

POLICY FRAMEWORK

2001: ENERGY CONSERVATION ACT (ECA)

2001

2001: ESTABLISHMENT OF INDIAN GREEN BUILDING COUNCIL (IGBC)

2002: FORMATION OF BUREAU OF ENERGY EFFICIENCY (BEE) UNDER ECA 2001.

2005: BUREAU OF INDIAN STANDARDS PUBLISHED THE NATIONAL BUILDING CODE

2006: MINISTRY OF ENVIRONMENT AND FORESTS (MOEF) MAKES AND ENVIRONMENT

IMPACT ASSESSMENT (EIA) MANDATORY FOR ALL BUILDINGS WITH A BUILT UP AREA OF

20,000 SQM.
2007: BEE FORMULATED THE ENERGY CONSERVATION BUILDING CODE (ECBC)-
2007: GREEN RATING FOR INTEGRATED HABITAT ASSESSMENT (GRIHA) WAS ADOPTED AS THE NATIONAL RATING SYSTEM FOR GREEN BUILDINGS IN INDIA.

2008: NATIONAL ACTION PLAN ON CLIMATE CHANGE WAS LAUNCHED; INTEGRATED ENERGY POLICY 2008 APPROVED BY THE CABINET
2015: INDIA SIGNS UN CLIMATE CHANGE PARIS AGREEMENT
2016: STATES OF ANDHRA PRADESH AND TELANGANA ADOPTING MANDATORY COMPLIANCE MEASURES FOR BUILDING EFFICIENCY

BENEFITS

of green factory

Environmental benefits:

Reduce wastage of water
Conserve natural resources
Improve air and water quality
Protect biodiversity and ecosystems

Economic benefits:

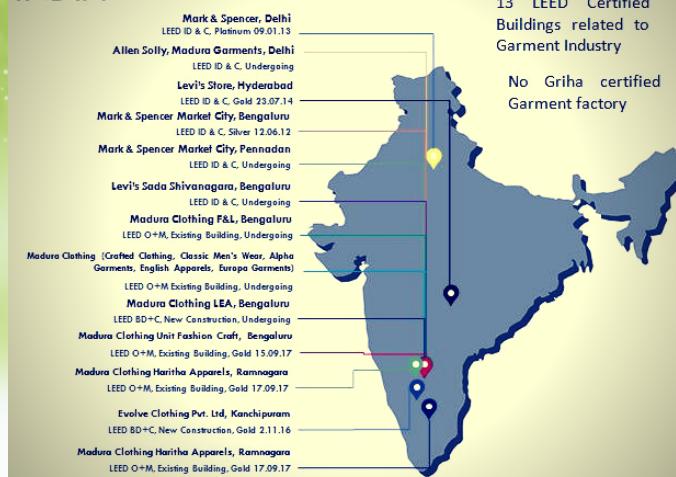
Reduce operating costs
Improve occupant productivity
Create market for green product and services

Social benefits:

Improve quality of life
Minimize strain on local infrastructure
Improve occupant health and comfort

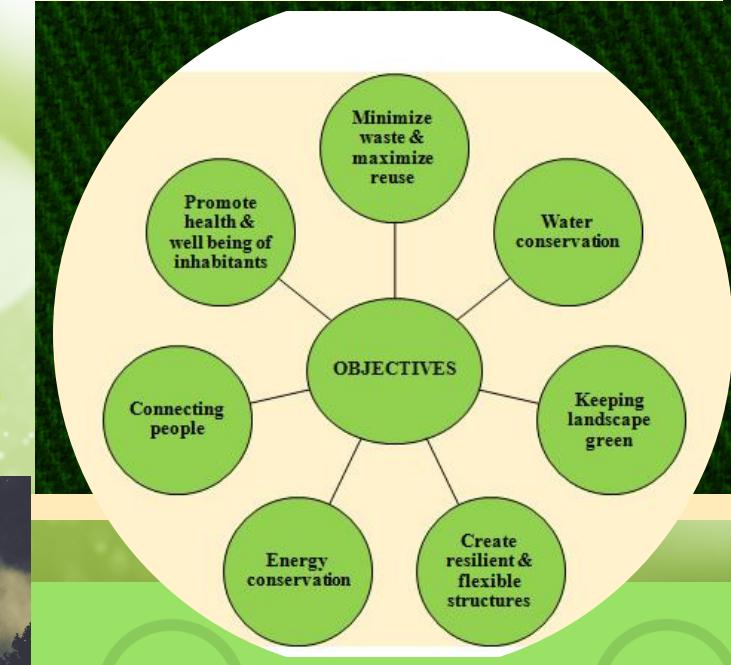
SCOPE OF GREEN GARMENT FACTORY IN INDIA

INDIA



13 LEED Certified Buildings related to Garment Industry

No Griha certified Garment factory



Certifications:

LEED (PROMOTED BY IGBC IN INDIA)
GRIHA (AN INITIATIVE BY TERI)

TO PROMOTE THE CONCEPT OF GREEN GARMENT FACTORY IN INDIA

CREATED BY
SHALU KUMARI & SHARMISHTHA DASH

INCENTIVES

NEED

GOVT. OF
INDIA

STATE GOVT./
LOCAL BODIES

FINANIAL
INSTITUTION

FAST TRACK ENVIRONMENT CLEARANCE FOR IGBC AND GRIHA PRE-CERTIFIED PROJECTS

MNRE PROVIDES REINBURSEMENT OF 90% OF THE REGISTRATION CUM-RATING FEE FOR PROJECTS UPTO 5000 SQ. M BUILT UP AREA WITH MINIMUM 3 STAR RATING, AND FOR PROJECTS >5000 SQ. M BUILT UP AREA WITH MINIMUM 4 STAR RATING

ADDITIONAL FLOOR AREA (FAR) AND/OR CONCESSIONS ON PREMIUM FOR FAR FOR BUILDINGS WITH MINIMUM GREEN RATING. CITIES PROVIDING ADDITIONAL FAR INCLUDE NOIDA, KOLKATA , JAIPUR AND PUNJAB

DEVELOPER CAN AVAIL DISCOUNT ON BUILDING PERMISSION CHARGES (PUNE & KOLKATA) AND REBATE ON PROPERTY TAX (PUNE & HYDERABAD)

LOWER MARGINS, INTEREST RATE AND REDUCED PROCESSING FEE AND HIGHER REPAYMENT TENTURE FOR GREEN RATED BUILDING FINANCING FOR ENERGY EFFICIENCY AUDITS, RETROFITS AND UPGRADES

EQUIPMENT SUBSIDY FOR SOLAR WATER HEATER INSTALLATION PROVIDE FINANCING TO ENERGY EFFICIENCY SERVICE COMPANIES (ESCO'S)

Savings in electricity

Mandatory byelaws promoting green construction

Growing market for green technologies

Increasing willingness of users to pay a premium

Increasing environmental consciousness among the affluent

DRIVERS

Growing demand for rated structure

Increased availability of energy efficient fixtures

Policy intent at national level



- Current footprint of buildings certified by the IGBC : over 1130 million m2.
- It is estimated that even if every factory, power plant, car and airplane is shut down, the average global temperature would still increase by 0.6°C in this century.
- It accounts for 30% of electricity consumption in India, growing at 8% a year, and for 23.6% of national GHG emissions, owing mainly to thermal power generation.
- Electricity consumption for lighting, air conditioners, water heaters and other appliances accounts for 10% of total electricity consumption.
- Between 45% and 65% of the energy consumption in buildings is for heating, ventilation and air conditioning (HVAC).
- Energy-efficient lighting and electrical appliances used in residential and commercial buildings could save 20,000 megawatts (MW).
- Solar photovoltaic (PV) and solar thermal systems would also reduce a building's energy-related emissions.
- There is potential to reduce GHG emissions by 142 megatons (Mt) a year by 2020 and by 296 Mt a year by 2030 through the adoption of energy-efficient measures.
- Globally, buildings are responsible for about 30%-40% of all material flows, and in India the construction sector alone accounts for 23.6% of the national greenhouse gas (GHG) emissions.