These initiatives include digitization of the ministry towards a paperless ministry, public interaction through social media etc.

**E**nergy is a precondition for the socio-economic development of a country. Without energy, not even a single organ of the country can grow – be it industry, trade & investment or health and education. Honorable Prime Minister Sheikh Hasina has set the nation's Vision 2021 to lead the country to achieve the status of a middle income country by 2021. By now, we have already stepped to the lower middle income status and will be able to become a middle income country even before 2021. The Prime Minister has also declared vision 2041 to become a developed country by 2041. Without energy, the dream of the father of the nation and the vision of Prime Minister Sheikh Hasina – who is recognized as the world leader - cannot be realized. From the very beginning of assuming office in 2009 under the direct guidance and courageous leadership of the Prime Minister highest priority was given to the energy sector. A Roadmap was developed under immediate, short, medium and long term plan to develop the energy sector.

In order to realize the vision of the father of the nation Bangabandhu Sheikh Mujibur Rahman to achieve the dream of 'Sonar Bangla' and subsequent vision of the Prime Minister, the government has shown remarkable progress in the power and energy sector in recent years.

#### Power Sector Achievements Since 2009

- Access to electricity almost doubled – increased to 76% from only 47%
- Power generation capacity almost tripled from 4,942 MW to 12,339 MW
- Scored a century of power plants from 27 to 102
- Number of consumers doubled from 10 million to 20 million
- Per capita power genera-

Total number of gas fields	: 26
Number of gas fields in production	: 20
Number of producing wells	: 97
Present gas production rate	: 2,600 MMCFD
Total recoverable (proven + probable) reserve	: 27.12 TCF
Total production of gas up to Dec 2014	: 12.57 TCF
Total reserve remaining as on Jan 2015	: 14.55 TCF
Total Customers (upto Dec 2014)	: 2.96 Million
Daily gas demand of existing customers	: 3,127 MMCFD

tion nearly doubled from 220 kWh to 371 kWh

- System loss reduced by 7% from 18.45% to 10.49%, resulting in savings of Tk 70 billion.
- More than 4 million solar home systems installed in rural areas, bringing energy at the doorsteps of 20 million people living in isolated parts of the country.

Energy Sector Achievements Since 2009 In spite of our limited natural resources, we have repeated the success stories as in the power sector. The energy sector so far has been able to meet the household and industrial demands. The following table gives an overview of the progress in the sector:

We are confident of elevating Bangladesh to the status of a middle income country even before 2021 and committed to lift up the country to a developed nation by 2041. To achieve the

targets, we set the investment target to be 32% of GDP by 2015 and 38% of GDP by 2021. In order to ensure safe and promising investment opportunities, the development of 100 economic zones under public and private sectors are underway. Reliable power and gas supply to the economic zones is very

important as it will accelerate the economic development of the country. We are pledge-bound to provide reliable power and gas to these economic zones. Policies have been made to facilitate these economic zones with uninterrupted power and gas supply.

I can assure the nation that power and energy will no longer remain a barrier in the path of development for the economic zones. In order to revolutionize the power sector, about US\$40 billion will be required for creating and developing the power infrastructure. It can be mentioned that since 2009 about \$5.2 billion has been invested to date and another \$8.5 billion investment is under process. There is still scope for huge investment. With the support from the private sectors, we can achieve these challenging targets. Other than the GOB budget and support from the development partners, we have explored



State Minister for Power, Energy & Mineral Resources Nasrul Hamid, MP, visits the Payra Power Plant area.



Country's First-ever Battery Charging Solar Station inaugurates by Nasrul Hamid, MP, State Minister for Power, Energy & Mineral Resources

innovative ways of financing such as ECA finance, bidders finance, deferred finance etc. We are the pioneer ministry in showing the path of accelerated development as well as innovative financing. These triumphs in the sector strongly demonstrate the potential of this ministry in successful project implementation.

With the blessings and strong leadership of the Prime Minister, the MPEMR has taken brilliant initiatives to accomplish the Vision 2021. Besides the physical infrastructure in line with the Roadmap, we have taken initiatives to address the governance issues and customer satisfaction. These initiatives include digitization of the ministry towards a paperless ministry, public interaction through social media etc.

### Future Roadmap for Power & Energy Sector

To achieve the goal as per the Roadmap, we are preparing Power System Master Plan 2015 (PSMP 2015) which is now at the final stage of approval. The PSMP 2015 has considered the power system development up to 2041 to achieve the vision 2041. We have also taken up initiatives to revise the Gas Sector Master Plan (GSMP). In the revised GSMP, LNG would be taken into consideration with the backdrop of present gas reserve scenario. Following major targets were

taken into consideration as per the Roadmap:

#### Power Sector

- Power generation target of 24,000 MW within 2021 to fulfill Vision 2021, 40,000 MW power within 2030 to achieve SDGs and 60,000 MW to achieve vision 2041.
- Implementation of renewable energy technology contributing to 10% of total energy. Contribute 3,000 MW to grid by 2030.
- 50% of the generation from coal with the introduction of clean coal technology.
- Increasing power trade through strengthening regional cooperation.
- Establishment of on-shore LNG terminal for primary fuel supply for power generation.
- Transmission system development paving the way of smart grid and bringing the whole grid system under SCADA operation and GIS mapping.
- Introducing Independent System Operator (ISO).
- Efficiency improvement through both supply side management through re-powering and conversion to combined cycle and demand side management through introduction of efficient equipment & appliances.
- Transforming the existing distribution

system into a modern distribution network through introduction of underground distribution line and substation.

- Bring all consumers under prepaid meter coverage.
- ERP implementation to ensure enhanced productivity and good governance.

#### Energy Sector

- Development of Dighipara and Khalashpir coal fields.
- Open pit mining at Barapukuria North: Hydro Geological Survey & Water modeling work is in progress
- Modernization of the gas distribution network through SCADA operation and GIS mapping.
- Exploration of 100 wells by BAPLEX within next 5 years.

BAPEX within next 5 years.

- Off-shore exploration of blocks through PSC
- Establishment of two onshore LNG terminals by 2023
- ERP implementation to ensure enhanced productivity and good governance.

In order to accomplish this goal, we have given due importance to ensure transparency & accountability along with improved customer services. Establishment of modern technology and digital system are also given utmost importance. We would encourage joint venture, private investment and public-private partnerships for the investments. Through the successful implementation of our roadmap, reliable energy supply will no longer remain just a dream. Through the implementation of our roadmap, we will accomplish the 7th goal of Sustainable Development Goals (SDGs) and also assist in achieving the other SDGs for Bangladesh. The successful implementation of these plans will establish Bangladesh as an example for development all over the world as we have shown in achieving the MDGs.



**Nasrul Hamid, MP;**  
State Minister for Power, Energy & Mineral Resources