









# **GRIHA REGIONAL CONCLAVE 2025**

**Proceedings** 

# ACCELERATING CLIMATE ACTION IN THE BUILT ENVIROMENT 10 MARCH, 2025

**RADISSON BLU HOTEL, GUWAHATI** 



# Introduction

'GRIHA Council', recognized as the 'National Rating System for Green Buildings in India', was developed by The Energy and Resources Institute (TERI) with the support of the Ministry of New and Renewable Energy (MNRE), Government of India. GRIHA Council administers GRIHA rating variants that evaluate 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 Lifespaces 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 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".

This year GRIHA Council is pleased to introduce the **GRIHA Regional Conclaves**. The GRIHA Regional Conclaves are aimed at enhancing regional outreach and decentralising the sustainability movement from the National level to State level action, in the allied aspects of built-infrastructure development. **After 4 successful regional conclaves** this fiscal year in Lucknow, Hyderabad, Jaipur and Chandigarh, our next stop was the **Gateway to Northeast** - **Guwahati.** 

The GRIHA Regional Conclave Guwahati was scheduled on 10 March 2025, at Radisson Blu Hotel, Guwahati, Assam on the theme 'Accelerating Climate Action in the Built Environment'.

Aligning with the vision of becoming a 'Net Zero' emission nation by year 2070, these regional conclaves seek to provide a forum to address region-specific challenges and identify tailor-made strategies that align with the local climatic conditions, cultural contexts and resource availability, thereby making them locally relevant and effective. The conclave showcased deliberations on technical sessions focused on the role of policies & legislative implementation of sustainable practices, importance of addressing resilience in disaster-prone regions, whilst integrating smart & sustainable infrastructure development strategies by government and industry experts from the region, along with felicitation of recently GRIHA rated projects in the NE states and fostering new partnerships in the presence of eminent dignitaries.

# **Acknowledgements**

At the outset, GRIHA Council would like to extend our deepest gratitude to **Assam Science Technology & Environment Council (ASTEC)**, **Government of Assam** for their unwavering support and invaluable contribution to the success of the GRIHA Regional Conclave, Guwahati.

We are extremely thankful to the eminent dignitaries who graced the event with their esteemed presence: **Shri Keshab Mahanta**, Hon'ble Minister, Departments of Health & Family Welfare and Science and Technology, Information & Technology, Government of Assam; **Dr. Jaideep Baruah**, Director, Assam Science Technology and Environment Council (ASTEC), Department of Science, Technology & Climate Change, Government of Assam and **Shri T. V. S. Prakasa Rao**, Assistant Commissioner (Acad.), Navodaya Vidyalaya Samiti (NVS), Shillong Region 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. We are grateful to our **partners**, including government partners, institutional partners, multilateral partners, associate partners and media partners for their steadfast support throughout the GRIHA Regional Conclave.

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 Guwahati.

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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# Agenda

# Accelerating Climate Action in the Built Environment' Date: 10 March 2025, Monday

Venue: Radisson Blu Hotel, National Highway 37, Guwahati, Assam

0900 - 1000 hrs	Registration			
	Opening Remarks			
1000 – 1030 hrs	<ul> <li>Welcome Address by Mr. Sanjay Seth, Vice President &amp; CEO, GRIHA         Council and Senior Director, Sustainable Infrastructure Programme, The         Energy and Resources Institute (TERI)</li> <li>Special Address by Dr. Dipankar Saharia, Senior Director, Social         Transformation &amp; Strategic Alliance and Administrative Services &amp;         Regional Centres, The Energy and Resources Institute (TERI)</li> <li>GRIHA Presentation by Ms. Shabnam Bassi, Deputy CEO &amp; Secretary,         GRIHA Council and Director, Sustainable Buildings Division, The Energy         and Resources Institute (TERI)</li> </ul>			
	Plenary Session 1: Building Disaster Resilience in Vulnerable Areas			
1030 - 1145 hrs	Assam's natural terrain makes it prone to various disastrous hazards, including natural and human-activity induced floods, whilst facing water stresses, and earthquakes due to its location under Seismic Zone V. The state, located on the bank of the mighty Brahmaputra River, faces recurrent flooding during monsoons, leading to loss of infrastructure, lives, livelihoods, and biodiversity every year. Unplanned urbanization has exacerbated issues of waterlogging and biodiversity loss, while seismic risks threaten infrastructure stability. This session aims to highlight these challenges that necessitate adoption of comprehensive disaster resilience strategies for infrastructure development. Seismic safety measures involve employing earthquake-resistant construction techniques and adhering to safety codes. Additionally, rainwater harvesting systems help manage flooding and alleviate water stress, while green spaces and restored wetlands serve as natural buffers against disasters. Community-led disaster preparedness programs and early warning systems enhance local response capacities. By integrating sustainable urban planning, innovative technologies like GIS mapping, and stakeholder collaboration, Assam can foster resilient development in its disaster-vulnerable regions.			
	<ul> <li>Moderator: Ar. Akash Deep, Deputy General Manager &amp; Treasurer, GRIHA Council</li> <li>Panellists: <ul> <li>Dr. Dipankar Saharia, Senior Director, Social Transformation &amp; Strategic Alliance and Administrative Services &amp; Regional Centres, The Energy and Resources Institute (TERI)</li> <li>Dr. Surajit Baruah, Senior Consultant, NDMA SFDRR Programme, Assam State Disaster Management Authority (ASDMA)</li> <li>Dr. Rajib Kumar Bhattacharjya, Professor, Department of Civil Engineering at IIT Guwahati</li> <li>Ar. Ragini Goswami, Proprietor, Ecospace, Green Design Consultancy &amp; EC Member, Association of Architects, Assam (AAA)</li> </ul> </li> </ul>			

1145 – 1200 hrs	Session Switch Break & Networking
	Plenary Session 2: Building Smart, Green Cities – Infrastructure for Tomorrow
1215 – 1330 hrs	As cities continue to grow and urbanization accelerates, the need for sustainable, resilient, and efficient infrastructure has never been more critical. With rapid urbanization and climate change presenting significant challenges, the session will focus on designing and implementing smart, green infrastructure solutions to address these issues. Discussions will cover the role of smart infrastructure systems in optimizing urban services, such as transportation, waste management, and energy distribution, to enhance efficiency and reduce environmental impact. It will further delve into green building practices, focusing on sustainable materials and techniques, and importance of urban green spaces and biodiversity, emphasizing their role in mitigating the urban heat island effect and improving public health. Concepts of circular economy in urban planning, focusing on waste recycling and sustainable material sourcing, will also be addressed. The session will also address factors and solutions of urban development to ensure integration of smart, green infrastructure that meets the needs of and promotes long-term sustainability.
	<b>Moderator: Smt. Shabnam Bassi,</b> Deputy Chief Executive Officer & Secretary, GRIHA Council & Director, Sustainable Buildings Division, The Energy and Resources Institute (TERI)
	<ul> <li>Panellists:</li> <li>Prof. (Dr.) Hari Prasad Agarwal, Dean, Royal School of Architecture (RSA), Royal School of Design (RSD), Royal School of Fashion Design &amp; Technology (RSFT) and Royal School of Fine Arts (RSFA)</li> <li>Mr. Soumya Das Gupta, Executive Engineer, PWRD, Brahmaputra Bridge Construction Division-II</li> <li>Ar. Rittick Hazarika, Principal Architect, Rittick Hazarika Design Associates (RHDA)</li> <li>Mr. Manish Chauhan, Cluster Project Manager, Northeast sector, Larsen &amp; Toubro (L&amp;T)</li> </ul>
1330 – 1445 hrs	Lunch

Plenary Session 3: Blueprint to Legislation - Policies Shaping Climate Action This session will explore key legislative frameworks and policies driving climate action in Assam, addressing the state's unique vulnerabilities and opportunities. It will focus on the Assam State Action Plan on Climate Change (SAPCC) and its strategies for low-carbon emissions and resilient development, emphasizing interdepartmental coordination stakeholder engagement. The session will also cover the Assam Green Budget for 2024-25, integrating climate considerations into public financial planning for green goals and procurement practices. Discussions will include targets for expanding renewable energy capacity, especially solar and biomass, to reduce fossil fuel reliance. Additionally, the role of civic engagement and open contracting practices in shaping climate legislation will be highlighted. Overall, this session will focus on the legislative and policy measures that are driving climate action in Assam, aiming to enhance the state's resilience and foster sustainable growth. 1445 - 1615 hrs Moderator: Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, The Energy and Resources Institute (TERI) Panellists: • Dr. Jaideep Baruah, Director, Assam Science Technology and Environment Council (ASTEC), Department of Science, Technology & Climate Change, Government of Assam Dr. Jayanta Pathak, Professor (HoD), Department of Civil Engineering, Assam Engineering College Mr. Mantu Bora, General Manager, Assam Urban Infrastructure Development and Finance Corporation Ltd. (AUIDFCL), Department of Housing & Urban Affairs, Government of Assam Ar. Pritam Nath, Consultant Architect, Neev and EC Member, Indian Institute of Architects Assam Chapter Special Remarks by Mr. N.B Nalage, CE (Engineering), Life Insurance Corporation of India (LIC) 1615 - 1630 hrs **Session Switch Break & Networking** 

	Valedictory Session			
1630 – 1745 hrs	<ul> <li>Opening Address by Mr. Sanjay Seth, Vice President &amp; CEO, GRIHA Council and Senior Director, Sustainable Infrastructure Programme, The Energy and Resources Institute (TERI)</li> <li>Special Address by Dr. Jaideep Baruah, Director, Assam Science Technology and Environment Council (ASTEC), Department of Science, Technology &amp; Climate Change, Government of Assam</li> <li>Special Address by Dr. Dipankar Saharia, Senior Director, Social Transformation &amp; Strategic Alliance and Administrative Services &amp; Regional Centres, The Energy and Resources Institute (TERI)</li> <li>Signing of Memorandum of Understanding (MOU)         <ul> <li>Indian Institute of Architects (IIA), Assam Chapter</li> <li>Association of Architects, Assam (AAA)</li> </ul> </li> <li>Special Address by Shri T. V. S. Prakasa Rao, Assistant Commissioner (Acad.), Navodaya Vidyalaya Samiti (NVS), Shillong Region</li> <li>Publication Launch</li> <li>GRIHA Felicitation Ceremony</li> <li>Valedictory Address by Shri Keshab Mahanta, Hon'ble Minister, Departments of Health &amp; Family Welfare and Science and Technology, Information &amp; Technology, Government of Assam</li> <li>Vote of Thanks by Ms. Shabnam Bassi, Deputy CEO &amp; Secretary, GRIHA Council and Director, Sustainable Buildings Division, The Energy and Resources Institute (TERI)</li> </ul>			
1745 – 1800 hrs	Cultural Performance by Sribhoomi Axom			
1800 hrs onwards	High Tea & Networking			
Closing of GRIHA Regional Conclave				

# **Opening Session**

#### **Welcome Address**

**Shri Sanjay Seth**, Vice President and Chief Executive Officer, GRIHA Council and Senior Director, The Energy and Resources Institute (TERI), stressed the urgency of climate action at the GRIHA Regional Conclave in Guwahati.

He stated, "The time for discussions has passed—now is the time for action. If we delay sustainable interventions today, we will lock ourselves into inefficient infrastructure for decades. Guwahati must embrace climate-responsive design now for a resilient future by 2047."

He added, "Development must go hand in hand with environmental responsibility. If we expand at the cost of forests, rivers, and ecosystems, we will face worsening floods, rising temperatures, and unpredictable weather. The Brahmaputra reminds us of nature's power—our planning must adapt, not resist."



#### **Special Address**



**Dr. Dipankar Saharia**, Senior Director, Social Transformation & Strategic Alliance and Administrative Services & Regional Centres, The Energy and Resources Institute (TERI)

highlighted the North-East's shifting climate, citing extreme weather events like temperature spikes and simultaneous floods and droughts. He emphasized the need for collective action to mitigate risks and find solutions.

He added, "In Assam, there is a significant annual investment in the building sector, with Guwahati at the forefront. GRIHA Council's role in promoting energy-efficient buildings is crucial, not only for large constructions but also for smaller projects like those under the Pradhan Mantri Awas Yojana, ensuring that sustainability becomes a standard across all levels of development."

#### **GRIHA Presentation**

**Smt. Shabnam Bassi**, Deputy CEO & Secretary, GRIHA Council and Director, Sustainable Buildings Division, TERI, outlined the GRIHA green building footprint in Assam and highlighted the various GRIHA rating frameworks and certifications tailored for different building typologies.

Emphasizing the importance of collective effort, she stated, "The success of sustainable development lies in collaboration. Whether it is the government, industry, academia, or local communities, every stakeholder has a role to play. GRIHA Council is here to facilitate that dialogue, to identify gaps, and to provide solutions that are not just theoretical but are implementable on the ground, ensuring a resilient and greener Assam".



# **Plenary Session 1**



The session, titled "Building Disaster Resilience in Vulnerable Areas" focused on mitigating disasters such as floods—both natural and human-induced—water stress, and earthquakes, given Assam's location in Seismic Zone V.

Situated along the Brahmaputra, the state experiences recurrent monsoon flooding, causing significant losses to infrastructure, lives, livelihoods, and biodiversity. Unplanned urbanization has worsened waterlogging and biodiversity loss, while seismic risks threaten infrastructure stability. These challenges highlight the urgent need for comprehensive disaster resilience strategies in infrastructure development.



Ar. Akash Deep, Dr. Rajib Kumar Bhattacharjya, Dr. Surajit Baruah, Dr. Dipankar Saharia, Ar. Ragini Goswami (from L to R)

#### Moderator

**Ar. Akash Deep,** Deputy General Manager & Treasurer, GRIHA Council He convened the session emphasizing that modern cities across the country, from Jammu to Mumbai and Guwahati, are facing increasing challenges from flooding and natural disasters. The current infrastructure, which was able to withstand older rainfall patterns, is now struggling to cope with more intense weather events.





**Dr. Rajib Kumar Bhattacharjya,** Professor, Department of Civil Engineering at IIT Guwahati

He emphasized that urban development often disrupts natural systems, worsening flooding risks. Rivers need space to flow, and encroaching on floodplains exacerbates these issues. While development is essential, he highlighted the need to minimize environmental impact and adopt green, sustainable building designs that integrate with natural systems to mitigate flooding.

**Dr. Surajit Baruah**, Senior Consultant, NDMA SFDRR Programme, Assam State Disaster Management Authority (ASDMA)

He highlighted that Northeast faces significant disaster risks due to its geographical location. Assam, in particular, is vulnerable to floods, landslides, and earthquakes, exacerbated by climate change. Shifting rainfall patterns and groundwater depletion pose further challenges. Effective disaster management requires localized actions, as climate change demands community-level responses. Data sharing across sectors is crucial to strengthen disaster preparedness and mitigation.





**Dr. Dipankar Saharia,** Senior Director, Social Transformation & Strategic Alliance and Administrative Services & Regional Centres, The Energy and Resources Institute (TERI)

He emphasized the interconnected challenges of agriculture and infrastructure in the face of climate change. He highlighted how shifting weather patterns, floods, and droughts threaten agricultural productivity, while unplanned infrastructure development exacerbates environmental degradation.

**Ar. Ragini Goswami**, Proprietor, Ecospace, Green Design Consultancy & EC Member, Association of Architects, Assam (AAA)

She emphasized the need to integrate sustainability from a project's inception. She highlighted the importance of assessing ecological impacts before construction, considering factors like water runoff and preserving natural landscapes. Overdevelopment contributes to issues like urban flooding, making it essential for all stakeholders to take responsibility for how buildings impact the environment.



# **Plenary Session 2**









Ami

# GRIHA REGIONAL CONCLAVE 2025 BUILDING SMART, GREEN CITIES: INFRASTRUCTURE FOR TOMORROW

10 March 2025

Radisson Blu Hotel, Guwahati



The session, titled "Building Smart, Green Cities – Infrastructure for Tomorrow," explored the role of smart infrastructure systems in optimizing urban services such as transportation, waste management, and energy distribution to enhance efficiency and reduce environmental impact. It delved into green building practices, focusing on sustainable materials, construction techniques, and the importance of urban green spaces and biodiversity in mitigating the urban heat island effect and improving public health. Additionally, the session addressed the integration of circular economy principles in urban planning, emphasizing waste recycling and sustainable material sourcing. Discussions also covered key factors and solutions in urban development, ensuring that smart, green infrastructure is seamlessly integrated to meet current needs while promoting long-term sustainability.



Ms. Shabnam Bassi, Mr. Manish Chauhan, Prof. (Dr.) Hari Prasad Agarwal, Mr. Soumya Das Gupta, Ar. Rittick Hazarika (from L to R)

#### Moderator

**Smt. Shabnam Bassi,** Deputy Chief Executive Officer and Secretary, GRIHA Council and Director, Sustainable Buildings Division, TERI

As a moderator, she commenced the discussion by emphasizing the urgent need for smart, green infrastructure in cities, highlighting how integrating technology, sustainability, and urban planning can create efficient, resilient, and eco-friendly urban spaces for the future.





**Prof. Hari Prasad Agarwal,** Dean, Royal School of Architecture (RSA), Royal School of Design (RSD), Royal School of Fashion Design & Technology (RSFT) and Royal School of Fine Arts (RSFA), stressed that sustainability must be central to architecture, not an afterthought. He advocated for climate-responsive strategies, real-world case studies, and hands-on learning in design education to equip future architects for resilient, sustainable development.

He emphasized that the future of architecture lies in interdisciplinary collaboration, integrating civil engineering, environmental sciences, urban planning, and data analytics to move beyond aesthetics and create climateresilient, resource-efficient, and socially inclusive buildings and cities.

Mr. Soumya Das Gupta, Executive Engineer, PWRD, Brahmaputra Bridge Construction Division-II, stressed that the future of road infrastructure lies in sustainability and innovation. By incorporating recycled materials, reducing cement consumption, and adopting seismic-based isolation systems, both resilient and environmentally responsible roads and bridges can be built. He also added that urban planning must focus on reducing traffic congestion and improving mass transport systems. Smart integration of AI, IoT, and diversified urban development can help create sustainable, efficient cities that meet the challenges of rapid urbanization.





**Mr. Manish Chauhan,** Cluster Project Manager, Northeast sector, Larsen & Toubro (L&T) stated that L&T integrates sustainability into every project right from the construction stage—using renewable energy, minimizing dust pollution, recycling construction waste, and promoting efficient material usage to lower our environmental impact.

He further added that the rapid urbanization and massive scale of construction in India require a balanced approach—ensuring development while minimizing environmental degradation through robust policies and responsible practices.

**Ar. Rittick Hazarika**, Principal Architect, Rittick Hazarika Design Associates (RHDA) emphasized that sustainability in construction extends beyond materials—it requires long-term planning. He cautioned that designing buildings and infrastructure with a short lifespan, even if energy-efficient, ultimately leads to wasted resources.

He further stressed the need to rethink reliance on conventional materials like concrete and bricks. Responsibly sourced timber, he noted, can serve as a sustainable alternative, helping to preserve Assam's architectural heritage while reducing carbon-intensive construction practices.



# **Plenary Session 3**



The session, titled "Building Smart, Green Cities – Infrastructure for Tomorrow," explored the role of smart infrastructure systems in optimizing urban services such as transportation, waste management, and energy distribution to enhance efficiency and reduce environmental impact. It delved into green building practices, focusing on sustainable materials, construction techniques, and the importance of urban green spaces and biodiversity in mitigating the urban heat island effect and improving public health. Additionally, the session addressed the integration of circular economy principles in urban planning, emphasizing waste recycling and sustainable material sourcing. Discussions also covered key factors and solutions in urban development, ensuring that smart, green infrastructure is seamlessly integrated to meet current needs while promoting long-term sustainability.



Mr. Sanjay Seth, Mr. Montu Bora, Dr. Jaideep Baruah, Dr. Jayanta Pathak, Ar. Pritam Nath (from L to R)

#### **Moderator**

**Mr. Sanjay Seth,** Vice President & CEO, GRIHA Council and Senior Director, Sustainable Infrastructure Programme, The Energy and Resources Institute (TERI).

As the moderator of the session, he highlighted that as we navigate the challenges of rapid urbanization, climate change, and resource constraints, the need for sustainable and resilient infrastructure has never been more urgent. He emphasized how collaboration, innovation, and policy action can redefine urban development and drive meaningful change, ensuring that our cities are not only smart but also truly sustainable for future generations.





**Mr. Mantu Bora,** General Manager, Assam Urban Infrastructure Development and Finance Corporation Ltd. (AUIDFCL), Department of Housing & Urban Affairs, Government of Assam, emphasized the need to promote non-carbon materials in construction and provide builders with better funding and technical support. Hybrid construction methods should receive positive policy allocations, ensuring that sustainable alternatives are prioritized.

He added, "The industry should benefit from government-backed incentives such as subsidies and tax benefits, with proper inspections ensuring that bidders comply with green building standards."

**Dr. Jaideep Baruah,** Director, Assam Science Technology and Environment Council (ASTEC), Department of Science, Technology & Climate Change, Government of Assam, stressed the need for a whole-of-government approach to climate action. ASTEC collaborates across departments in Assam to integrate climate resilience into urban planning, promote climate-smart agriculture, and expand renewable energy adoption.

He further stated, "Interdepartmental collaboration is key to climate action. By bringing together policymakers, industry leaders, and local communities, we can develop solutions that are practical, scalable, and rooted in Assam's unique environmental context."





**Dr. Jayanta Pathak, Professor (HoD),** Department of Civil Engineering, Assam Engineering College, stressed that academicians play a vital role in ensuring future engineers integrate sustainability into design and planning. By embedding sustainable development principles—ranging from material selection to carbon footprint estimation—into the curriculum, sustainability becomes second nature in engineering practice.

He added, "Bridging the gap between theory and implementation requires hands-on exposure and real-world applications. By linking project estimates to carbon impact, optimizing designs, and mainstreaming sustainability in development controls, engineers can drive real change beyond mere theoretical compliance."

**Ar. Pritam Nath,** Consultant Architect, Neev and EC Member, Indian Institute of Architects Assam Chapter emphasized that sustainability begins with proactive planning. Government bodies must integrate architects early in the process to create energy-efficient, future-ready designs that optimize comfort and resource use.

He further stressed, "For effective low-carbon development, architects and building consultants must be actively involved in policymaking. Their insights can help address real challenges at the design stage, ensuring sustainable strategies are practical and implementable."



#### **Special Remarks**

Mr. N.B Nalage, CE (Engineering), Life Insurance Corporation of India (LIC)

In his special remarks, he extended his sincere gratitude to the GRIHA Council and their team for their invaluable support in obtaining green building certifications. He acknowledged their expertise and unwavering commitment to sustainability, which have played a crucial role in helping LIC achieve this significant milestone.

He further stated, "Obtaining green building certification is not just an achievement for LIC—it is a step towards a more sustainable and environmentally responsible future. Through ongoing evaluation and investments, we remain dedicated to adopting best practices in sustainability and resource conservation."





Mr. N.B. Nalage and Mr. Sanjay Seth

# **Valedictory Session**



Dr. Dipankar Saharia, Mr. Sanjay Seth, Shri Keshab Mahanta, Ms. Shabnam Bassi, Dr. Jaideep Baruah, Shri T. V. S. Prakasa Rao (from L to R)

#### **Welcome Address**

**Shri Sanjay Seth,** Vice President and Chief Executive Officer, GRIHA Council and Senior Director, The Energy and Resources Institute (TERI), appreciated the recently concluded. The Advantage Summit in Guwahati which highlighted new technologies, clean energy transition, and sustainable development, particularly in the realm of green buildings.

He acknowledged the instrumental support received from the Government of Assam in making the GRIHA Regional Conclave in Guwahati a success. He shared that the outcomes of our discussions have been highly promising, and GRIHA Council and TERI looks forward to advancing these efforts with the Assam government and hope to scale up these efforts to achieve tangible results.



#### **Special Address**



**Dr. Jaideep Baruah**, Director, Assam Science Technology and Environment Council (ASTEC), Department of Science, Technology & Climate Change, Government of Assam, reiterating deliberations at the GRIHA Regional Conclave in Guwahati, shared the need to establish a comprehensive policy framework that integrates all aspects of sustainable construction. It would involve not only proper building codes but also strategies for incentivizing builders and stakeholders.

He further highlighted, "There is a need for a shift in perspective which will aid in addressing common misconceptions about the additional costs of constructing green buildings and demonstrate its true value."

#### **Special Address**

**Dr. Dipankar Saharia,** Senior Director, Social Transformation & Strategic Alliance and Administrative Services & Regional Centres, The Energy and Resources Institute (TERI), called for collective efforts from government bodies, architects, associations, and consultants to strengthen green building policies, enforce sustainable bylaws, and promote eco-friendly procurement. He stressed "One of our key focus areas is expanding GRIHA in the Northeast, particularly in Assam. With 1.7 lakh Pradhan Mantri Grahmin Awas Yojana homes to be built, incorporating GRIHA standards can significantly reduce emissions from the construction sector, which currently contributes around 30% to Assam's total emissions".



#### **Special Address**



Shri T. V. S. Prakasa Rao, Assistant Commissioner (Acad.), Navodaya Vidyalaya Samiti (NVS), Shillong Region, mentioned that partnership with the GRIHA Council empowers us to adopt best practices and redefine how we construct and manage educational spaces. Together, we are paving the way for a more sustainable future, inspiring students to become change agents for a healthier world"

"Education is not just about academic instruction; it is about nurturing responsible citizens who are mindful of their impact on the planet. Through our collaboration with the GRIHA Council, we are integrating sustainable practices within our schools to create eco-friendly learning environments."

#### Valedictory Address

Shri Keshab Mahanta, Hon'ble Minister, Departments of Health & Family Welfare and Science and Technology, Information & Technology, Government of Assam, commended GRIHA Council for hosting the GRIHA Regional Conclave in Guwahati and for its crucial role in advancing discussions on sustainability and energy efficiency in the built environment. He emphasized that the insights and recommendations from the conclave will contribute to shaping Assam's green infrastructure strategies and Net Zero policies.

He further reaffirmed, "Assam is committed to collaborating with organizations like GRIHA Council to implement green building standards, develop training programs, and build capacity for a more sustainable and energy-efficient future."



#### Vote of Thanks



Ms. Shabnam Bassi, Deputy CEO & Secretary, GRIHA Council and Director, Sustainable Buildings Division, The Energy and Resources Institute (TERI) stressed that as we stand at the forefront of pressing realities of climate change and environmental challenges, the urgency of adopting sustainable building practices has never been greater.

She stated, "While we are the first generation to fully witness the impact of climate change, we must not be the last to take decisive action in addressing it." She highlighted that GRIHA Council's commitment to fostering partnerships with industry leaders and utilizing knowledge-sharing platforms to build confidence in sustainable practices. By increasing awareness and showcasing the tangible benefits of green buildings, she stressed the importance of driving broader acceptance and integration of sustainability within the construction sector.

# **Release of GRIHA Publications**

During the conclave the following set of guidelines were officially launched in the regional language Assamese

- Sustainable Guidelines for Design Implementation
- Sustainable Guidelines for Construction Management
- Sustainable Guidelines for Operation and Maintenance

These manuals provide comprehensive strategies for designing, constructing, and maintaining green buildings, thereby covering the entire building lifecycle.



Recognizing the need for accessibility and regional inclusivity, these manuals are also being translated into local languages. The localized edition, in Assamese, was unveiled during the Conclave, marking a significant step towards spreading sustainability at the grassroots level. More language launches are planned in the near future, ensuring that sustainable practices reach diverse communities across India.



A GRIHA Council Publication – Set of Manuals on Sustainable Guidelines for Design Implementation, Construction Management and Operation & Maintenance was released during the valedictory session of GRIHA Regional Conclave, Guwahati.

# Signing of Memorandum of Understanding (MoU)

At the GRIHA Regional Conclave in Guwahati, significant Memorandum of Understandings (MoU) were signed with The Indian Institute of Architects (IIA), Assam Chapter, and Association of Architects Assam (AAA). This collaboration aims to strengthen knowledge exchange, research, and capacity building in sustainable architecture and infrastructure development. By leveraging the expertise of these institutions, the partnership will promote best practices in green building design, climate-responsive urban planning, and sustainability education. The MoU marks a strategic step toward fostering innovation and regional inclusivity in sustainable development, reinforcing Assam's role as a model city for climate action in the built environment.





GRIHA Council and The Indian Institute of Architects, Assam Chapter signed a Memorandum of Understanding





GRIHA Council and Association of Architects Assam (AAA) signed a Memorandum of Understanding

# **GRIHA Felicitation Ceremony**

S. No.	School Name	State	Rating
1	Jorhat Divisional Office Building, Life Insurance Corporation of India Jeevan Prakash, Rajabari, Garali, Jorhat	Assam	5 star
2	PM Shri School Jawahar Navodaya Vidyalaya, West Jaintia Hills	Meghalaya	5 Star
3	PM Shri School Jawahar Navodaya Vidyalaya, Lohit	Arunachal Pradesh	4 star
4	PM Shri School Jawahar Navodaya Vidyalaya, Changlang	Arunachal Pradesh	4 star
5	PM Shri School Jawahar Navodaya Vidyalaya, West Siang	Arunachal Pradesh	4 star
6	PM Shri School Jawahar Navodaya Vidyalaya, Longding	Arunachal Pradesh	4 star
7	PM Shri School Jawahar Navodaya Vidyalaya, Dima Hasao	Assam	4 star
8	PM Shri School Jawahar Navodaya Vidyalaya, Mon	Nagaland	4 star
9	PM Shri School Jawahar Navodaya Vidyalaya, Wokha	Nagaland	4 star
10	PM Shri School Jawahar Navodaya Vidyalaya, West Sikkim	Sikkim	4 star
11	PM Shri School Jawahar Navodaya Vidyalaya, Gomati	Tripura	4 star
12	PM Shri School Jawahar Navodaya Vidyalaya, Dhalai	Tripura	4 star
13	PM Shri School Jawahar Navodaya Vidyalaya, North Sikkim	Sikkim	4 star

























# **Cultural Evening**







# **Key Highlights**

## **Inaugural Session:**

- The session emphasized the urgent need for immediate action to shift from discussions to implementing climate-responsive design and sustainable infrastructure to build long-term environmental resilience.
- It highlighted the importance of balancing development with environmental responsibility, ensuring that growth does not come at the cost of forests, rivers, and ecosystems.
- Discussions also addressed the escalating climate risks in the North-East, stressing the necessity of proactive mitigation strategies to combat increasing heat spikes, simultaneous floods, and droughts.
- The session reinforced that sustainability must become a standard across all construction projects, from large-scale developments to affordable housing, integrating energy-efficient design for longterm environmental and economic benefits.
- Collaboration emerged as a key theme, with the collective action from government, industry, academia, and communities, ensuring the implementation of practical and impactful solutions.

#### Plenary Session 1 - Building Disaster Resilience in Vulnerable Areas

- The session highlighted the growing climate challenges in cities like Jammu, Mumbai, and Guwahati, where existing infrastructure struggles to handle intensifying floods and extreme weather.
- Speakers emphasized how rapid urbanization disrupts natural systems, worsening flood risks. They called for sustainable, flood-resilient designs to balance development with environmental needs.
- Assam's high disaster vulnerability—including floods, landslides, and earthquakes—was a key focus.
   Experts stressed localized climate action and cross-sector data sharing for better disaster preparedness.
- Discussions also addressed the climate-agriculture-infrastructure link, warning that floods, droughts, and unplanned growth threaten both productivity and ecosystems.

#### <u>Plenary Session 2 - Building Smart, Green Cities – Infrastructure for Tomorrow</u>

- The session emphasized the critical role of smart, green infrastructure in shaping efficient, resilient, and eco-friendly cities by integrating technology, sustainability, and urban planning.
- Speakers highlighted that sustainability must be embedded in architecture from the start, with climate-responsive strategies, hands-on learning, and interdisciplinary collaboration ensuring longterm resilience.
- The discussion addressed the need for innovation in road and bridge infrastructure, advocating for recycled materials, reduced cement usage, and seismic-based isolation systems to build durable and environmentally responsible transport networks.
- The importance of technology-driven urban planning was emphasized, with AI, IoT, and smart mass transit solutions seen as key to reducing congestion and enhancing urban efficiency amid rapid urbanization.
- The session also addressed rethinking conventional construction materials, encouraging the use of responsibly sourced timber to preserve architectural heritage while reducing reliance on carbonintensive materials like concrete and bricks.

#### Plenary Session 3 - Blueprint to Legislation - Policies Shaping Climate Action

- Speakers emphasized the urgent need to address rapid urbanization, climate change, and resource constraints through sustainable urban development.
- The session highlighted the importance of prioritizing sustainable building materials and providing better funding and technical support for builders.
- The session called for policy incentives, such as subsidies and tax benefits, to encourage compliance with green building standards.
- Discussion addressed the necessity of interdepartmental collaboration in Assam to integrate climate resilience into urban planning, promote climate-smart agriculture, and expand renewable energy adoption.
- The session also emphasized the role of academia in ensuring future engineers integrate sustainability into design and planning.
- The session also called for architects and building consultants to be actively involved in policymaking to develop energy-efficient, low-carbon, and future-ready designs that are both practical and implementable.

#### **Closing Session**

- The session highlighted Assam government's collaboration with GRIHA Council is driving sustainable development, shaping green infrastructure strategies, and advancing Net Zero policies.
- Speakers emphasized the importance of an integrated framework, including building codes, incentives, and awareness campaigns to address misconceptions about the costs of green buildings.
- The session highlighted the need to integrate sustainability into everyday construction practices, policy frameworks, and decision-making processes to achieve long-term environmental and economic benefits.
- Speakers also discussed strategies to address regulatory hurdles, financial constraints, and lack of awareness that often hinder the large-scale adoption of green building practices.
- The conclave called for collective efforts from government bodies, architects, associations, and consultants to strengthen policies, enforce sustainable bylaws, and promote eco-friendly procurement in construction projects.

# **GRIHA Regional Conclave in News**

# The Sentinel city

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#### NPS employees miffed at budget announcement on pension

Budget announcements on Lakshminath Bezbaruah bailed

Budget 2025 neglects PwDs: PSSA

GRIHA Regional Conclave on 'Accelerating Climate Action in the Built Environment' held

Source: The Sentinel

#### Assam's accelerated growth reflected in Budget: Dilip Saikia

#### AdtU, VFS Global Academy Drug peddler sign MoU on courses



## Indigenousherald

5th GRIHA regional conclave on accelerating climate action

n faind. This platform will play a crucial role in balanting collaborations that pave the way for a gre

Source: The Indigenous Herald

# 5th GRIHA Regional Conclave held in Guwahati

Source: The Hills Times

# गुवाहाटी में जलवायु संबंधी पांचवां गृह क्षेत्रीय सम्मेलन आयोजित

Source: Dainik Purvoday



गुवाहाटी: 'निर्मित पर्यावरण में त्वरित जलवायु कार्रवाई' पर गृह क्षेत्रीय सम्मेलन आयोजित

भारत में सबसे तेजी से शहरीकरण करने वाले राज्यों में से एक के रूप में, असम अपने बुनियादी ढाँचे के विकास में अद्वितीय चुनौतियों का सामना करता है, जिसमें जलवायु संवेदनशीलता, संसाधन प्रबंधन और शहरी फैलाव शामिल हैं।



Sentinel Digital Desk Published on: 11 Mar 2025, 3:21 pm

Source: The Sentinel



Source: DD News Source: ND 24



Source: SP News Agency



# गुवाहाटी में आयोजित निर्मित पर्यावरण में जलवायु संबंधी गतिविधियों में तेजी लाने पर पांचवां गृह क्षेत्रीय सम्मेलन

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Source: Viksit Bharat Samachar

# City conclave pitches for climate action

Hirakjyoti Deka TNN

Guwahati: Green Rating for Integrated Habitat Assessment (GRIHA) Council, in collaboration with the Assam Science Technology and Environment Council (ASTEC) and Assam govt, has organised its 5th GRIHA regional conclave.

Themed "Accelerating Climate Action in the Built Environment", the event on Monday aimed to promote sustainable practices in infrastructure, focusing on policy implementation, disaster resilience, and smart, sustainable development strategies.

Three publications on sustainable design and construction guidelines were launched during the event in Assamese, and the GRIHA Council signed MoUs with the Indian Institute of Architects (IIA) Assam Chapter and the Assaciation of Architects Assam (AAA) to further promote sustainability in the built environment.

Minister of science, technology, and climate change, Keshab Mahanta, highlighted Assam's expanding role in clean energy, green technologies, and low-carbon infrastructure following the Advantage Assam 2.0 summit. Technical sessions during the conclave delved into policy implementation, building resilience, and sustainable infrastructure development.

Source: Assam Tribune

# The state of the s

Source: Dainik Jugasankha

# 5th Griha Regional Conclave held

GUWAHATI, March 11: Griha Council, in collaboration with Assam Science Technology & Environment Council (ASTEC), held the 5th GRI-HA Regional Conclave on March 10 here in Guwahati on the theme 'Accelerating Climate Action in the Built Environment'. Keshab Mahanta, Minister for the departments of Health & Family Welfare and Science and Technology, Information & Technology, attended the conclave and spoke on the recently concluded 'Advantage Assam 2.0 - Investment and Infrastructure Summit 2025' - the Investors' Summit 2025.

The technical sessions included insights on the role of policy and legislative implementation in promoting sustainable practices, the critical need to enhance resilience in disaster-prone areas, and the integration of smart and sustainable infrastructure development strategies by government and industry experts from the region. A set of 3 publications - 'Sustainable Guidelines for Design Implementation', 'Construction Management' and 'Operation & Maintenance' - was also launched at the event.

Source: Times of India



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