

DECARBONISATION BUSINESS CHARTER

Value Chain Approach to Decarbonize the Building & Construction Sector in India



India is set to become the world's third-largest construction market and its real estate sector is expected to contribute 13% to the country's GDP by 2025, with a market size of US\$1 trillion by 2030¹.

The government's **Pradhan Mantri Awas Yojna**-Urban initiative will increase the building footprint by 360 million sq. m. and the houses built under it will last for about 40-60 years². This presents India with a unique opportunity to transition to a low-carbon pathway and achieve a net-zero building and construction sector. However, buildings and construction currently account for around 25% of India's greenhouse gas emissions, and this is expected to rise due to increased energy demand driven by concentrated construction in urban areas, traditional building structures, and growing appliance use, primarily for cooling.

Reducing demand for costly virgin materials, adopting circularity, and decarbonizing the building sector are vital. Climate risks and financial impacts emphasize the need for sustainable practices. This Decarbonisation Business Charter provides strategies and actions for stakeholders across the value chain to address these challenges.

Project Relevance to National Priorities

The project aligns with:



SDG 13 Climate Action

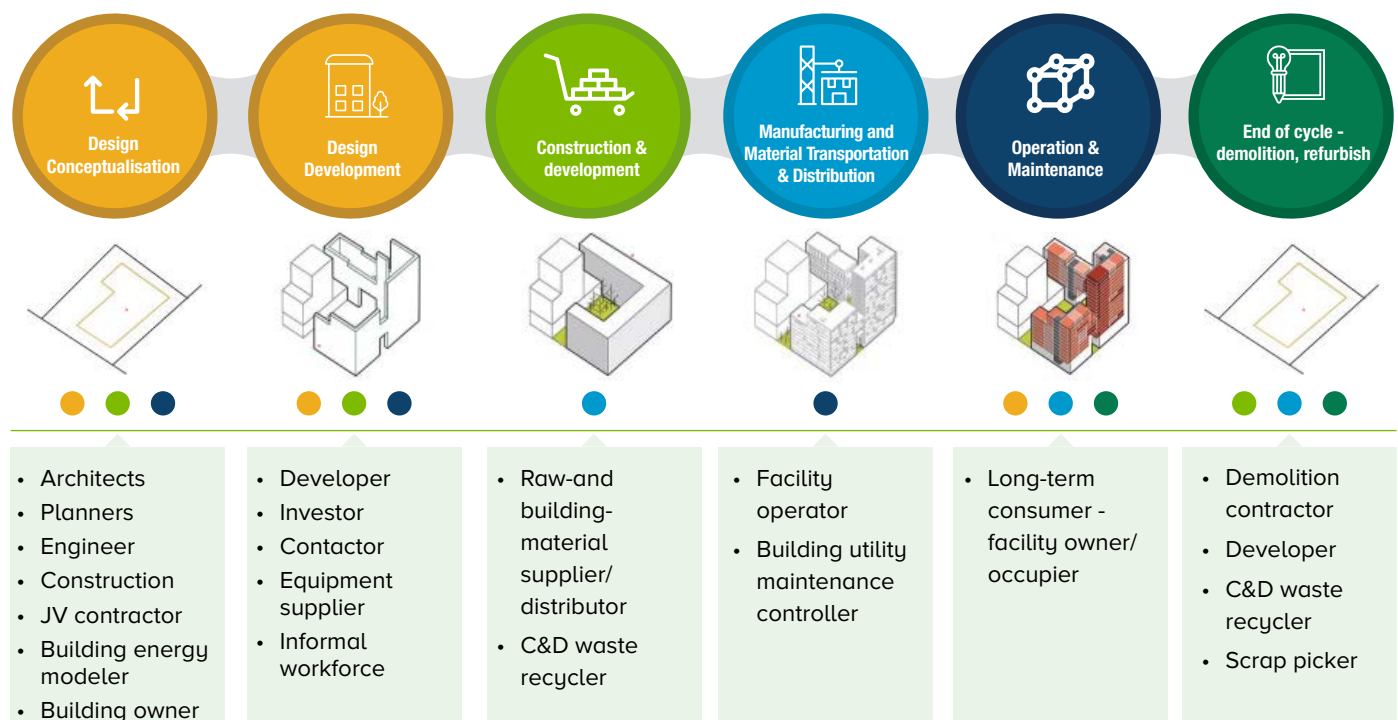


SDG 11 Sustainable Cities and Communities



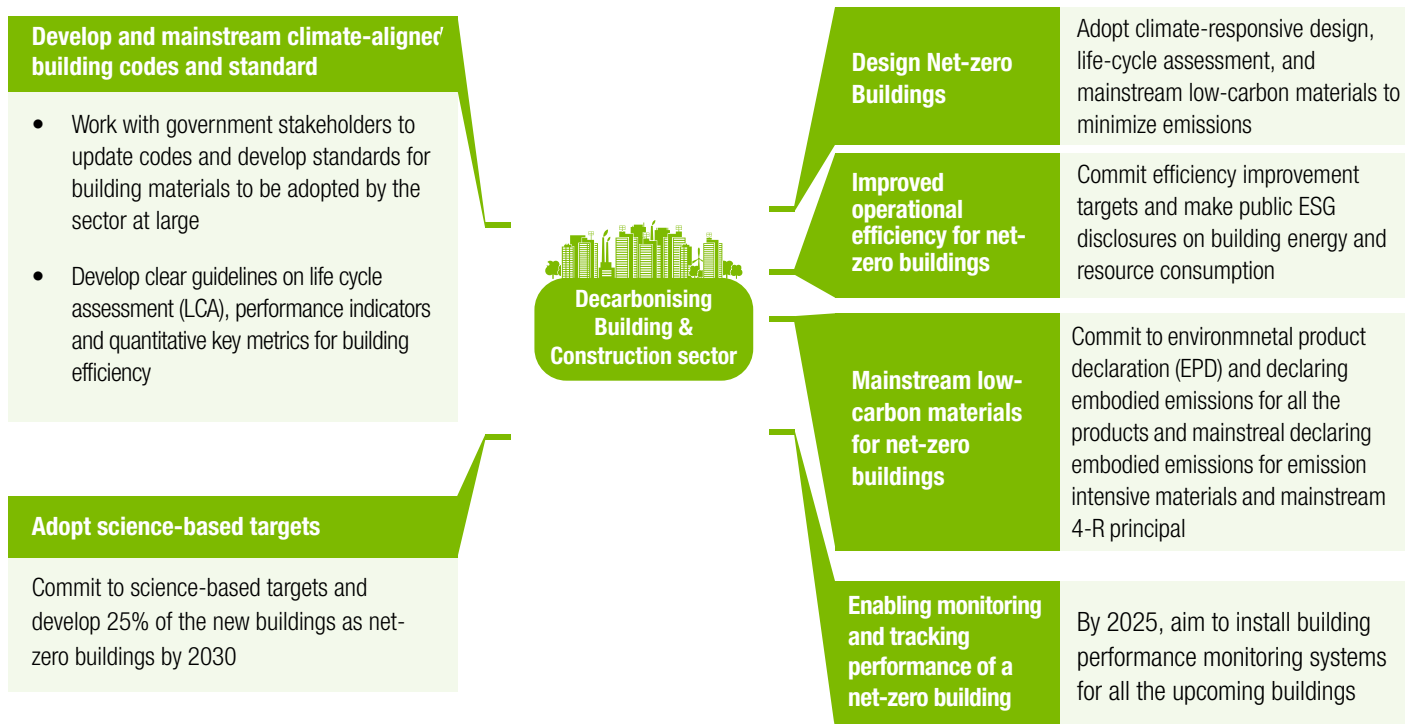
India's Nationally Determined Contributions

KEY STAKEHOLDERS ACROSS THE VALUE CHAIN

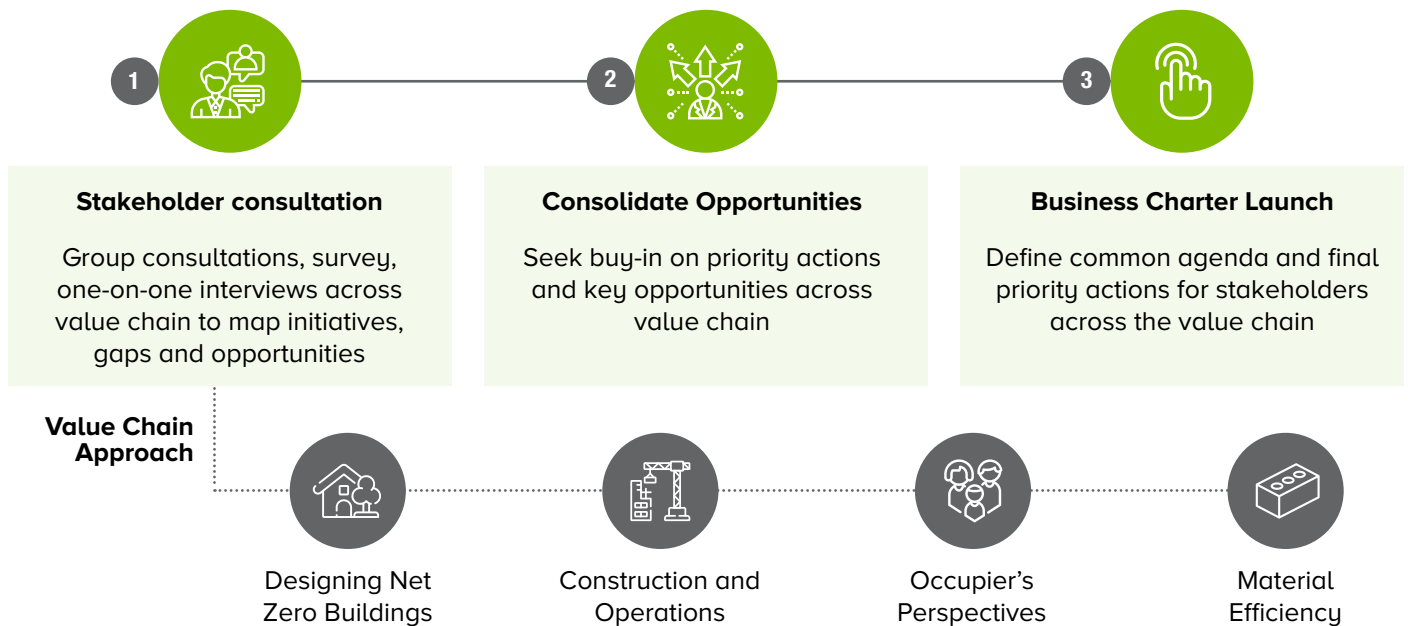


1. IBEF Indian Real Estate Industry Report, Nov 2020
<https://www.ibef.org/industry/real-estate-india.aspx>
 2. Pradhan Mantri Awas Yojna: Housing for All (Urban) 2015
 Mission Document https://pmaymis.gov.in/PDF/HFA_Guidelines/hfa_Guidelines.pdf

PRIORITY ACTIONS



JOURNEY SO FAR





- ➔ By adopting a value chain approach, all the partners engaged with 150+ stakeholders across the entire lifecycle of buildings and gather insights from various perspectives.
- ➔ In 2021, four stakeholder discussions were conducted on four themes: designing net zero buildings, construction and operations, occupier perspectives, and material efficiency. The idea was to invite diverse perspectives from the stakeholders involved in this sector and understand the challenges and opportunities throughout the building lifecycle.
- ➔ These dialogues helped shape six specific broad action areas that could help start the process of putting the sector on a low-carbon pathway. Following this, the Decarbonisation Business Charter was launched on February 10th 2022.

PROJECT APPROACH & OUTCOMES

The Swiss Agency for Development and Cooperation (SDC) is Switzerland's international cooperation agency, within the Federal Department of Foreign Affairs (FDFA). In collaboration with India, SDC utilizes Swiss expertise in designing energy-efficient buildings to promote sustainable architecture. The Building Energy Efficiency Project (BEEP) was one of the flagship initiatives that played a pivotal role by providing capacity building and technical assistance for this collaboration. In Decarbonisation Business Charter – value chain approach to decarbonise the building & construction sector in India, the following activities are supported by SDC.

 <p>Enabling Decarbonization Charter in 3 Indian Metro Cities</p> <p>Analyze building industry to find key sustainable developers and engage with them to become signatories to the charter committing to decarbonization.</p> <p>C-Suite events will be held to promote the value proposition and media coverage for outreach.</p>	<p>SIGNATORY ENGAGEMENT AND PROJECT ACTIVITIES</p> <ul style="list-style-type: none"> Identifying the stakeholders committed to sustainability & decarbonisation. Engaging with the ecosystem & facilitating signatory process through outreach activities.
 <p>Capacity Building on sectoral decarbonization</p> <p>The charter offers tools to help signatories work towards net zero goals.</p> <p>Local partners will join as signatories and help develop standardized training with the secretariat for virtual or in-person sessions at a discounted fee.</p>	<p>SIGNATORY ENGAGEMENT AND PROJECT ACTIVITIES</p> <ul style="list-style-type: none"> Develop standardised training modules and offer virtual and in person training sessions. Identifying and engaging local partners for integrating learnings into the design and strategic business decision in decarbonising approach.
 <p>Implementation through technical support</p> <p>The charter aims to connect signatories with industry experts for design charettes on actual projects. The platform fosters partnerships, however the cost of charettes is not included.</p>	<p>SIGNATORY ENGAGEMENT AND PROJECT ACTIVITIES</p> <ul style="list-style-type: none"> Enhances decarbonization Commitments and enables signatories to move towards implementing priority actions.

VALUE PROPOSITION & BENEFITS

 <p>Value proposition</p>	<p>Transforming the building sector through awareness, collaboration, and technical support for sustainable construction and operation practices.</p>
 <p>Benefits</p>	<p>Raised awareness via workshops, success stories, and an online community platform, fostering partnerships, and providing technical assistance for policy reforms</p>

PARTNERS



WRI India is a not-for-profit organization that envisions an equitable and prosperous planet driven by the wise management of natural resources and aspires to create a world where the actions of government, businesses, and communities combine to eliminate poverty and sustain the natural environment for all people.



Alliance for an Energy Efficient Economy (AEEE) is a leading Indian organisation driving energy efficiency through data-driven, evidence-based policies and research. It supports policy implementation as a non-profit enabler, engaging key stakeholders. AEEE catalyses market transformation for energy-efficient products and services, contributing to India's energy security and climate goals. With a Lean-Mean-Green approach, AEEE develops frameworks for net-zero built environments, thermal comfort, sustainable cold chain, e-mobility, and robust energy data. Visit <https://aeee.in/> for further details.



Established in 1994, Mahindra Lifespace Developers Ltd. ('Mahindra Lifespaces') brings the Mahindra Group's philosophy of 'Rise' to India's real estate and infrastructure industry through thriving residential communities and enabling business ecosystems.



EcoCollab was founded as a platform to mainstream & simplify building sustainability for end-users. We are a "one-stop-shop" for eco-friendly buildings at the price of conventional ones. Our benchmark prevents approx. 5000 kg of Carbon Dioxide Emissions for every 1000 sqft. Of built space. We deliver low carbon & energy efficient buildings through passive & climate responsive design, Energy simulations, Optimization and Retrofits, Alternate materials, Incorporation of R.E., Water monitoring & management strategies, Waste Management, and Organic Farming and landscaping solutions on-site.

EXISTING SIGNATORIES

Aeon Integrated Building Design Consultants LLP
AKDA
AMBIATOR Pvt. Ltd.
Ant Studio Private Limited
Argus Concrete Solutions
Ashok B Lall Architects
BIOME
BuildAhome
Carbon Craft Design
CDE Asia
CnT Architects
Colliers
Daily Dump
Design2Occupancy
Ecofirst Services Limited
Ela Green Buildings and Infrastructure Consultant Pvt. Ltd.
Enhanced Biofuels and Technologies India Pvt. Ltd.
Enverte Consultancy
Envint
Environmental Design Solutions Pvt. Ltd.

Geo Climatic Risk Solutions
Gohemp Agroventures Pvt Ltd, Uttarakhand
Green Business Certification Institute Private Limited (GBCI)
Green Forms Private Limited
Green Jams
Green Sketch Consultants
GreenPath Energy & Sustainability Services
Greentech Knowledge Solutions Pvt. Ltd.
GreenTree Global
GRIHA - Green Rating for Integrated Habitat Assessment Council
Hexpressions
Humengi
Hydromx
Indian Federation of Green Energy
INDIQUEBE
Integrative Design Solutions Private Limited
JSW Steel Ltd
Kapoor and Associates
Landmark Developers
Lemon Tree Hotels
Lodha Group

Mahindra Lifespace Developers Ltd.
Manchanda Associates
McD BERL
Monk Spaces
Morphogenesis
Saahas Zero Waste
Samridhi Buildmart Ltd
Sathya Consultants
ShiFt Studio
SKDO
Smart Joules
Smarter Dharma
Stenum Asia
Sterling India
Strawcture Eco
Sunmeister
Tabreed
Team Architects
Terra Viridis Consultants LLP
Vinayak Corporation
Yatha Infratech Pvt. Ltd
WAR Architects
VKe:environmental (LLP)



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