

## Swiss Agency for Development and Cooperation SDC Directorate Global Cooperation

Enhancing Energy Efficient Design Features in New Buildings in India

## Indo-Swiss Project on Energy Efficiency in Buildings (BEEP)



Buildings in India account for 33 per cent of the country's electricity consumption, and the construction sector is expected to grow significantly in the coming years. There is great potential to reduce energy consumption in the building sector by changing design practices and by making new buildings highly energy-efficient.

Theme
Climate Change

This joint project, driven by a 5-year Memorandum of Understanding between the Governments of India and Switzerland, brings together Swiss experts with prominent builders and developers, laboratories and state agencies to enhance energy efficient design of new buildings.

## Adopting an Integrated Approach to the Sector

Among India's major builders, the project aims at creating a culture of energy efficient Integrated Building Design through the organisation of Integrated Design Charrettes (interdisciplinary workshops) for 24 large commercial building projects. These Charrettes will bring together the whole design team with senior specialists to develop the energy concept together.

The project reinforces the insulation materials testing capacity of Indian laboratories, through equipment, pilot testing and on-the-job training. The laboratories will then be able to generate more information on the characteristics of such materials and thereby promote their use.

The project also facilitates the development of guidelines, labels and tools to support energy efficient design. The project is developing and disseminating comprehensive guidelines for designing energy-efficient residential buildings in three main climatic zones. In addition, it is planned to develop and adapt the Swiss Minergie® label to the Indian context. Finally, the project includes the development of tools to promote the design of new low-energy government buildings.

## **Building the Knowledge Base**

Architects, engineers, designers, builders, policy makers and end-users tend to lack documentation and tools to guide their decisions in an effective way. Drawing on Switzerland's historical experience in the field, the project's goal is to promote innovative processes and approaches to influence building design practices and to contribute to reducing energy consumption in new buildings. In order to do so, the project organises study tours, advanced training programmes, onthe-job training, as well as seminars and workshops to increase the knowledge and know-how of climate-responsive, high-performance, energy-efficient solutions for new buildings.

Region India

Bureau of Energy Efficiency, Ministry of Power, Sorane SA, Greentech Knowledge Solutions Ltd

Starting point / Background information

The Bureau of Energy Efficiency has set minimum energy performance standardsfor new commercial buildings by introducing a voluntary Energy Conservation Building Code (ECBC).

**Project target** 

To promote processes and practices and knowledge to design more energy efficient new buildings in India.

**Target group** 

Building sector professionals and practitioners, local authorities, policy makers and end-users.

Costs

Current Phase: CHF 4'800'000 Previous Phase: CHF 2'100'000

**Duration** 

Current Phase:12/212 - 12/2016 Previous Phase:10/2008 -12/2012

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