



Green Cricket – Solarizing M. Chinnaswamy Stadium, Bangalore

Highlights

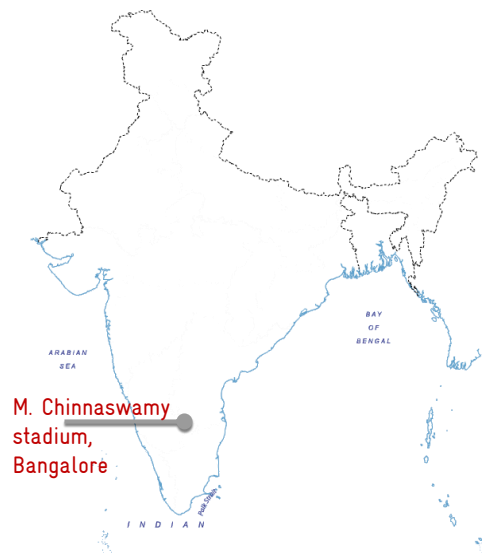
- Cricket is in the hearts of Indians and thus qualifies to be the best means to promote environmental consciousness through it.
- To realize the potential of solar rooftop photovoltaic on sports infrastructure, GIZ provided economical & technical advisory for a pilot project of capacity 400 kW solar plant on the roof of Bangalore cricket stadium
- Replication potential – 1.3 MW at the same site, hundreds of MW on other stadium
- Along with GIZ Environment Programme, the stadium becomes a green stadium (Green wicket campaign) with waste management, rain water harvesting etc.

Context

In recent years, India has successfully hosted many international sports mega events including Commonwealth Games 2010, Hockey World Cup, Indian Grand Prix and the Cricket World Cup. Hosting events of such magnitude needs high class sports infrastructures and sports stadiums form an integral part of this infrastructure. It is not only important to see that these infrastructures are environment friendly in itself but also should be a showcase to the fans for spreading environmental consciousness. Sports and sports stars are followed by a huge population in India and it is the best channel to promote eco awareness and motivate people to adopt green measures to contribute in saving the environment.

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Karnataka State Cricket Association (KSCA) entered into an Agreement of Co-operation in order to jointly promote sustainable development, to promote resource efficiency (including water resources) and to support measures that contribute to the reduction of greenhouse gas emissions such as CO₂. GIZ closed a MoU to support development of a solar photovoltaic roof top installation at the M. Chinnaswamy Stadium.

India has more than 100 cricket stadiums, and other sports stadiums which has a huge potential to integrate solar rooftop photovoltaic plants



GIZ's work

GIZ with the help of Lahmeyer International India carried out a feasibility study of the stadium roof structure with regard to installation and long term operation of solar PV System. GIZ and KSCA together also launched the 'Green Wicket Campaign' during the one day international cricket match between India and Australia on 2nd November 2013, to create awareness on making life styles, cities and future eco-friendly. Signature of the green wickets through both national captains has been covered with huge media attention. Four Cricket stars signed up as ambassadors for the different focus areas of the campaign, e.g. Javagal Srinath (former fast bowler of the Indian cricket team) is the ambassador for the "renewable energy" campaign.

GIZ is also providing economical & technical advisory to the association to realize a 400 kW solar plant on the roof of cricket stadium.

Activity Details

The feasibility analysis revealed that the east stand and the west stand can be effectively utilized for solar PV plant installation. With some modifications in the structure and roofing sheets, it is possible to install solar photovoltaic power plants with cumulative capacity of approximately 1.3 MW on the roof of east and west stands. However, the roof of the west stand uses Asbestos sheets which have to be replaced, but the roof of the east stand is made of metal sheets and thus has been directly utilised for solar plant installation. The first phase of the solar plant - 400 kW rooftop solar photovoltaic system is installed and running successfully.



The plant was inaugurated on 15 April 2015 by D.K. Shivakumar, Minister for Energy, Government of Karnataka (GoK), in the presence of Mr. Ashok Anand, President, KSCA, Mr. Brijesh Patel, Secretary, KSCA and Mr. Dayanand Pai, Treasurer, KSCA and other senior KSCA officials and members along with GIZ staff.

Up-scaling

The concept of Green roof on stadiums is becoming very popular across the globe and has lot of potential in India as this option is the least explored here. The 400 kW PV plant can be extended to 1.3 MW at the same site by using the west stand and similar stadiums shall be motivated to replicate similar approaches.

Impacts

- The pilot intervention is a means for motivating, educating and showcasing solar technology with an organization (KSCA) which has vast potential of implementing rooftop photovoltaic power plants on other cricket stadiums
- The project shall directly help in reducing green house gas emissions and shall act as a light-house project for future replications.
- The stadium hosts lot of cricket matches thus attracting thousands of visitors and through this activity, solar energy becomes a showcase to common masses at large and helps to create awareness among them.
- One pilot intervention will create ripples and lead to replication within KSCA and then further to other sports associations and stadiums.



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