



Commonwealth Games Village

Location	: New Delhi
Site Area	: 473000 m ²
Built-up Area	: 156000 m ²
Air-conditioned Area	: Fully air-conditioned
Non Air-conditioned Area	: Nil
Energy consumption reduction	: 61% reduction from TERI GRIHA benchmark
EPI	: 78 KWh/ m ² /year
Occupancy hours	: 8760 hours / year
Renewable energy installed on site	: 128 KW
GRIHA rating	: 2 Stars

The following strategies were adopted to reduce the impact of the proposed building on natural environment:

- 🌍 Sustainable Site Planning:
 - Roads were regularly sprinkled with water for dust control; wheel-washing was done for vehicles at entry and exit of the site.
 - Dust screens provided around construction area to prevent air pollution.
 - Top soil stored and preserved on adjacent site for later use.
 - Utility corridors designed along roads and pathways on site.
- 🌍 Ensure health and well-being of construction workers on site:
 - Sanitation/safety facilities for construction workers provided as per NBC 2005.
 - Clean and hygienic accommodation, toilet facilities and safe drinking water provided to all workers on site.
- 🌍 Reduction in water consumption (compared to TERI GRIHA benchmark):
 - 61.1 % reduction in building water consumption by use of low-flow fixtures.
 - Waste water recycled and reused within the complex.
 - Reduction in landscape water consumption by planting native species of trees and shrubs and by installing efficient irrigation systems.
- 🌍 Reduction in energy consumption (compared to TERI GRIHA benchmark) while maintaining occupant comfort:
 - ECBC compliant building envelope.
 - Installed air conditioning system based on Variable Refrigerant Volume (VRV)
 - Energy efficient lighting systems.
- 🌍 Renewable energy technologies installed on site:
 - 31% outdoor lighting powered by solar energy.
 - 10% annual energy requirement for internal artificial lighting proposed to be met by solar energy.

Integrated Team:

Project Management	: Emaar MGF Land Pvt. Ltd.
Architect	: Stewart and Associates Pvt. Ltd. Singapore, Sikka Associates New Delhi
Landscape Design	: Integral Designs
Mechanical/Electrical/Plumbing Consultant	: Spectral Services
Green Building Design and Energy Consultant	: The Energy and Resources Institute