

# Why are we not focusing more on renewable energy?

MIZANUR RAHMAN

THE Sustainable and Renewable Energy Development Authority (SREDA) of Bangladesh reveals that as of 20 May 2017, the total installed electricity generation capacity of Bangladesh is 15,592 MW. Of the capacity, the generation from the renewable energy is around 443 MW which is only 2.84 percent of the overall electricity generation capacity of Bangladesh.

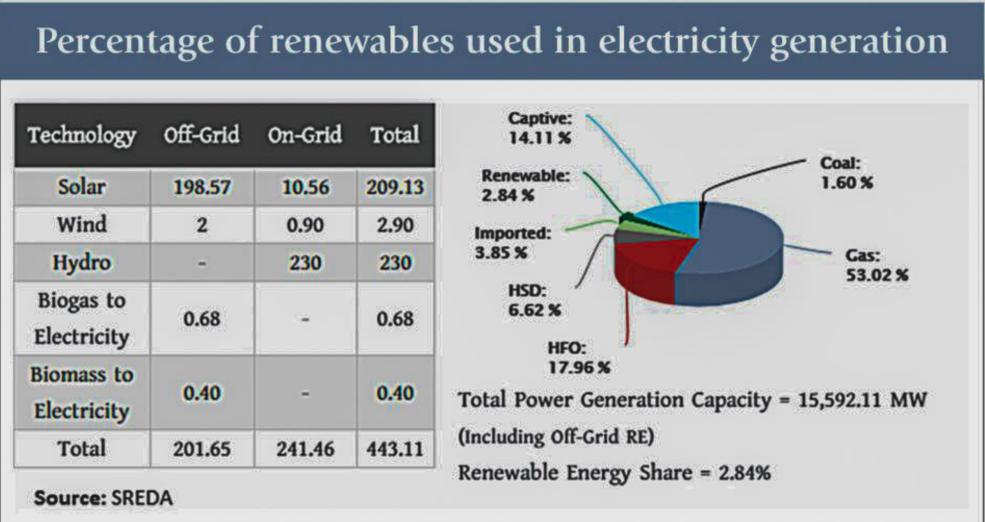
However, the Government of Bangladesh has planned to increase the share of renewable energy to 10 percent of overall electricity generation by 2020. Accordingly, new solar projects have been planned for providing electricity to the National Grid only during the day. That means, the energy ministry needs to take care of the night time/peak hour electricity supply by using existing or new fossil fuel power plants. From this electricity generation planning, analysts have pointed out that despite the publicity regarding the spread of Solar Home Systems (SHS), Solar irrigation and so on, in reality, Bangladesh is heavily reliant on fossil fuel based power plants with a little contribution from renewable energy sources. Fossil fuels are going to eventually end globally one day, but the solar energy, the wind energy and the sea will remain so long as Earth exists. One hour of solar energy falling on Earth is equivalent to more than the whole world's energy consumption for an entire year. Hence, solar energy is by far the largest energy source on Earth.

There is a misinterpretation from certain interest groups in Bangladesh that the electricity from renewable energy is expensive, however from the detail and long term cost analysis, it is found that the electricity generation from fossil fuels is much more costly than that. It may be mentioned that neighbouring India has increased their share of renewable energy to 30 percent with plans to generate more than half

(56.5 percent) of their total electricity from renewables by 2027? Like Bangladesh, they too import solar panels from China.

So how do we reduce the costs and promote renewable energy? Other countries including India are going for huge cost reduction by promoting and introducing all out and comprehensive renewable energy electricity generation, thus increasing the share of renewable energy and decreasing the share of fossil fuel power generation.

Some argue that Bangladesh being a populous country, does not have enough space to go for all out renewable energy. But China too is a populous country having less space, but is leading in solar/renewable energy, some of the European Cold Countries hardly have any solar irradiation, but they are leading in their use of renewable energy through wind and other green technologies. Japan is installing solar parks on the sea above the water. Some types of agricultural farm lands can be used for both agriculture/tree plantations as well as for solar parks. Moreover, research is going on worldwide to increase the efficiency of solar cells/solar panels. According to Solar Cell information on Wikipedia, at present, a normal single junction silicon solar cell can have a maximum practical solar to electrical conversion efficiency of 19 percent, however, the efficiency of newly innovated Concentrated Photo Voltaic (CPV) can go up to 31 percent, finally in 2014, the latest multi-junctions solar cells recorded the efficiency of 46 percent. Though new efficient solar cells are much costlier than the conventional cells, like the conventional one, their price is likely to reduce in the course of time, so, when solar cells of 31 percent or 46 percent efficiency will be used in the solar park project instead of the present 19 percent, there will be around 50 percent less requirement of solar panels as well as less space/land for a solar park



project. In future, when this efficiency will reach near 100 percent, then it will be possible to trap enormous solar energy by using very few solar panels which means we would not have to rely on fossil fuels any more.

Let us look at recent policy changes in India regarding renewable energy. According to the National Electricity Plan released by the Ministry of Power, India in December 2016, more than half (56.5 percent) of India's energy/electricity will be from renewable sources by 2027, also no further fossil fuel based power plants will be built till then.

India's solar energy programme has taken a big step recently by including storage facilities in a solar park project. For the first time, the energy storage was part of a tender that state run Solar Energy Corporation of India (SECI) floated for 750 MW of installed capacity at Ananthapuram Solar Park in Kadapa district of Andhra Pradesh (*The Economic Times*). It was the first hybrid tender of the SECI in which every bidder had to include a storage system alongside its solar plant. "It

will be a normal tender, but as a technical specification, we will ask for battery storage," said Dr. Ashvini Kumar, managing director of SECI (*The Economic Times*).

Like neighbouring India, Bangladesh may also include energy storage in all planned Solar Parks as storing Renewable Energy is essential for continuous electricity supply, especially during night.

#### How to formulate a Sustainable Energy Policy in Bangladesh?

1. The Energy Ministry, including SREDA may re-evaluate their existing energy policy and formulate a sustainable future energy policy based on Sustainable/Renewable Energy sources aiming for rapid increase of Renewable Energy share as well as decrease in Fossil Fuel based energy share. If necessary, Bangladesh may follow and analyse the case of countries leading in renewable energy use in order to formulate a sustainable Renewable Energy Policy.
2. As Bangladesh is a riverine country, efforts should be given to

install more medium, small and micro hydro power plants utilising the kinetic and potential energy of water. Also, at present, there are new innovations regarding low cost small wind turbines which can operate at low wind speed, these new innovative tools can be employed to generate more electricity from wind throughout the country. The country has a vast sea and coastline which give the opportunity for converting huge wind, tidal, wave, potential energy to electricity. Lastly, as an agricultural and populous country, Bangladesh has the huge potentiality to convert bio-energy into electricity. In Germany, as well as in India, this bio-energy contributes in a big way to the overall electricity generation.

3. All planned and future Solar Parks should be based on energy storages in order to reduce the reliance on fossil fuel power plants. Also, Bangladesh is planning only conventional low efficiency Solar Parks, lately, efficient solar cells/panels and solar projects (CPV, Dish Stirling, Parabolic Trough CSP

etc) are coming to the market, based on cost, technical properties and end user requirements, the country should adopt the appropriate type of solar project in the appropriate place in order to get the maximum benefit out of it.

4. Again, the Energy Ministry, the Energy and Power Research Council (EPRC) may promote and encourage home grown innovation and research in the Renewable Energy field including energy storage by financially supporting research/innovative projects of various Universities including startup companies. It is essential as importing innovative and efficient Renewable Energy technology and equipment from Developed Countries is very costly, and sometimes not possible due to various restrictions. Other countries where there is technological advancement, the Government or the Energy Ministry plays the pivotal role in funding the innovative projects of various universities as well as startup companies. In the Indian sub-continent or in Bangladesh, there is no shortage of world class talents; the only requirement is the proper and adequate support by the Government. Without adequate financial and policy support from the government, it is difficult to advance a technological or energy innovation as private sectors normally do not invest in uncertain fields.

If the Government of Bangladesh takes a genuine initiative to lead and promote renewable energy in Bangladesh, it is not that difficult to formulate and implement a sustainable renewable energy friendly energy policy in Bangladesh, overcoming all the technical as well as non-technical challenges. This is what the people of Bangladesh expect from the government as it is for the greater interest of their country.

The writer is an engineer who specialises in renewable energy.

# The China Post begins a new journey



ON May 15, *The China Post* published its 23,621st issue, its final print edition after 65 years.

Much has changed since ink was first splashed across

the pages of *The Post*. In 1952, the word "computer" referred mostly to a person who made calculations. Tim Berners-Lee, the British scientist known as the father of the World Wide Web, had yet to be born.

*The China Post* bid farewell to a medium that no doubt has held a special significance for many. For many, a copy of a newspaper is a daily ritual, a tangible representation of daily events, a curated and designed collection of snapshots of the world — it is the first page of history. It is the reason news media are known as the press and the most important stories as headline news.

People remember historic events through the newspaper front pages that covered them — something that persists to this day. People are getting their news from the internet but on the morning after a landmark election, no one prints out news webpages as souvenirs — they buy newspapers.

However, we are not in the souvenir-making business. Paper is no longer the

most effective and most used medium for news coverage and consumption. Even people who buy newspapers to commemorate significant events don't really get their daily news from them. *The China Post* faces the same challenges that newsrooms around the world are familiar with — dwindling readership and advertisement revenue as well as the advent of new media. The *Post* has to concentrate its resources. It had to make

a choice — to hold on to a tradition or to change.

We chose change because there is still a lot to do. Much has changed in 60 years but a lot has also stayed the same. The *Post* has witnessed the post-war age of relative peace and prosperity when democracy, law and order seem to be on their way to becoming the norms in "the end of history." For quite some time, we let ourselves believe that



The tools and challenges might be new but our mission is the same: to discover the truth, to tell the truth in an engaging way, to provide opinions based on the best interest of our readers.

getting the message right is only half the battle, we also need to ensure the message reaches the people.

Even as long time readers, former *The China Post* journalists and friends came to our office to pick up copies of our 23,621st issue and share their memories of and their support for *The Post*, we at the newsroom were negotiating the unsteady waters of producing a paperless newspaper. The tools and challenges might be new but our mission is the same: to discover the truth, to tell the truth in an engaging way, to provide opinions based on the best interest of our readers, to admit when the truth is unclear or when we get it wrong, and to take on those who spread falsehoods.

The writer is Executive Editor, *The China Post*, Taiwan.

This is a series of columns on global affairs written by top editors and columnists from members of the Asia News Network and published in newspapers and websites across the region.



### QUOTABLE Quote

SATYAJIT RAY  
Indian Bengali filmmaker.

The only solutions that are ever worth anything are the solutions that people find themselves.

### CROSSWORD BY THOMAS JOSEPH

**ACROSS**

- 1 Green stone
- 5 Carved gems
- 11 Plow pullers
- 12 Artemis' twin
- 13 Avenue trees
- 14 Put in order
- 15 Zodiac sign
- 16 Browser button
- 17 Comb parts
- 19 Bit of ointment
- 22 Wonderland guest
- 24 Rival
- 26 Penniless
- 27 Finished
- 28 Dawn
- 30 Fern part
- 31 Harris and Asner
- 32 German sub
- 34 Lily pad sitter
- 35 Glacier makeup
- 38 Knee jerk, for one
- 41 Marshy wasteland
- 42 Stir up
- 43 Cuzco native
- 44 Waves to, say
- 45 Inquires

**DOWN**

- 1 Singer Billy
- 2 Car bar
- 3 Military punishments
- 4 USN rank
- 5 Gem unit
- 6 Military helicopter
- 7 Brother, of a sort
- 8 Caribou's cousin
- 9 Bullring call
- 10 Lawn makeup
- 16 Hive dweller
- 18 Beige
- 19 Prayers
- 20 Prayer finish
- 21 Pole explorer
- 22 Church area
- 23 Raucous
- 25 Nick Charles' wife
- 29 Least tainted
- 30 London weather
- 33 Goes a bout
- 34 Chimney part
- 36 Spigot
- 37 Periods
- 38 Joplin song
- 39 Do the wrong thing
- 40 Enemy
- 41 Farrow of films

### BEETLE BAILEY BY MORT WALKER

LOOK AT THE GENERAL GOING DOWN THAT RAT HOLE!

HE'S NOT GOING AFTER A RAT

HE'S TRYING TO RETRIEVE A GOLF BALL

YESTERDAY'S ANSWER

SPED OMAHA  
WILDE MANED  
INNERCIRCLE  
SCIRATHIP  
HANGAR BOUT  
YOUNG ARMS  
STOPS  
MATT SHEEPS  
ERASHASHES  
MOT AIR ONA  
OUTERPLANET  
ISLET SLICE  
REELS ACAD

### BABY BLUES BY KIRKMAN & SCOTT

WHOA. 42-INCH FLAT SCREEN, 1080p RESOLUTION, 16:9 ASPECT RATIO.

NICE BABY MONITOR.

IF WE HAD ONE OF THOSE, I'D KNOW WHERE I WAS EVERY SECOND.

IF IT GOT ESPN, YOU'D KNOW WHERE I WAS EVERY SECOND.