## State Level Energy Park

Uttarakhand Renewable Energy Development Agency (UREDA) with the financial support of Ministry of New and Renewable Energy (MNRE), Govt. of India, has established State Level and District level Energy Parks as per Non-conventional Energy Policy of Govt. of India for proper harnessing and publicity of Non-conventional Energy Sources. For the demonstration of renewable energy and its applications, use in daily life and impact on future, and to generate awareness the State Level Energy Park has been established at Patel Nagar, Industrial Area, Dehradun covering 2.3 Acres of land. The park has been established within a period of one year only.

Ministry of New and Renewable Energy (MNRE), Govt. of India has provided financial support of Rs. 91.84 Lakhs for installation of various equipments and models based on renewable energy sources. Apart from this, state Government spent Rs. 197.00 Lakhs for construction of different energy efficient building based on "Solar Passive Architecture Concept". All the buildings in the park are based on Solar Passive Techniques.

The buildings based on Solar Passive Architecture have been constructed with hollow concrete blocks. Air gap is provided with vents between the walls. These buildings constructed on this technique are able to maintain internal temperature and so save electricity used in cooling or heating of the building.

## Inside the Urja Park

A Solar Photovoltaic Power Plant of 6 KW capacity has been installed for providing electricity to all the building in park. Solar Cottage, Demonstration Hall, Water Power Room, Solar Canteen, Toilet Complex has been constructed in the park. A 1.8 KW Solar Photovoltaic Power Plant and a solar water heater of capacity 100 LPD has been established on the roof of Solar Cottage for fulfilling all electricity and hot water need in the cottage. Solar photovoltaic pump of 900 watt capacity has been installed for lifting water from water body to operate sprinklers and dual-fuel biomass gassifier of 5 KW capacities has been installed for demonstration of biomass use for electricity generation.

In water power room, live exhibits of different types of turbine has been installed to display the electricity generation through water power. These exhibits can be operated by children and tourist for their use and demonstration.

Solar Toy Cars, Battery Operated Bicycles and remote controlled boats are available to entertain children. These equipments will be given to the Children for joy rides on payment basis. A Seminar Hall having 50 person sitting capacity has constructed for film show on different renewable energy sources. This hall can also be utilized for meetings, seminars and trainings by different departments/ organizations on payment basis.

## Urja Park: Self Sustain Park

This park is being operated on self sustain basis by taking Rs. 10/- against entrance fee. The children below 5 yrs. are exempted from the entrance fee. A Solar Aditya Shop is also operating in the park campus for the sale of renewable energy equipments. The seminar hall is utilized for meetings, seminars and trainings by different departments/organizations on payment basis.

During Year 2010-11, 1632 students from the 51 schools, 6433 direct visitors have visited the Urja park campus and the total income (including the seminar hall charges etc) was Rs 223884 whereas total expenditure for proper maintenance of park was Rs. 174400.

## Urja Park: Awareness Park for the school students

For creating awareness of renewable energy technologies among the students of school, UREDA is continuously arranging the tour/visit for the school students at Urja park campus of UREDA. Bus facilities from school to Urja park and from Urja park to school, lunch facilities for the school students and teachers are arranged from the UREDA side. Students are shown videos and pictures related to renewable energy. 1632 students from 51 schools have visited Urja Park during year 2010-11.