

SOLAR ENERGY CENTRE – TECHNICAL FOCAL POINT OF THE NEW AND RENEWABLE MINISTRY

The Solar Energy Centre is a technical focal point of the Ministry of New and Renewable Energy for the development and promotion of solar energy technologies. Talking to a group of journalists at the Centre, Dr. Bibek Bandopadhyay said that on this 200 acre campus we have buildings constructed on solar passive techniques to achieve energy efficiency and environmentally friendliness. We have incorporated more solar essential points which provides energy efficiency. It maximizes solar radiation during winter and avoids during summer.

Centre has equipments, laboratories and other associated facilities for design development, testing and evaluation. We also have testing and standardization facilities, he added. The Center provides assistance to Research Institutions, Academic Institutions and industries in the country in developing solar technology. The products developed by organizations are brought here for testing and standardization. The centre evaluate it and suggest ways for modifying it towards betterment. As a result of this, a more reliable and efficient product comes out.

The solar thermal test facility is equipped for testing of solar thermal collectors, domestic solar water heating systems and solar cookers, both box type and concentrating type. The center works closely with the Bureau of Indian Standard, which brought out Indian standards on solar flat-plate collectors at par with the International Standards.

Giving details on solar photo-voltaic facility, it was informed that there are four other such centers in the world. They are ISPRA, Milan, Italy, TUV, Germany, Arizona University USA and Kyoto. The demand of solar cells which are called solar wafers and modules or solar panels is very high in the country. We import about 30 per cent solar cells. Telecom Ministry, Defence, Railways and ONGC are permanent users of this system. Referring to revolution in home light systems, Dr. Bandopadhyay said that LED, i.e. Light Emitting Diodes have been developed. Incandescent lights have been replaced by fluorescent lights. Recently, CFL bulbs with little modification in fluorescent system came in the market but this also does not have efficacy. So far LED was used in electronic equipments as indicators but with innovation of white LED, we will have LED light systems in the near future. They have longest life and they can work in hard environments. Fluorescent lights do not works in cold regions like Leh Ladakh and in vary hot regions like Rajasthan.

With the initiation of the Ministry there are 5,60,000 solar lanterns, 3,42,000 home lighting systems, 54,700 solar street lights and almost 7000 water pumping systems in the country.

The Center is also working towards bio-fuels and 26,000 Jatropha saplings from three different agro-climatic zones have been planted in 26 acre land. The programme is in the second year of implementation.

Source: PIB