

ACCELERATING CLIMATE ACTION IN THE BUILT ENVIRONMENT







Fire & Security Association of India



Introduction

'GRIHA Council', recognized as the 'National Rating System for Green Buildings in India', was developed by The Energy and Resources Institute (TERI) in support with the Ministry of New and Renewable Energy (MNRE), Government of India. 'GRIHA Council' evaluates the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard for green buildings and sustainable habitats. The Government of India has also recognized 'GRIHA' as a tool to evaluate greenhouse gas (GHG) reduction from habitats under its obligations to mitigate climate change as contained in the Nationally Determined Contributions (NDC's) documentation submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

Over the years, GRIHA Council has been hosting its annual summits to deliberate on issues which are of national discourse in association with distinguished entities from national and international spheres, encompassing government bodies, industry partners, multilateral and bilateral organizations, academia, and building practitioners. The Council's prominent affiliations are with esteemed entities including the Ministries of Housing & Urban Affairs, Power, New and Renewable Energy; Bureau of Energy Efficiency; Life Insurance Corporation of India; Indian Oil Corporation Limited; Bhopal Smart City Development Corporation Limited; Government of Maharashtra; Uttar Pradesh; Andhra Pradesh; European Union; Royal Danish Embassy; 2000-Watt Smart Cities Association; DLF; AIS; JSW Cement; Mahindra Life spaces Developers Limited; JK Cement Limited; Saint Gobain; Larsen & Toubro; Sheffield Hallam University; UNSW Sydney; Council of Architecture; National Institute of Urban Affairs. The past summits had been designed on the themes such as "Approach to Integrated Sustainability", "Fostering Partnerships for Sustainable Habitats", "Transforming Habitats", "Sustainable is Affordable", "Rejuvenating Resilient Habitats", "Restoring Green Economy", "Towards Net Positive Habitats", and "Empowering Sustainable and Resilient Communities".

The GRIHA Reginal Conclave was scheduled on 25th October 2024 at Jaipur Marriott, Ashram Marg, Near Jawahar Circle, Jaipur, Rajasthan 302015, India on the theme 'Accelerating Climate Action in the Built Environment'. Climate change mitigation action is a race against time when compared to the escalated pace of damage that is being repeatedly done to the environment, thus there is an urgent need to accelerate climate action. The building and construction industry alone accounts for nearly 34% of global energy consumption and about 37% of greenhouse gas emissions (UNEP, 2022). The time is now to embark on transformative efforts to revolutionize our design processes, construction practices, and management of urban spaces. Towards this, GRIHA Council aims to address the urgent need to adopt sustainable practices in the built environment whilst advancing innovative solutions to mitigate the adverse effects of climate change.

This year GRIHA Council is pleased to introduce the GRIHA Regional Conclaves. The conclaves come with the idea to augment the development of sustainable habitats and resilient communities at the regional level. Three GRIHA Regional Conclaves are planned in Lucknow, Hyderabad, and Jaipur this fiscal year around the central theme, 'Accelerating Climate Action in the Built Environment'.

The 16th GRIHA Summit and GRIHA Regional Conclaves shall serve as a platform to deliberate on the interdependence between communities and organizations in creating inclusive and climate-resilient infrastructure in our drive towards decarbonizing the built environment by 2050 and achieving the target of becoming a 'Net Zero' nation by 2070. Aligning with the vision of becoming Viksit Bharat @2047 encompassing various aspects of development, including economic growth, social progress, environmental

sustainability, and good governance, the Regional Conclaves and Summit shall serve as platforms to deliberate on the mitigation and adaptation strategies in creating inclusive and climate resilient infrastructure.

We invite all stakeholders, including policymakers, industry leaders, architects, urban planners, researchers, and civil society to come together and share insights, knowledge, and experiences in our drive towards advancing sustainability in the built environment. We at GRIHA Council invite you to participate in the GRIHA Regional Conclaves and the 16th GRIHA Summit.

Background

The GRIHA Regional Conclave Jaipur held on October 25, 2024, at the Jaipur Marriott Hotel, brought together a diverse group of stakeholders to discuss and promote sustainable building practices in the region. The theme for this conclave was "Accelerating Climate Action in the Built Environment." Jaipur, known as the Pink City, is renowned for its rich cultural heritage, historical significance, and architectural marvels. The city's unique blend of traditional and modern architecture provided an ideal backdrop for discussions on sustainable development. The conclave aimed to leverage Jaipur's historical context to inspire contemporary sustainable practices.

Key highlights of the conclave included sessions on promoting low caron materials climate action in construction, focusing on strategies to reduce carbon emissions and advance development of innovative materials and technologies for achieving net-zero buildings. There was also an emphasis on the importance of traditional Rajasthani architecture in building climate resilience, with case studies showcasing how local materials and techniques can be integrated into modern construction. Additionally, innovative solutions for water conservation and management in urban areas were discussed, highlighting best practices for rainwater harvesting and wastewater recycling.

Rajasthan is at the forefront of sustainable development with recent policies emphasizing green and eco-friendly urban growth. The state's new draft township policy and building by-laws mandate green building practices for plots exceeding 2,500 square meters and prioritize energy-efficient infrastructure with incentives for certified sustainable buildings. Developers are now required to reserve spaces for greenery, playgrounds, and essential amenities, ensuring holistic urban development. Furthermore, high-rise constructions are regulated to align with safety and environmental standards, demonstrating Rajasthan's commitment to fostering a resilient and sustainable built environment. These initiatives align seamlessly with the GRIHA Regional Conclave's vision of accelerating climate action.

Jaipur serves as a major hub for governance and administration in Rajasthan, housing key government offices and institutions such as the Jaipur Development Authority (JDA), Rajasthan State Road Development Corporation (RSRDC) and Rajasthan Pollution Control Board (RPCB). The presence of these institutions underscores Jaipur's strategic importance in fostering policy discussions and collaborations for sustainable development. The conclave saw participation from various sectors, including government officials, industry experts, architects, and environmentalists. Notable speakers included Shri Alok, Additional Chief Secretary, Energy Department, Government of Rajasthan, Shri Nishant Jain, IAS, Secretary, Jaipur Development Authority, Government of Rajasthan and Dr. Ajay Kumar, Deputy Commissioner, Navodaya Vidyalaya samiti, Regional Office, Jaipur, Ministry of Education, Government of India.

The GRIHA Regional Conclave in Jaipur successfully highlighted the importance of regional inclusivity in the discourse on sustainability. By addressing region-specific challenges and identifying tailored strategies, the conclave aimed to make sustainable practices locally relevant and effective. The event underscored Jaipur's potential as a model city for integrating traditional wisdom with modern advancements to achieve sustainable development goals.

Acknowledgements

At the outset, GRIHA Council would like to extend our deepest gratitude to the Government of Rajasthan for their unwavering support and invaluable contribution to the success of the GRIHA Regional Conclave, Jaipur. We extend our sincere gratitude to **Shri Alok**, Additional Chief Secretary, Energy Department, Government of Rajasthan for his appreciation for GRIHA Council's efforts in scaling up the green building footprint in the country and accelerating climate action in the built environment.

We are extremely thankful to the eminent dignitaries who graced the event with their esteemed presence: **Shri Nishant Jain**, IAS, Secretary, Jaipur Development Authority, Government of Rajasthan; **Dr. Ajay Kumar**, Deputy Commissioner, Navodaya Vidyalaya Samiti, Regional Office, Jaipur, Ministry of Education, Government of India; **Shri Vijay N.**, Member Secretary, Rajasthan Pollution Control Board (RPCB), Government of Rajasthan and **Shri Subhash Arya**, Deputy General Manager Electrical, Rajasthan State Road Development Corporation (RSRDC), Government of Rajasthan.

We express our sincere gratitude to **Shri Amit Kakkar**, Chief Engineer, Department of Information Technology & Communication (DOIT&C), Government of Rajasthan, Jaipur Chapter, **Shri Ankur Gupta**, Director FSAI (Fire & Security Association of India) and **Shri Sudhir Mathur**, Chairman, Indian Plumbing Association (IPA), Rajasthan, Jaipur Chapter for collaborating with GRIHA Council in the drive towards sustainability.

Special gratitude to all our **moderators** and **speakers** for their insightful contributions across various facets of sustainability. The realization of the GRIHA Regional Conclave, Jaipur was made possible through the unwavering support of our partners, including **government partners**, institutional partners, industry partners, multilateral partners, associate partners and media partners.

Special thanks to **Design2Occupancy** for their invaluable support, insights and contributions as our **knowledge partner**.

Our sincere appreciation is also extended to our **Event Partner- ASAI** for their pivotal role in the seamless organization of the GRIHA Regional Conclave in Jaipur.

The success of the event was further enriched by the active participation and engagement of our esteemed delegates, who contributed to a plethora of enriching discussions. We express our heartfelt thanks to all participants and guests for their invaluable role in making the event a success.

Lastly, we convey our profound gratitude and admiration for the visionary leadership provided by **Dr. Vibha Dhawan**, President, GRIHA Council, and Director General, TERI, whose commitment has guided us on a journey towards a greener India.

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Outline Agenda

'Accelerating Climate Action in the Built Environment' 25th		
October 2024 (Friday)		
Venue: Jaipur Marriott Ashram Marg, Near Jawahar Circle, Jaipur, Rajasthan 302015 India		
0900 – 1000 hrs.	Registration	
1000 – 1115 hrs.	 Inaugural Session Lighting the lamp Welcome Address Special Remarks Release of GRIHA Publication Keynote Address Signing of Memorandum of understanding Inaugural Address GRIHA Updates GRIHA Felicitation Ceremony Vote of Thanks 	
1115 – 1130 hrs.	Networking Tea/Coffee	
1130 – 1300 hrs.	Plenary Session 1: Advancing Low-Carbon Materials in the Construction Industry	
1300 – 1345 hrs.	Networking Lunch	
1345 – 1515 hrs.	Plenary Session 2: Sustainable, resilient and innovative solutions to water and energy	
1515 – 1530 hrs.	Networking- Pitch booths	
1530 – 1700 hrs.	Closing Session: Navigating the Path to Sustainability: Implementing Rajasthan's New Regulations into Action	
1700 – 1730 hrs.	Cultural Event & Networking Tea/ Coffee	

Detailed Agenda

'Accelerating Climate Action in the Built Environment' 25th				
October 2024 (Friday)				
Venue: Jaipur Marriott Ashram Marg, Near Jawahar Circle, Jaipur, Rajasthan 302015 India				
0900 – 1000 hrs.	0900 – 1000 hrs. Registration			
	Inaugural Session			
	Lighting the Lamp			
	Welcome Address:			
	Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, TERI			
	Special Remarks:			
	Dr. Ajay Kumar, Deputy Commissioner, Navodaya Vidyalaya Samiti, Regional Office, Jaipur, Ministry of Education, Government of India			
	Release of GRIHA Publication			
	Keynote Address:			
1000 – 1115 hrs.	Shri Nishant Jain, IAS, Secretary, Jaipur Development Authority, Government of Rajasthan			
	Signing of Memorandum of understanding			
	Inaugural Address:			
	Shri Alok, Additional Chief Secretary, Energy Department, Government of Rajasthan			
	GRIHA Updates:			
	Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council and Director, Sustainable Buildings Division, TERI			
	GRIHA Felicitation Ceremony			
	Vote of Thanks:			
	Shri Ashu Gupta, Managing Partner, Design2Occupancy (D2O)			
1115 – 1130 hrs.	Coffee/Tea Break			

Plenary Session 1:

Advancing Low-Carbon Materials in the Construction Industry

	The initiative to support low-carbon building materials aims to reduce carbon emissions from both the construction processes and the materials used, fostering ecological responsibility and sustainability. Therefore, it is imperative that the environmental impact of the construction industry be addressed promptly. Prioritizing the use of low-carbon materials throughout a building's lifecycle is essential for the construction industry to effectively combat climate change. Higher cost of sustainable alternatives, the general lack of knowledge, uncertainty of emission, and the difficulty of obtaining adequate funding for sustainable initiatives are some of the main barriers. The shift to low-carbon materials is making progress despite these obstacles. India's building industry can make significant progress toward a more environmentally friendly and sustainable future by utilizing state-of-the-art innovations, encouraging cross-sector cooperation, and adopting a sustainability-focused culture. Leading authorities from the public and private sectors will convene in this session to discuss strategies for advancing low- carbon materials. It seeks to eliminate knowledge gaps, promote industry cooperation, and create a coherent plan for cutting carbon emissions in the building sector.
1130 – 1300 hrs.	Setting the Theme:
	Shri Vijay N., Member Secretary, Rajasthan Pollution Control Board (RPCB), Government of Rajasthan
	Moderator:
	Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council & Director, Sustainable Buildings Division, TERI
	Speakers:
	Shri Anand Mishra, Director, Trimurty Group
	Shri Subhash Arya, Deputy General Manager Electrical, Rajasthan State Road Development Corporation (RSRDC), Government of Rajasthan
	Ar. Gagan Sharma, Director, Dezine Synthesis
	Shri Roopesh Gupta, Chief Consultant, Agilon
1300 – 1345 hrs.	Lunch Break

	Plenary Session 2: Sustainable, resilient and innovative solutions to water and energy.
	Sustainable water and energy solutions are increasingly essential in response to the growing environmental challenges. The recent regulations in Rajasthan emphasize the importance of managing these critical resources innovatively. For water, this includes advanced irrigation techniques, rainwater harvesting systems, and wastewater recycling.
	The primary focus is on utilizing renewable energy sources such as wind and solar power. With its abundant sunlight and wind, Rajasthan is well-positioned to lead in renewable energy adoption. The state is investing in wind turbines and solar farms to significantly reduce its dependence on fossil fuels. Additionally, energy- efficient building designs and smart grid technologies are being promoted to optimize energy use and minimize waste.
1345 – 1515 hrs.	The GRIHA Regional Conclave will present these creative, robust, and sustainable solutions. In addition to providing case studies and best practices, experts will talk about the most recent developments in energy and water management. The goal of the conclave is to provide attendees with the motivation and resources they need to adopt comparable solutions back home.
	Moderator: Shri Kushagra Juneja, Managing Partner, Design2Occupancy (D2O) Speakers: Shri Abinav Banthia, Managing Director, MANU Yantralaya Pvt. Ltd. Shri Sudhir Mathur, Chairman, Indian Plumbing Association (IPA), Rajasthan
	Shri Akash Deep, Deputy General Manager & Treasurer, GRIHA Council Smt. Dhwani Patel, Technical Solutions Area Manager- North & East India, Gujarat Guardian Limited
1515 – 1530 hrs.	Networking - Pitch booths

Closing Session: Navigating the Path to Sustainability: Implementing Rajasthan's New Regulations into Action

Rajasthan, a state renowned for its arid landscapes and rich cultural heritage, is making significant strides towards sustainability through the implementation of new environmental laws. These regulations address critical issues such as waste management, energy consumption, and water scarcity. By promoting the use of renewable energy, encouraging water conservation, and enforcing stricter waste management protocols, Rajasthan is setting an example for other regions to follow.

The Successful implementation of these laws requires collaboration. Government agencies are working closely with local communities to ensure the new policies are well understood and effectively implemented. Educational programs and workshops are being conducted to raise public awareness about the benefits of sustainable practices. Additionally, companies are stepping up by reducing their carbon footprint and adopting green technologies, further aiding in the state's sustainability goals.

At the GRIHA Regional Conclave, we will explore the strategies and measures being employed to effectively implement Rajasthan's new regulations, offering a comprehensive examination of the path to sustainability. Professionals from various domains will share their knowledge and experiences, highlighting the achievements and challenges encountered during this transition. The conclave will serve as a platform for collaboration and knowledge sharing, cultivating a sustainability-focused community of practice. By learning from Rajasthan's journey, other regions can gain valuable insights and inspiration to advance their own sustainability efforts.

Moderator:

Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, TERI

Speakers:

Shri Amit Kakkar, Chief Engineer, Department of Information Technology & Communication (DOIT&C), Govt. of Rajasthan

Shri Jyotirmay Mathur, Professor, Dept. of Mechanical Engineering, Malaviya National Institute of Technology (MNIT) Jaipur, Rajasthan

Smt. Sunita Mantri, Chief Managing Director, Enkay Enviro Services Jaipur

Ar. Gaurav Agrawal, Vice Chairman, Indian Institute of Architects (IIA), Rajasthan

Prof. Neeraj Gupta, Head of Department, Department of Architecture, Central University of Rajasthan

1700 – 1730 hrs. Cultural Event & Networking Tea/ Coffee

Inaugural Session

Welcome Address



Shri Sanjay Seth, Vice President and Chief Executive Officer, GRIHA Council and Senior Director, Sustainable infrastructure programme, The Energy and Resources Institute (TERI), highlighted the unusual phenomenon of flooding in the Thar Desert as a stark reminder of the climate crisis being faced in the most arid landscapes. He emphasized "Together, we're not only envisioning a greener future but are committed to actively building it, ensuring that our efforts today lead to a sustainable tomorrow."

Special Remarks



Dr. Ajay Kumar, Deputy Commissioner, Navodaya Vidyalaya Samiti, Regional Office, Jaipur, Ministry of Education, Government of India reflected on the founding of Navodaya Vidyalaya Samiti (NVS) and underscored the essential role of robust, sustainable structures in shaping resilient learning environments. He shared the landmark milestone of the Memorandum of Understanding signed between GRIHA council and NVS in 2023, which set a new standard for integrating sustainability in educational spaces. He aptly put, *"Building with purpose today ensures sustainable growth for future generations."* This collaboration marks a significant step forward in embedding green principles at the foundation of our educational infrastructure."

Keynote Address

Shri Nishant Jain, IAS, Secretary, Jaipur Development Authority, Government of Rajasthan, emphasized the theme 'Accelerating Climate Action in the Built Environment' and the urgent need to build effective solutions to address it. He highlighted the budget for Jaipur's Hitec City as a model for sustainable urban growth. He discussed the connections between GRIHA and ECBC, emphasizing their role in energy-efficient design, and highlighted Rajasthan's traditional architecture as a blueprint for culturally sensitive green buildings. He also noted the Jaipur Development Authority's recent green building relaxations, advocating for innovation that bridges tradition with sustainability.



Inaugural Address



Shri Alok, Additional Chief Secretary, Energy Department, Government of Rajasthan highlighted the significance of signing of three MoUs at the event, underscoring their role in advancing climate action through collaborative efforts. He emphasized on renewable energy initiatives in the state, especially solar as renewable energy source. He discussed impactful initiatives like the KUSUM scheme, which promotes solar energy adoption and supports climate resilience. He highlighted the remarkable achievement of reaching 4,500 MW of solar capacity, underscoring the role of renewable energy in India's sustainable future. He emphasized the importance of green building rating systems like GRIHA in guiding sustainable development and discussed expanding data center capacities.

GRIHA Updates



Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council and Director, Sustainable Buildings Division, TERI shed light on green building incentives for GRIHA rated projects, including incentives for projects like Pradhan Mantri Awas Yojana. She introduced GRIHA-LD, which focuses on sustainable master planning and emphasized pathways to net-zero and decarbonization. She noted Rajasthan's progress with over 165 companies registered under GRIHA and incentives like 7.5-15% FAR. She also announced the 16th GRIHA Summit in Delhi and the launch of *Prayavaran Rakshak Program 3.0 Green Carnival.*

Vote of Thanks



Shri Ashu Gupta, Managing Partner, Design2Occupancy Services LLP, expressed gratitude to all the esteemed guests, emphasizing the collective commitment to decarbonization and sustainable development. He highlighted the Vidyut Bhawan building as an example of green architecture and celebrated the signing of the MoU's, symbolizing a holistic approach to environmental stewardship.



Shri Ashu Gupta, Shri Sanjay Seth, Shri Alok, Shri Nishant Jain, Dr. Ajay Kumar and Smt. Shabnam Bassi (*from L to R*)

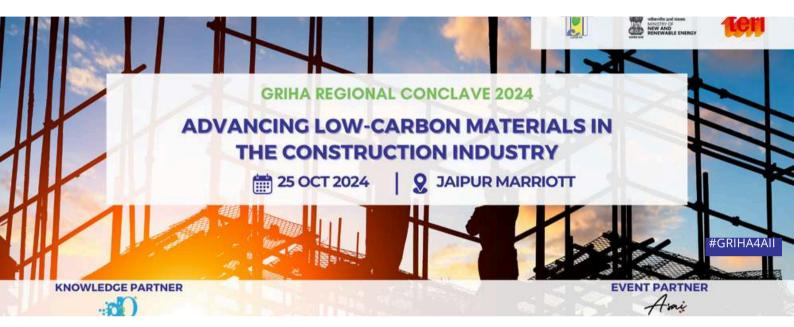
Key Takeaways: Inaugural Session

- Speakers emphasized the urgency of climate resilience, highlighting collaborations with programs like Pradhan Mantri Awas Yojana and initiatives under the KUSUM scheme to advance solar energy, achieving 4,500 MW capacity.
- The session acknowledged recent MoUs, focusing on integration of renewable energy & decarbonization towards a green future. Partnerships with Navodaya Vidyalaya Samiti and Rajasthan's adoption of GRIHA standards further highlighted the state's commitment towards sustainable transformation.
- Rajasthan was noted for its progress, with over 165 companies registered under GRIHA, and providing incentives like 7.5-15% FAR for green compliance. The significance of rating systems, especially GRIHA and GRIHA-LD (for sustainable master planning), was highlighted as essential to net-zero targets.
- Announcements for the 16th GRIHA Summit in Delhi and the Prayavaran Rakshak Program 3.0 Green Carnival were made during the session.

Plenary Session 1

Advancing Low-Carbon Materials in the Construction Industry

The session, titled **"Advancing Low-Carbon Materials in the Construction Industry,"** convened distinguished experts to discuss innovative strategies and technologies in sustainable material production & manufacturing. to reducing the carbon footprint from industry construction. The discussions underscored the critical role of low-carbon materials in achieving climate goals.





Shri Vijay N., Member Secretary, Rajasthan Pollution Control Board (RPCB), Government of Rajasthan, in his keynote address reflected on traditional construction methods from 30-40 years ago, highlighting the use of Manglu tiles. He discussed initiatives undertaken by the State Pollution Control Board to combat environmental impacts. He also explained about embodied & operational carbon and emphasized the need for waste recycling strategies in the construction industry. By promoting the use of tiles made from residual materials and minimizing landfill waste, he advocated for circular economy and a green channel system to enhance sustainability in construction.

Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council & Director, Sustainable Buildings Division, TERI moderated the plenary session. She initiated the session by emphasizing on the urgent need to adopt low-carbon materials throughout the construction lifecycle. She discussed innovative approaches to financing, material selection, capacity building, and raising awareness to achieve significant reductions in carbon emissions.



Shri Anand Mishra, Director, Trimurty Group, discussed the construction industry's adaptation to the global push for sustainability, emphasizing the adoption of low-carbon materials such as recycled steel and eco-friendly concrete. He noted that while integrating these materials can initially impact project timelines due to sourcing and testing, strategic planning and early supplier engagement can effectively mitigate these challenges. He advocated for enhanced collaboration among stakeholders to accelerate the transition towards more sustainable building practices.





Shri Subhash Arya, Deputy General Manager Electrical, Rajasthan State Road Development Corporation (RSRDC), Government of Rajasthan, highlighted the challenges faced regarding in availability and supply chain of low-carbon materials in Rajasthan, pointing to logistical issues that can hinder project timelines. He discussed innovations in construction techniques, such as modular construction and prefabrication, which are helping to reduce carbon emissions across large infrastructure projects. He emphasized the need for training and upskilling the construction workforce to effectively implement sustainable and digital solutions.



Ar. Gagan Sharma, Director, Dezine Synthesis, discussed the role of digital tools and technologies, particularly Building Information Modeling (BIM), in optimizing the use of low-carbon materials in construction projects. He emphasized the importance of balancing visual design aspects with the functional requirements of low-carbon materials. He also addressed how integrating renewable energy systems with low-carbon materials is vital for achieving net-zero buildings, showcasing a holistic approach to sustainability in construction.

Shri Roopesh Gupta, Chief Consultant, Agilon, provided insights into the technical differences between XLPE and PVC cables, explaining that XLPE cables offer superior heat resistance and insulation properties. He also distinguished between flame retardant and flame resistance cables, emphasizing their importance for safety in construction. Additionally, he discussed eco-friendly cables made from sustainable materials and bespoke cables designed to meet specific project requirements, enhancing efficiency and reducing environmental impact.





Smt. Shabnam Bassi, Shri Subhash Arya, Shri Vijay N., Shri Anand Mishra, Ar. Gagan Sharma and Shri Roopesh Gupta (*from L to R*)

Key Takeaways: Plenary Session

- The session highlighted the need to merge traditional building practices with modern low-carbon materials, using methods like recycled waste and locally sourced products to reduce environmental impact.
- The session addressed supply chain challenges, particularly in Rajasthan, for sustainable construction materials. As part of solutions early collaboration with suppliers and innovative sourcing strategies were suggested to maintain project timelines.
- Emphasis was laid on upskilling the construction workforce to handle sustainable materials and digital tools, enabling smoother transitions to eco-friendly practices across projects.
- Discussions underscored the importance of incorporating renewable energy systems, such as solar, alongside low-carbon materials to support the push toward net-zero buildings and decarbonization efforts in the construction sector.

Plenary Session 2

Sustainable, resilient and innovative solutions to water and energy

The session, titled "Sustainable, resilient and innovative solutions to water and energy," brought together distinguished experts to discuss innovative, resilient, and sustainable solutions for water and energy management, emphasizing strategies that address local challenges while promoting long-term environmental stewardship and resource efficiency.



Shri Kushagra Juneja, Managing Partner, Design2Occupancy (D2O), as a moderator facilitated discussions with esteemed dignitaries on the role of sustainable, resilient and innovative solutions for water management and enhancing energy efficiency. Additionally, he discussed the role of innovation, such as smart grids and Al-driven water management, in enhancing efficiency and sustainability. These approaches are essential for securing nature resources for future generations.

Shri Abhinav Banthia, Managing Director, MANU Yantralaya Pvt. Ltd. emphasized how the principles of a circular economy are increasingly being adopted in manufacturing, aiming to reduce waste while extending product lifecycles through innovative recycling and remanufacturing methods. He shared how the automotive component industry's shift towards zero-defect supply has spurred efforts to adopt more sustainable production methods. Additionally, he emphasized the need for established companies to play a role in mentoring startups and supporting new technologies that address water and energy challenges, fostering a collaborative ecosystem.





Shri Sudhir Mathur, Chairman, Indian Plumbing Association (IPA), Rajasthan, discussed current initiatives to equip plumbing professionals with the skills needed for implementing sustainable practices, highlighting programs aimed at educating professionals on efficient water management and renewable energy integration. He addressed how regulatory frameworks support these advances, however certain policies still need updating to fully embrace emerging technologies.





Shri Akash Deep, Deputy General Manager & Treasurer, GRIHA Council, shared insights into how GRIHA adapts green building standards to local climatic and cultural conditions, allowing projects to achieve sustainability goals while staying regionally relevant. He stressed on the need to integrate sustainable aspects in building design, with an emphasis on energy-efficient and water-saving systems that align with India's unique needs. The conversation delved into how green rating systems incentivize projects to prioritize sustainable practices, offering tangible benefits to developers and end users who focus on reducing water and energy consumption—ultimately fostering a more resource-conscious building sector.

Smt. Dhwani Patel, Technical Solutions Area Manager- North & East India, Gujarat Guardian Limited, highlighted the shift towards sustainable practices in glass manufacturing, where innovations are reducing the environmental footprint of production. She explained how Low-E (low-emissivity) glass contributes significantly to energy savings by enhancing thermal insulation, which minimizes the need for artificial heating and cooling. Furthermore, she discussed the potential of glass recycling to reduce energy and water usage in construction while supporting a circular economy. She noted, the integration of recycled materials into new glass products, advances sustainability in construction, aligning with water and energy conservation goals.





Shri Akash Deep, Shri Abhinav Banthia, Shri Sudhir Mathur, Smt. Dhwani Patel and Shri Kushagra Juneja (L to R)

Key Takeaways: Plenary Session 2

- Discussions highlighted the adoption of circular economy principles in production and operations, focusing on extending product life cycle and minimizing waste, which is essential for sustainable development.
- The session addressed the importance of training professionals in sustainable technologies, especially in water and energy sectors, while exploring opportunities for expanding renewable energy solutions to meet regional demands effectively.
- Aligning green building practices to the regional construction practices & resource availability was emphasized, making adoption of sustainable practices more applicable and impactful. Green rating systems were recognized as key to promoting water and energy efficiency.
- The role of advanced materials, like energy-efficient glass, and the benefits of recycling were discussed as strategies to reduce environmental impact, improve energy savings, and support the circular economy within the building industry.

Pitch Booths

List of Stalls

Leading companies will have booths at the GRIHA Regional Conclave Jaipur to display their eco-friendly goods, services, and innovations. This forum offers a chance to investigate cutting-edge technologies and establish connections with business titans promoting energy efficiency and green building techniques.

S. No.	Name of the Organization	Products/Technologies/Serv ices	Key Features/Benefits
1	ECO INDEX	SUSTAINABLE BUILDING MATERIALS	ECO-FRIENDLY SOLUTIONS FOR ENERGY EFFICIENCY AND LOW CARBON
2	ARMACELL	Insulation products	HIGH-PERFORMANCE THERMAL AND ACOUSTIC INSULATION
3	KNAUF	GYPSUM-BASED BUILDING MATERIALS	Lightweight, fire-resistant, and durable wall systems
4	AGILON	Advanced façade and cladding systems	Aesthetic and energy-efficient façade solutions
5	AIS (Asahi India Glass)	Glass and glazing solutions	Energy-efficient glass with superior U-value and solar factor
6	GREENFINCH REAL ESTATE ENGINEERS AND CONSULTANTS PVT LTD	Green building consultancy and design solutions	Expertise in IGBC and GRIHA green building certifications
7	JINDAL CERAMICA	Ceramic tiles and sanitaryware	High-quality, eco-friendly products for interior applications

Photograph







Closing Session

<u>Navigating the Path to Sustainability: Implementing Rajasthan's</u> <u>New Regulations into Action</u>

The session, titled **"Navigating the Path to Sustainability: Implementing Rajasthan's New Regulations into Action,"** convened distinguished experts to deliberate on the importance of fostering sustainable practices in line with Rajasthan's new regulations, emphasizing a holistic approach to achieving environmental and economic resilience.





Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, TERI, delivered introductory remarks and moderated the session. Setting the tone of the session, he highlighted, *"The urgent need to engage government officials, private sector leaders, architects, and academicians to collectively work towards securing natural resources"*.



Shri Amit Kakkar, Chief Engineer, Department of Information Technology & Communication (DOIT&C), Government of Rajasthan, initiated the discussion by emphasizing the integration of sustainable practices within IT infrastructure projects in Rajasthan. He highlighted the department's commitment to ensuring that technology does not become a burden but rather a tool for sustainable development. He spoke about the initiatives being taken to manage e-waste effectively, underscoring the importance of responsible recycling in the IT sector. He poignantly stated, "Waste must not to be a burden" and should be treated & recycled as part of sustainability practice.



Prof. Jyotirmay Mathur, Professor, Dept. of Mechanical Engineering, Malaviya National Institute of Technology (MNIT) Jaipur, Rajasthan, shared insights on the role of ongoing research in driving innovation that aligns with Rajasthan's Renewable Energy Policy 2023. He elaborated on the challenges and opportunities associated with integrating renewable energy sources into the existing power grid, particularly from a mechanical engineering perspective. He also discussed the government's efforts to ensure widespread availability of EV charging stations and how this aligns with clean mobility and sustainability goals. His words resonated with the audience: "Keep upskilling yourself," a reminder for continuous improvement and adaptation.

Smt. Sunita Mantri, Chief Managing Director, Enkay Enviro Services Jaipur, spoke passionately about the importance of thorough Environmental Impact Assessments (EIA) for large projects in Rajasthan. She outlined the measures in place to enforce compliance and penalize those who fail to adhere to regulations, stressing the need for accountability in environmental stewardship. Furthermore, she highlighted strategies to improve air quality across urban and rural areas. Smt. Mantri emphasized the critical role of public-private partnerships (PPPs) in transitioning Rajasthan into a renewable energy hub, advocating for collaborative efforts to accelerate this shift. "Do something for your loved ones," she urged, reminding everyone of the personal stakes involved in environmental action.

Shri Gaurav Agrawal, Vice Chairman, Indian Institute of Architects (IIA), Rajasthan, provided an overview of the various laws introduced by the government to advance sustainability. He discussed the renewable energy sources being adopted in Rajasthan to achieve sustainability goals and highlighted significant design innovations that could enhance energy efficiency in buildings, particularly in the hot and arid climate regions. His assertion that "sensitivity and ownership" are essential in this journey encapsulated the need for a collective commitment to sustainability. He concluded with a call to "learn, unlearn, and relearn," urging professionals to adapt continually to the evolving landscape of sustainable practices.



Prof. Neeraj Gupta, Head of Department, Department of Architecture, Central University of Rajasthan, focused on the role of education in training future architects in promoting eco-friendly practices, aligning to Rajasthan's unique environmental challenges. He discussed how together effective governance, and privatization can bolster the enforcement of environmental regulations in city planning. Additionally, he shared insights from developing smart, eco-friendly campuses, emphasizing the applicability of these principles in urban projects to ensure they meet environmental standards. His profound statement, "Embracing wisdom in our choices today ensures a sustainable future for generations to come," left a lasting impression, highlighting the long-term impact of our decisions today.





Shri Sanjay Seth, Shri Amit Kakkar, Prof. Jyotirmay Mathur, Smt. Sunita Mantri, Ar. Gaurav Agrawal and Prof. Neeraj Gupta (From L to R)

Key Takeaways: Closing Session

- The closing session emphasized the critical need to integrate sustainable practices across all sectors, particularly focusing on innovative technologies and methodologies that promote environmental stewardship.
- Strong emphasis was placed on the importance of public-private partnerships and collaborative efforts to achieve significant advancements in sustainability. These partnerships are essential for driving renewable energy initiatives and improving compliance with environmental regulations.
- The discussion highlighted the necessity of educating future professionals on sustainable practices, ensuring they are equipped with the knowledge and tools to address Rajasthan's unique environmental challenges effectively.
- A shared vision for a sustainable future was underscored, focusing on the importance of making informed choices today that will benefit future generations, ensuring environment protection and safeguarding resources.

Release of GRIHA Publication

Guide to Effective Documentation

The **"Guide to Effective Documentation"** was introduced at the GRIHA Regional Conclave 2024 as a part of the prestigious GRIHA Technical Manual series. For consultants, engineers, architects, and other participants in the GRIHA grading process, this handbook is intended to be an invaluable resource. By guaranteeing that statements made during evaluations are truthful, open, and completely compliant with GRIHA's appraisal requirements, the Guide to Effective Documentation expedites the evaluation process. These manuals help project teams grasp the significance of particular documentation and its relation to attaining sustained excellence by providing thorough information on best practices.



A GRIHA Council Publication- Manual on Guide to Effective Documentation was released during the inaugural session of GRIHA Regional Conclave, Jaipur

Signing of Memorandum of Understanding (MoU)



A Memorandum of Understanding was signed between GRIHA Council and The Indian Plumbing Association (IPA) Jaipur Chapter by Shri Sanjay Seth, VP & CEO, GRIHA Council & Shri Sudhir Mathur, Chairman, Indian Plumbing Association (IPA), Rajasthan



A Memorandum of Understanding was signed between GRIHA Council and ASHARE Jaipur Chapter by Shri Sanjay Seth, VP & CEO, GRIHA Council & Shri Amit Kakkar, President (ASHRAE-Rajasthan Chapter)



A Memorandum of Understanding was signed between GRIHA Council and Fire & Security Association of India) by Shri Sanjay Seth, VP & CEO, GRIHA Council & Shri Ankur Gupta, President, FSAI

GRIHA Rated Projects







GRIHA Rated Projects



GRIHA Felicitation Ceremony

S. No.	State	Name of the Project	Rating Variant	Rating Achieved
1	Rajasthan	JAWAHAR NAVODAYA VIDYALAYA, AJMER	GRIHA for Existing School (GRIHA ES)	5 Star
2	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, JAISALMER	GRIHA for Existing School (GRIHA ES)	5 Star
3	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, BANSWARA-II	GRIHA for Existing School (GRIHA ES)	5 Star
4	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, BARMER	GRIHA for Existing School (GRIHA ES)	5 Star
5	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA ALWAR	GRIHA for Existing School (GRIHA ES)	5 Star
6	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA GAJNER, BIKANER	GRIHA for Existing School (GRIHA ES)	5 Star
7	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, SIKAR	GRIHA for Existing School (GRIHA ES)	5 Star
8	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, NAGAUR	GRIHA for Existing School (GRIHA ES)	5 Star
9	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, NAGAUR	GRIHA for Existing School (GRIHA ES)	5 Star

GRIHA Felicitation Ceremony

S. No.	State	Name of the Project	Rating Variant	Rating Achieved
10	Rajasthan	JAWAHAR NAVODAYA VIDYALAYA, SIROHI	GRIHA for Existing School (GRIHA ES)	4 Star
11	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, BASEDA, PRATAPGARH	GRIHA for Existing School (GRIHA ES)	4 Star
12	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, BARAN	GRIHA for Existing School (GRIHA ES)	4 Star
13	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, SHRI GANGANAGAR-I	GRIHA for Existing School (GRIHA ES)	4 Star
14	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, PALLU, HANUMANGARH	GRIHA for Existing School (GRIHA ES)	4 Star
15	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, KARAULI	GRIHA for Existing School (GRIHA ES)	4 Star
16	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, TILWASNI, JODHPUR	GRIHA for Existing School (GRIHA ES)	4 Star
17	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA, UDAIPUR	GRIHA for Existing School (GRIHA ES)	4 Star
18	Rajasthan	PM SHRI JAWAHAR NAVODAYA VIDYALAYA NAGAUR, TONK	GRIHA for Existing School (GRIHA ES)	4 Star

GRIHA Council in News

GRIHA Council hosted its Third regional conclave in Jaipur to "Accelerate Climate Action in the Built Environment"

Jaipur Agencies

RIHA Council hosted its 3rd TGRIHA Regional Conclave in Jaipur, Rajasthan on 25th October centered around the theme 'Accelerating Climate Action in the Built Environment'. This was the third in the series of conclaves that are planned throughout the year, lining up with the annual GRIHA Regional Conclave, all centered around the same theme.

Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, The Energy and Resources Institute (TERI) welcomed the esteemed guests, dignitaries and participants at the inaugural session. He encouraged everyone to take a moment and reflect on our actions today which will ultimately impact the world as we pass it on to our future generations. He empha-



sized that it's no longer enough to nearly explore sustainability and resilience, the time has also come to have certain robust systems in place that can reduce and effectively respond to the escalating crisis that we are facing today. The event was graced by the presence of Alok, Additional Chief Secretary, Energy Department, Government of Rajasthan. In his inaugural address emphasized the escalated pace of climate change and the need to sensitize ourselves to combat

it, to secure the lives of our future generations. He shared about one of the initiatives of the Rajasthan government - under the Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyaan (PM-KUSUM) scheme. He shared the overwhelming and huge response from different sectors including businessman, farmers. 4500 MW orders have been placed and work for 3000 MW has already been started. He emphasized on the importance of green building, sustainable

construction and building practices, which will significantly contribute to climate action in the built environment. He was appreciative of the GRIHA Council's initiative to organize the Regional Conclaves and building new partnerships with three different institutions - IPA, FSAI and AHSRAE, to advance sustainability in the built environment. Nishant Jain, IAS, Secretary, Jaipur Development Authority, Government of Rajasthan, in his keynote address highlighted his concern over the growing urbanization and carbon emissions which have grave impact on the climate and our environment. He also shared about the green building relaxations and incentives provided by the Jaipur Development Authority, Government of Rajasthan. He also highlighted that Jaipur Pink city being declared as a UNESCO World Heritage Site which is based on the traditional architecture designs.

सम्मेलन में वक्ताओं ने रखे विचार 'जलवायु और पर्यावरण पर गंभीर प्रभाव डालता है कार्बन उत्सर्जन'



जयपुर@पत्रिका प्लस, 'जलवायु परिवर्तन की तीव गति और उससे निपटने के लिए स्क्यं को संवेदनशील बनाने की आवश्यकता हैं, ताकि आने वाली पीढिय़ों का जीवन सुरक्षित रह सके।' ग्रीन रेटिंग फॉर इंटीग्रेटेड हैब्रिटेंट असेसमेंट (गृह) परिषद, जयपुर की ओर से गुक्रवार को राजधानी में आयोजित क्षेत्रीय सम्मेलन में ऊर्जा विभाग के अतिरिक्त मुख्य सचिव, आलोक ने यह विचार व्यक्त किए। साथ ही पीएम कुसुम योजना पर भी

डाला। सम्मेलन के प्रकाश उद्घाटन सत्र में संजय सेठ ने अतिथियों का सम्मान किया। जयपुर विकास प्राधिकरण के सचिव निशांत जैन ने शहरीकरण और कार्बन उत्सर्जन के बढते प्रभावों पर चिंता व्यक्त की. जो जलवाय और फ्यांवरण पर गंभीर प्रभाव डालते हैं। उन्होंने जेडीए की ओर से ग्रीन बिर्लिंडग्स के लिए प्रदान की गई छट के बारे में भी बताया। सांस्कृतिक प्रस्तुतियों के साथ कार्यक्रम का समापन हुआ।



पुर शहर

GRIHA परिषद ने जयपुर में अपने तीसरे क्षेत्रीय सम्मेलन का आयोजन किया

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उद्देश्यः निर्मित पर्यावरण में जलवायु कार्रवाई में तेजी लाना

जीआरआईएचए परिषद ने जयपुर में अपने तीसरे क्षेत्रीय सम्मेलन का आयोजन किया

जीआरआईएपए चरिषद ने जप्पुर, राजस्थान में हनिवार को अपने होसो जेआरआरिया बेडीय सम्मेलर का जठआरआर्थ्या वाहीय सम्मानन का आयोजन किया। इसका मुग्ता विषय का 'निर्वात पर्यात्राण में जालवामु कॉल्डी में रिजे सात'। यह साल घर अर्थाजित किए जने पाले सम्मालने ए क्रम में रोसार आर्थालन का, जो कि वार्णिक तीसार आयोजन था, जो कि साविक दरिआरआईएसर, सेडीय सम्मीलन के साथ मेल खाता है और इस्से विषय के बेडीटत है। जोअत आईएसर स्वीपद के उपरायक और मुख्य बठवेकारी अधिकारी एवं कार्जा और संसाधन संस्थान के वादिष्ठ पुरे कार का सामय के ने उद्यादन का बाद निदेशक, सांतप केंद्र ने उद्यादन का वे सभी सम्पादित अतिथियों, पापसान्य व्यक्तियों और प्रतिभाषियों का स्वातत सभी सम्मद्यित अतिथाये, गणमत्रथ व्यक्तियो और प्रतिभाषिचे का स्वाप्त किया उन्होंने सभी को यह स्तेपने के रित्य प्रेरित किया कि आज तमारे प्राय बिय गए बार्च हम्हों अगने जाली पीड़ियों को प्रश्ववित करें। उनदेन हम काल प्रमुख को प्रश्ववित करें। उनदेन हम सत पर जेर दिया कि अब केवल सतला और लवीत्वपर का अन्वेषण करवा पर्वत नहीं है, अब सबप आ एक है कि तबरे त्रम कात दोस प्रणालियों से जो नते संबद को कम करने और प्रभावी हंग मे

🛚 जलतेवीय , जयपुर



सारकत का जनन कहटन सवाल म काठेने जानवपु परिवर्तन को तीव गति और उससे निपटने के लिए स्वयं को संवेदसारील बनाने की आवयपकात पर जेर दिपा ताकि अने पाले पीड़ियों का uner finder alle sone finder pund it would be also free ait for faith में जलवानु का बोगहन देने। महत्वपूर्ण जोआर आईएकए चरिषद के जीवन सुरक्षित रह सके। उन्होंने राजस्थान 中的 जवन मुत्यवर सरकाः । उत्तर गतस्यन सरकार को एक प्रस्त - उत्तरनवंदी किसान उत्तर नुसार पर ज्यान कारण्या वेतन्द के खरे में जनसारे ये। इस योतन के तहा अब तक 4500 संस्थाद के अन्द्रेत दिए जा पुंचे हैं सम्पेलन आयंडीवर बारने और धारतिय प्लीचेंग एम्सेनिरातन , फापर एड फिक्सोरिटी एम्सेनिरातन और इडिय , और ASHRAE के साथ वा साझेदांगों के निर्माण के प्रवासों को जिनमें से 3000 मेगावाट का कार्य फाले वो शुरू हो चुका है। उन्होंने हो अवन, संसारन की। जपपुर विकास प्राधिकतण, राजस्थान

सावसार के सर्पिया, नितास जैन ने अन्ते पुरुष भारण में शार्थकारण और कार्यन सावनंत्र के बाजे प्रकार प्रेश कार्यन सावनंत्र के प्रकार प्रकार के प्रकार का सावनंत्र अप्रिय प्रकार प्रारं के प्रकार की लिए प्रधान की पई पुरु और प्रेलसानों के साथ कि प्रकार का उन्होंने साह भी उल्लेसानों के साथ कि प्रकार का उन्होंने साह भी उल्लेस fam fa ways as for full संख्या का जन्दुन का तरक मन्द्रा, जनपतिंक सामुख्यका डिवासों पा अपपतिंत होने के कारण, पूर्वकारे की विषय परीहा स्वय के जन्दा के प्रितित विषय पर्वकार और पास्त अवसारंथना विषया की बाह्यक देने का सामार्थन विषया की बाह्यक देने का सामार्थन विषया के बीचा विषयानय पांस्टर, कोये कांचा कांग्रंग ग्वाग्यन सन्दर, वावप कार्यातम, जन्मूर, शिक्षा मंत्रालय, प्रानं सलकार के ता आयुक्त, दी. आत्रयं कुम्झा ने उडाइन साह से आपने विशेष संबोधका में बताय कि स्कूल केवल सीखने के केंद्र ही नहीं, बॉन्क जवाचा के पा थी है। उनदेने कहा कि भवन जनवानु कार्रवा में एक रक्तिराहती उपकरण है, जो उनदेने जोजराज्यांएकर प्रथित के साथ जुड़ने के बाद सन्द्रहादन सम्मोलन में तीन तकनीको सत्र हुए, जिनमें विचार विमर्श किंग्य गाह।

जयपुर, रविवार २७ अक्टूबर, २०२४ means in aftern famin that is south

Cultural Evening







Way Forward - Action Points

In line with the deliberations held during the GRIHA Regional Conclave, Jaipur and key takeaways drawn from the sessions, GRIHA Council intends to work on the following action points to support the Government of Rajasthan in its journey of sustainable transition in the state.

• Advocacy: During the GRIHA Regional Conclave in Jaipur, it was proposed that GRIHA Council should establish a dedicated regional center to work closely with the state government with an intent to extend the presence of GRIHA in the state of Rajasthan. The regional center would:

> Facilitate the adoption of green building practices through GRIHA ratings and certifications.

➤ Provide handholding to diverse stakeholder groups including government officials, building professionals, developers, policymakers and academicians etc. to implement sustainable building practices effectively and efficiently.

> Encourage the uptake of green building products through GRIHA Product Catalogue.

Along with this, GRIHA Council in association with the Government of Rajasthan and industry partners proposes to organize GRIHA Regional Conclaves annually at various locations and regions of the state of Rajasthan. Reaching every corner of the state, these events will provide a platform to discuss and deliberate with bureaucrats, industry experts, building professionals and civil society on the furtherance of sustainable habitat development in the state and India. Permeating the idea of sustainability to a broader audience and stakeholders, the GRIHA Regional Conclaves aim to drive new initiatives, provide insights on best practices, and showcase sustainable products and green business opportunities to elicit practical applications that are most relevant in the context of the State.

• **Training and Capacity Building:** Through awareness programmes and capacity-building training workshops, GRIHA Council proposes to disseminate knowledge to diverse stakeholder groups on various facets of green buildings and sustainable construction practices. These programmes will acquaint professionals such as government officials, architects, engineers, urban planners, developers, builders, students, and end-users etc.

• Fostering Collaboration and Partnerships: Cultivating partnerships is a prerequisite to taking any initiative forward. GRIHA Council proposes to collaborate with diverse stakeholders including government officials, architects, engineers, planners and industry experts. These collaborations intend to jointly work on diverse aspects of strengthening sustainability in the built environment such as promoting environmental stewardship, cool roof adoption, and implementation etc.











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