



Accelerating Sustainable and Super-efficient Real Estate



What is ASSURE?

ASSURE is an initiative to transform India's carbon and energy-intensive real estate sector by promoting High-Performance Buildings (HPBs).

HPBs present a game-changing opportunity to meet Indian business, climate and sustainability, innovation, and job creation goals.

ASSURE will start with the decarbonisation of large commercial and public buildings, drawing on the business case for commercial HPBs Indian industry pioneers have established.

Provided the right design support, HPBs cost less to build than conventional commercial buildings, and save millions of USD of energy and water each year. Their significantly reduced carbon footprint makes them attractive for climate finance and ESG investment.



What are High-Performance Buildings (HPBs)?

HPBs are highly resource efficient and cost-effective buildings, using Factor 2 (half) to Factor 4 (one-fourth) of the energy and water specified by current Indian Codes. They also meet national indoor air quality, waste management, and resilience standards, and their performance is continuously monitored and verified.

Why ASSURE?

India's real estate sector is large, rapidly growing, and a major source of emissions. It currently accounts for about 7-8 per cent of the Gross Domestic Product, is projected to grow 5x from 2021 levels by 2030, and accounts for 21-22 per cent of India's current emissions.

India will add a billion sq. ft. of commercial building space by 2030, yearly. Given typical building lifespans of 50+ years, conventional commercial buildings can lock-in massive energy and water inefficiency, high carbon emissions, and a poor living and work environment for millions of Indians. Not building them as HPBs will constrain the growth prospects of India's emerging green and circular economy.



If even half of India's new commercial buildings by 2030, are constructed or retrofitted on high performance principles, it will:

- Save businesses USD 432 billion in energy
- Create 10 million permanent and skilled green jobs
- Avoid 600 million tCO₂e of Greenhouse Gas (GHG) emissions
- Help reprioritise USD 1.1 billion of public sector energy investments
- Provide a scalable model for other buildings in India, and across the globe

Key Components

Realising the possibilities HPBs present requires demonstration of effective implementation and a systematic effort to address the range of policy, financing, regulatory, and capacity gaps that currently constrain the design, construction, and retrofitting of HPBs at scale.

ASSURE will over 2024-30:

- Mobilise and partner with **100 million sq. ft. of lighthouse projects** across India's largest cities by offering technical assistance to turn them into HPBs
- Design and deliver **skilling and upskilling programmes** for 12,000 young net-zero / HPB professionals and practitioners
- Document functioning HPBs to develop compelling **business and policy cases** for supportive policies and public and private investment in HPBs
- Develop a **performance verification protocol and savings assurance platform** to validate energy and carbon savings and unlock new financing arrangements
- Run **design challenges** and offer support to HPB innovators and start-ups
- Engage with national, State and city-level governments on **policy, regulatory, and process reform** to incentivise HPBs
- Engage with financial institutions (FIs) to evolve **new financing arrangements and protocols** to promote HPBs

In pursuit of the above, ASSURE will engage a wide range of ecosystem players to:

- Align with national policy and programme priorities and climate disclosure, science-based, and ESG targets
- Leverage the best domestic and global expertise and Indian entrepreneurial spirit and funding

Projected Impact

ASSURE is envisioned as the world's largest effort to build and retrofit HPBs. Realising 100 million sq. ft. of HPBs in India through lighthouse projects over 2024-30 will:



Enable USD 200 million in operating energy savings for participating firms



Avoid 1.2 million tCO₂e of GHG emissions



Create 100,000 permanent and skilled green jobs



Help reprioritise USD 110 million of public sector energy investments



Other direct benefits include: material use efficiency across the supply chain; appreciation of asset and rental values; job creation; and, better working conditions for those using the premises

A 2x amplification of these direct impacts by 2030 and a 50x amplification by 2050, is envisaged through a demonstration effect and by developing enabling policy options, financing arrangements, and capacities.



Institutions behind ASSURE



IIHS, India's premier knowledge and practice institution working on the equitable, sustainable, and efficient transformation of Indian settlements, anchors ASSURE in a knowledge partnership with Infosys.



Infosys, a global leader in next-generation digital services and consulting and an early mover in setting and achieving ESG goals and transitioning to low-carbon operations, is India's largest builder of HPBs, with 30 million sq. ft. in current use.

Find out more about ASSURE at factor4assure.iihs.co.in

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