

Deepak Gupta, Ministry of New and Renewable Energy Secretary

# “MNRE committed to fulfill green dreams”

With the world going for alternatives to reduce carbon emission, India too is undertaking initiatives to fulfill green dreams. Taking note of it Energetica India conducted interview of Ministry of New and Renewable Energy Secretary Deepak Gupta. Excerpts...

**“GAON Gaon Bijli, Ghar Ghar Prakash, Akshya Urja Se Desh Ka Vikas” (Electricity in all the villages, Electricity & Light in all homes, Progress & Growth of the nation with Renewable Energy) is not only the punch line of MNRE but also objective. What steps has MNRE taken to come true to its words?**

The Ministry implements the Remote Village Electrification (lighting) Programme under which it has provided financial support for providing renewable energy based basic lighting to more than 9000 such villages where grid connectivity will not be possible in the near future. The current Central Financial Assistance for this purpose is upto 90% of the cost. The RVE Programme is one step towards fulfilling the Government's commitment of lighting each and every household in the country. The programme is implemented by the States. But there are thousands of villages where power does not come even where the grid is there. We have recently started a new programme to assist and incentivise rural banks to provide loans for solar lighting systems. We have set ourselves an ambitious target of covering 2 lakh households this year.

No doubt MNRE has taken innumerable initiatives to support renewable energy in India but still the country is much behind in terms of International efforts. In solar energy, India is lagging behind in comparison to Germany and Spain. And in wind energy it has slipped down to fifth position. Why is it so?

The countries are making use of solar

energy based on their own priorities. In India, in view of the high initial cost of solar energy systems, these are being promoted for decentralized applications such as lighting, telecommunication, etc. in remote areas and cooking and water heating applications, where these are competitive to other conventional options. Over 1.5 million small decentralized solar systems have been set up in the country for variety of applications. New demonstration programmes have been developed on “Rooftop PV Power” for diesel saving during daytime and also on “Tail end grid connected PV power plants” with the objective to generate power near the load so that transmission losses are minimized. We have also launched a demonstration programme on generation based incentive for power from grid connected solar power plants on the lines of Germany and Spain. Based on the experience gained through these programmes we will have regular schemes with larger targets in the future.

In case of Wind power, annual capacity addition has increased substantially from 240 MW in 2002-03 to 1600-1700 MW in 2007-08. India has been able to maintain the capacity addition at that level during the 10th Plan period and consequently, it had 4th position in the world till 2007. During the year 2008, China has assumed the 4th position due to the capacity addition of the order of 6300 MW in one year. China's potential and wind regime is higher and better. India slips to the 5th position for the above reason and not because the capacity addition was significantly low in India during 2008 as compared to previous years.

**What steps are MNRE taking to achieve its wind power target set for 11th plan?**

The target of 10,500 was envisaged for the 11th plan period taking into account the capacity addition of 1,740 MW during the last year of the 10th plan period. Wind Power projects are set up entirely through private



sector investment and it depends on the general investment environment prevailing in the country as well as the State tariff policy for wind power projects. Thus, the actual achievement would depend mainly on the above factors. However, 4,230 MW has already been added in the first two years of the XIth Plan and we are hopeful that this trend will continue.

**In India Lanco Infrastructure has shelved its upcoming project of wind turbine manufacturing. Is the Indian renewable energy industry facing the impact of the world economic crisis? As per your anticipation when will the conditions recover particularly in the wind sector?**

Ministry is not aware of the reasons for Lanco Infrastructure to shelve its upcoming project of wind turbine manufacture. However, four new manufacturers of larger wind turbines have set up manufacturing facilities recently in the country. There is sufficient manufacturing capacity in the country, as the wind power projects are set up in India entirely through private sector investment and mostly by availing loan from financial institutions of the 70% of the project cost; it is quite natural that the effect of the melt down and the recession would be felt by the wind sector also.

**Mini wind farms could be the best option to electrify the rural regions. Does the government have any policy to promote mini wind farms?**

Mini Wind Farms could be one of the options for providing electricity in the rural areas. However, favourable wind conditions for generation of electricity are available in India only for a limited period of the year which is

generally from March to September. Therefore, the mini wind farms on its own will not be an ideal solution for providing sustainable electricity supply in the rural areas. Small aerogenerators in hybrid mode with solar panels are being promoted in project mode to provide electricity in off grid manner to institutions, such as primary health centres, etc, wherever the annual wind speed is favourable for reasonable electricity generation.

**The new administration of US President Barack Obama has sent its first trade mission to India. Around 14 US companies recently visited the country. Will the trade mission attract FDI in the Indian solar sector?**

Most of the members of the US delegation were either already operating in India through their own subsidiary or joint ventures or were planning to do so. We expect more investment by US companies in India in the future.

**It is good news that eSolar has entered into a pact with Acme for developing solar power plants in India. Does this indicate that the solar energy industry is shining in India?**

The investment by ACME in e-Solar is part of agreements being forged between Indian developers and technology providers from abroad. The National Action Plan on Climate Change has proposed National Solar Mission as one of the missions to mitigate the carbon emission. The Mission is expected to aim for higher targets for solar power projects. The interest generated in the sector is expected to grow and more investment is likely to come.

**The German government has made it an obligation to install solar panels on roof tops of buildings and high-rises for generating electricity for domestic use as well as for feeding into the grid the surplus power. Does India have any such plan?**

It is not possible to mandate this currently. As said earlier, our roof top PV demonstration programme is different than what they have in Germany. It is to study how diesel consumption could be reduced during daytime in areas where long hour power cuts are there through the use of PV Power and is limited to institutions/organizations not to individu-

als. In Germany it is for grid connected PV systems installed by institutions/organizations and individuals. In our case grid connected PV power projects of 25 to 200 kWp were set up in the country under a demonstration programme. They had a mixed performance. The PV power plants could feed power to their full capacity to the grid where the grid was stable at other places where the grid was not stable ( as most of our low tension grid fluctuates both with respect to voltage and frequency and synchronization is a problem) their performance was poor. Secondly the power distribution companies in India are yet to introduce net metering and different tariff for peak and normal timings, which are the key parameters for success of the western model. A Rooftop PV programme on the lines of Germany could be considered only after addressing the above issues. It would also require very substantial subsidies at present.

**What is the projection for biomass sector in India for 2009?**

The target for biomass power, including bagasse cogeneration, for the year 2008-09 was 300 MW. Achievement is 320 MW for the period April-February 2009. For the year 2009, the target fixed under biomass power is 310 MW.

The Indian government recently approved a National Biofuel Policy that predominantly aims at promoting private investments in the biofuel sector for achieving set targets. The policy aims at mainstreaming biofuels in the energy vision of India. It sets a target of achieving at least 20% blending of biofuels, both biodiesel and bioethanol, by 2017. Prior to the announcement of the policy, 5% blending of bioethanol with gasoline was mandatory, but now this has been increased to 10% w.e.f. October 2008. To achieve this target what are the financial instruments that the MNRE has devised?

The National Policy on Biofuels is still under consideration of the Government of India. As regards to mandatory blending of 10% ethanol with gasoline, the Ministry of Petroleum and Natural Gas, which is the Nodal Ministry for blending, marketing, distribution, retailing of biofuels, etc., have not yet started blending of 10% ethanol. According to Ministry of Petroleum and Natural Gas, 5% ethanol blended petrol programme is being implemented in 16 States and 3 UT's out of 20 States and 4 UT's identified for implement-

ing this programme. The Ministry of New and Renewable Energy will finalize an action plan for the promotion and use of biofuels in consultation with the concerned union Ministries and Departments after the Government approves the National Policy on Biofuels.

**There is a wide gap between demand and supply of electricity. It is for sure that renewables can shrink up the gap. But this requires mass awareness. Does MNRE have any plan to create awareness about renewable sources of energy and how does it intend to go about it?**

The Ministry is already focusing on extensive publicity and awareness on the use of renewable energy systems / devices through print, postal and electronic media, and through organization of special events like the Rajiv Gandhi Akshaya Urja Diwas. We also need an adequate business response in sectors where renewable energy can make a difference.

**At a time when renewables comprise just 11.5 per cent of energy source in the United States, India stands tall with renewables accounting for 32 per cent of total electricity generation capacity. Even China and Japan trail behind India at 21 and 20 per cent respectively, according to the organisers of the Green Energy Summit. Where do you see India by 2030 and can you detail the points you wish to raise at the 2009, United Nations Climate Change Conference in Copenhagen, Denmark?**

The renewables share of 32% in the total power generation capacity is inclusive of the 25% contribution by large hydro above 25 MW. The present renewable power generation installed capacity excluding large hydro is 14,485 MW as on 31.03.2009, which is about 9% of the total capacity of about 1.47 lakh MW with a contribution of around 3% in the electricity mix. It is envisaged that this contribution would increase to about 6.8% by 2022 and to 10% by 2032. The view of the Ministry is that there must be a multiplication of RE applications assisted by a more transparent and friendly CDM mechanism and availability of low cost funds. These would reduce the barrier of high initial capital costs.