

NEW TOWN

India's first green **Satellite City**

IGBC Green City

To address the environmental sustainability in the emerging cities, IGBC Green Cities Committee has developed the rating system. The development authorities and developers can apply these green concepts to **reduce environmental impacts** that are measurable and **improve the overall quality of life**.

Benefits of Green Cities

Efficient
Land Use

Efficient
Mobility

Enhanced
Quality Of
Life

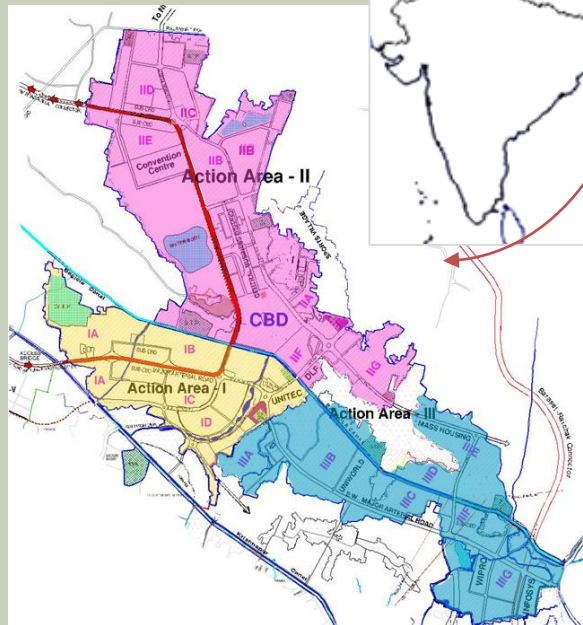
Efficient City Infrastructure (Water
and energy efficiency, SWM)

Scoring Pattern

Certified: 40-49 , Silver: 50-59,
Gold: 60-75, Platinum: 76 -100

Project Location

New Town, Kolkata



New Town, Kolkata: IGBC Scoring

Awarded -68

Environmental Categories

- 01 Eco-Vision
- 02 Land Use Planning & Built Environment
- 03 Health & Well Being
- 04 Sustainability Mobility
- 05 Water, Energy & Infrastructure Management
- 06 Information & Communications Technology
- 07 Innovation in city planning 11



Key Highlights

Compact City Planning



Developed area – 3087 Ha (Action area 2952 Ha and Water Treatment & Garbage Disposal Centre 135 Ha)

EWS Housing

Provision for **10% additional FAR** for affordable housing projects with 5000 sqm plots



- Urban Heat Island Mitigation**
- Material Selection
 - Shading of paved roadsides with 50% plantation,
 - plantation strips for all typologies

Green Buildings



Permission of **additional 10% FAR** for green buildings having gold or higher rating by IGBC or 'four-star' or higher rating by GRIHA

Encouragement from WBHIDCO for Solar Passive Architecture '**Rabi Rashmi**', Energy Conservation Building Codes (**ECBC**) compliance and installation of Renewable Energy

Preservations and Restorations of Water Bodies and Eco- Sensitive Zones

7.5% of the total project area is surrounded by open green areas for recreational facilities and fire fighting in each sub-sectors.

Strategies to preserve bheries and wetland

- 0.35 Ha preserved under conversion plan
- measures for de-silting of bheries

Existing water bodies - 268.80 acres
Proposed water bodies - 572.10 Acres

No eco-sensitive zones declared by MoEF

Public Green and Open Spaces

Total developed area – 2596.9 Ha
Open & Green space – 390.53 Ha (15% dedicated)

Green spaces percentage

- Action area I – 14.3%
- Action area II – 13.9%
- Action area III – 17.9%

Facilities:

- Swimming, picnic spots, parks, linear parks, walking trails, fish farming, urban agriculture, urban horticulture, urban forestry, ecological parks etc. in all action areas

Sustainable Mobility and Barrier Free Access



- E-Vehicles for last mile connectivity
- E-bus/ e-cars along with charging points, bus terminus etc.
- Dedicated cycle and pedestrian tracks
- 1:20 slope ramps at crossings and junctions, plot entries of collector roads along with zebra crossings
- Country's first Sensory Park for specially abled children developed by WBHIDCO

Water, Management

Bifurcated water supply according to usage such as drinking, cooking, bathing, flushing, washing clothes and utensils, gardening, etc.

Water management system to monitor, regulate and account for the potable water distribution system

- 135 lpcd for residential land use (10% below baseline criteria by CPHEEO)
- 45 lpcd for commercial land use as a baseline case.

Primary, secondary and tertiary network grid by PHE dept.
- 24X7 supply with zero water loss

Renewable Energy

'Development of Solar City' by the Ministry of New and Renewable Energy (MNRE), Govt. of India supports the ULBs to prepare the Solar City Master plan.



Rain Water Harvesting

A. Collection & Channelizing

1. Collection of Rain water from the sheds covering the rooftop organic garden
2. Channelizing collected rain water via pipe line network

B. Accumulation & Storage in tanks at ground floor, after filtration

C. Overhead Storage

1. Pumped to overhead tank and stored
2. Used for watering the rooftop garden



Information & Communications Technology



Innovation in city planning



Bamboo railings



Tall Tree Nursery and Pocket Forest