



GRIHA
Regional Conclave 2025

ACCELERATING CLIMATE ACTION IN THE BUILT ENVIROMENT



25TH MARCH 2025



BHUBANESWAR

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Introduction

GRIHA, recognized as India's own green building rating system, 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 Life spaces Developers Limited; JK Cement Limited; Saint Gobin; 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".

The **GRIHA Regional Conclave Bhubaneswar** was scheduled on **25th March 2025** at **Mayfair Convention, Bhubaneswar, Odisha, and India** on the theme '**Accelerating Climate Action in the Built Environment**'.

Climate change mitigation is a race against time, given the accelerating environmental degradation. The building and construction sector alone contributes nearly 34% of global energy consumption and approximately 37% of greenhouse gas emissions (UNEP, 2022). This underscores the urgent need for transformative measures in design, construction, and urban management.

In response, GRIHA Council is committed to promoting sustainable practices in the built environment while driving innovative solutions to mitigate climate change. Through its initiatives, GRIHA fosters the adoption of green building strategies, energy efficiency, and resilient urban planning, ensuring a more sustainable and climate-responsive future.

GRIHA Council introduced the GRIHA Regional Conclaves with the idea to augment the development of sustainable habitats and resilient communities at the regional level.

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.

Background

Bhubaneswar, the capital city of Odisha, stands as a rapidly growing urban centre with a unique blend of heritage and modernity, making it an ideal venue for discussions on accelerating climate action in the built environment. Recognized as India's first Smart City under the Smart Cities Mission, Bhubaneswar has made significant strides in urban planning, infrastructure development, and climate resilience. With its rich cultural history and growing metropolitan landscape, the city provides a dynamic case study for sustainable urban development.

Despite its structured planning and increasing focus on sustainability, Bhubaneswar faces numerous environmental challenges. Odisha, being highly vulnerable to climate change due to its long coastline, frequently experiences cyclones, rising sea levels, and extreme weather events. Additionally, the rapid urbanization of Bhubaneswar has led to challenges such as increased energy consumption, traffic congestion, air pollution, and stress on water resources. As an administrative and economic hub, the city is in a strategic position to drive climate-responsive urban planning and sustainable construction practices.

In response to these challenges, Bhubaneswar has taken proactive measures in green infrastructure development. The city has implemented sustainable urban mobility solutions, enhanced storm water management systems, and promoted energy-efficient building regulations under national policies like the Energy Conservation Building Code (ECBC) and the Odisha Renewable Energy Policy. Furthermore, initiatives like the Bhubaneswar Town Centre District (BTCD) and solar energy programs are paving the way for climate-resilient urban growth.

As an emerging smart city, Bhubaneswar is focusing on integrating sustainability with urban expansion. The emphasis extends beyond technological advancements to climate adaptation, energy efficiency, and reducing carbon footprints. From sustainable transportation networks to climate-responsive housing and resilient infrastructure, the city's development strategies are centered on future-proofing its urban landscape.

The GRIHA Regional Conclave in Bhubaneswar served as a key platform to deliberate on innovative solutions for climate action in the built environment. The conclave fostered discussions on best practices and region-specific strategies to enhance resilience against climate change by bringing together policymakers, urban planners, architects, developers, and sustainability experts. With the theme **"Accelerating Climate Action in the Built Environment,"** the conclave aligned with Bhubaneswar's vision for sustainable urban development, focusing on resource efficiency, climate adaptation, and carbon reduction.

In collaboration with state authorities and industry leaders, the event reinforced Bhubaneswar's role as a forerunner in sustainable development, highlighting its potential to set an example for other growing cities in India.

Acknowledgements

At the outset, GRIHA Council would like to extend our deepest gratitude to the Government of Odisha and Bhubaneswar Municipal Corporation for their unwavering support and invaluable contribution to the success of the GRIHA Regional Conclave, Bhubaneswar.

We are extremely thankful to the eminent dignitaries who graced the event with their esteemed presence, such as - **Shri Prithiviraj Harichandan**, the Hon'ble Cabinet Minister of Law, Works & Excise, and Government of Odisha and **Shri Babu Singh**, Member of Odisha Legislative Assembly, Ekamra Bhubaneswar Constituency and **Shri Rajesh Prabhakar Patil**, IAS, Commissioner, Bhubaneswar Municipal Corporation and Special Secretary, Housing and Urban Development Department, Government of Odisha and **Shri Subhendra Kumar Nayak**, OAS, Special Secretary, Industries Department, Government of Odisha. Their presence and insights played a pivotal role in advancing the discourse on sustainability and climate resilience.

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, industry partners, multilateral partners, associate partners, and media partners, for their steadfast support throughout the GRIHA Regional Conclave.

Special thanks to **Sustainability Leaders Odisha Pvt. Ltd.** 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 Bhubaneswar.

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: 25th March 2025

Venue: Mayfair Convention, Jaydev Vihar, Bhubaneswar, Odisha 751013

0900 – 1000 hrs.	Registration
1000 – 1100 hrs.	Inaugural Session <ul style="list-style-type: none"> • Lighting the lamp • Welcome Address • Release of GRIHA Publication • Special Address • Keynote Address • Signing of Memorandum of Understanding • Inaugural Address • Presidential Address • GRIHA Award Ceremony • GRIHA Updates • Vote of Thanks
1100 – 1130 hrs.	Pitch Booth & Networking Tea/Coffee
1130 – 1300 hrs.	Plenary Session 1: Green and Blue Infrastructure Planning- A Regional Perspective
1300 – 1400 hrs.	Networking Lunch
1400 – 1530 hrs.	Plenary Session 2: Smart Building Services for Net Zero Future
1530 – 1600 hrs.	Pitch booth & Networking Tea/Coffee
1600 – 1730 hrs.	Closing Session: Climate Policy Advocacy in Odisha
1730 hrs. onwards	High Tea

Detailed Agenda

‘Accelerating Climate Action in the Built Environment’

Date: 25th March 2025

Venue: Mayfair Convention, Jayadev Vihar, Bhubaneswar, Odisha 751013

0900 – 1000 hrs.	Registration
	Inaugural Session
	<p><i>Lighting the Lamp</i> <i>Welcome Address</i> Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, TERI, New Delhi.</p> <p><i>Special Remark:</i> Shri Subhendra Kumar Nayak, OAS, Special Secretary, Industries Department, Government of Odisha</p> <p><i>Release of GRIHA Publication</i> <i>Special Address:</i> Shri Rajesh Prabhakar Patil, IAS, Commissioner, Bhubaneswar Municipal Corporation and Special Secretary, Housing and Urban Development Department, Government of Odisha.</p> <p><i>Signing of Memorandum of Understanding</i></p> <p><i>Keynote Address:</i> Shri Babu Singh, MLA, Ekamra Bhubaneswar Constituency, Member of Odisha Legislative Assembly, District President Bharatiya Janata Party Bhubaneswar</p> <p><i>GRIHA Felicitation Ceremony</i> <i>GRIHA Updates:</i> Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council & Director, Sustainable Buildings Division, TERI, New Delhi.</p> <p><i>Vote of Thanks:</i> Ar. Sudipta Singh, Founder & Managing Director, Sustainability Leaders Odisha Pvt. Ltd., Bhubaneswar.</p>
1000 – 1100 hrs	
1100 – 1130 hrs.	Networking Tea/Coffee
	Plenary Session 1: Green and Blue Infrastructure Planning- A Regional Perspective

<p>1130 – 1300 hrs</p>	<p>Odisha's unique geographical landscape, marked by its extensive coastline, rivers, and rich biodiversity, presents both opportunities and challenges in the face of climate change. Integrating Green and Blue Infrastructure (GBI) into urban and regional planning is essential to enhancing climate resilience, protecting natural ecosystems, and supporting sustainable development.</p> <p>This session will focus on the strategic role of green infrastructure—such as urban forests, green roofs, and parks—and blue infrastructure—including wetlands, rivers, and coastal ecosystems—in building climate-adaptive and sustainable communities. Discussions will highlight how GBI can mitigate urban flooding, improve air and water quality, enhance biodiversity, and regulate microclimates.</p> <p>Participants will explore innovative planning approaches that blend ecological preservation with urban growth, including sustainable drainage systems, rainwater harvesting, and ecosystem restoration. The session will also emphasize the integration of GBI with green building standards like GRIHA to promote low-carbon, resource-efficient development.</p> <p>By prioritizing green and blue infrastructure, Odisha can strengthen its resilience against climate risks, enhance urban liveability, and support inclusive, nature-based solutions. This session aims to provide policymakers, urban planners, and developers with actionable insights into implementing GBI strategies for a sustainable and climate-resilient future.</p> <p><i>Moderator:</i> Smt. Shabnam Bassi, Deputy Chief Executive Officer & Secretary, GRIHA Council & Director, Sustainable Buildings Division, TERI</p> <p><i>Panellists:</i></p> <ul style="list-style-type: none"> • Shri Veerendra Singh, Regional Officer, National Highway Authority of India, Bhubaneswar • Shri Bilash Kumar Behera, City Engineer, Bhubaneswar Municipal Corporation (BMC), Bhubaneswar • Prof. P.P. Karmakar, HoD, Department of Architecture, College of Engineering & Technology, BPUT, Bhubaneswar • Shri. K.K. Mitra, President, Lloyd Insulations (India) Limited and Member of ASHRAE • Ar. Mousumi Nanda, Vice-Chair Person, Indian Institute of Architects (IIA) Odisha Chapter
<p>1300 – 1400 hrs</p>	<p>Lunch Break</p>
	<p>Plenary Session 2: Smart Building Services for Net Zero Future</p> <p>As Odisha advances toward sustainable urbanization, the integration of smart buildings and intelligent services is essential for enhancing energy efficiency, resource management, and climate resilience. Smart buildings leverage advanced technologies such as IoT (Internet of Things), Building Management Systems (BMS), and data analytics to optimize energy consumption, water usage, indoor air quality, and overall operational efficiency. These systems enable real-time</p>

<p>1400-1530 hrs</p>	<p>monitoring, predictive maintenance, and adaptive energy management, resulting in reduced carbon emissions and lower operational costs.</p> <p>The session will highlight innovative solutions, including automated lighting and HVAC systems, smart meters, renewable energy integration, and water-efficient technologies that align with green building standards like GRIHA. Discussions will also emphasize the importance of user-centric design, occupant comfort, and adaptive spaces that respond to environmental changes. By adopting smart building solutions, Odisha can significantly enhance sustainability in its infrastructure, contributing to climate action goals and improving urban living standards. This session aims to equip industry professionals, policymakers, and developers with actionable insights into implementing smart technologies for a more sustainable and resilient built environment.</p> <p><i>Moderator:</i> Shri Akash Deep, Deputy General Manager & Treasurer, GRIHA Council, New Delhi</p> <p><i>Panellists:</i></p> <ul style="list-style-type: none"> • Shri. Bijoy Tripathy, Chairman, Indian Building Congress (Retd. EIC Buildings, PWD and CGM (P&C), IDCO, Govt. of Odisha) • Prof P. Dinakar, Dean, Sponsored Research and Industrial Consultancy (SRIC), School of Infrastructure, Indian Institute of Technology (IIT) Bhubaneswar • Prof. (Dr.) K. Mohan, Head & Dean, Faculty of Architecture, Sri Sri University, Cuttack • Sheikh Mairajul Haque, Co-Founder & Director, Acrerise, (Member, CREDAI) • Ar. Ruchipurna Jena, Founder, Prakriti Architects, Bhubaneswar
<p>1530 – 1600 hrs.</p>	<p>Networking Tea/Coffee</p>
	<p>Closing Session: Climate Policy Advocacy in Odisha</p> <p>Odisha, a state at the forefront of India's climate resilience challenges, offers a critical platform for discussions on climate policy advocacy.</p> <p>Odisha's unique geographical and ecological diversity makes it particularly vulnerable to climate change impacts, such as cyclones, rising sea levels, and erratic rainfall patterns. Consequently, the state requires a robust climate policy framework to address these challenges while fostering economic growth.</p> <p>This session will bring together policymakers, environmental experts, industry leaders, and academics to deliberate on aligning Odisha's development trajectory with sustainable and green practices in the built environment. The session aims to foster a collaborative approach, creating actionable pathways to strengthen Odisha's climate resilience and align with India's net-zero ambitions. Participants will gain insights into scalable solutions and policy strategies to build a sustainable future for Odisha.</p>

1600– 1730 hrs	<p><i>Moderator:</i> Shri Sanjay Seth, Vice President & Chief Executive Officer, GRIHA Council & Senior Director, Sustainable Infrastructure Programme, TERI</p> <p><i>Panellists:</i></p> <ul style="list-style-type: none"> • Shri. Pyari Mohan Mishra, Engineer-In-Chief (Electricity) -cum- Principal Chief Electrical Inspector (PCEI), Bhubaneswar, Odisha. • Smt. (Prof.) Kajri Mishra, Academic Dean, School of Human Settlements, Xavier Institute of Management (XIM) • Shri. Ambika Prasad Nanda, Head CSR- Odisha, Tata Steel Ltd. • Shri Chirag Khaitan, Executive Director, SPD Construction Pvt Ltd., Bhubaneswar. • Ar. Sudipta Singh, Founder & MD, Sustainability Leaders Odisha Pvt. Ltd., Bhubaneswar
1730 hrs Onwards	High Tea
	Closing of GRIHA Regional Conclave

Inaugural Session

Welcome Address

Shri Sanjay Seth, Vice President and Chief Executive Officer of the GRIHA Council and Senior Director of the Sustainable Infrastructure Programme at (TERI)

He stated, "GRIHA is India's own national green building rating system, tailored to the country's diverse climate, construction practices, and operational needs. Unlike in many other parts of the world, not every building in India is air-conditioned. In fact, air-conditioning penetration remains surprisingly low, with only about 8-10% of households using it. The vast majority of our population continues to depend on natural ventilation and ceiling fans for thermal comfort. Ensuring thermal comfort and safety in buildings is not just an option—it is a fundamental requirement. If our designs fail to meet these needs, then we must reconsider our approach."



Special Remark

Shri Subhendra Kumar Nayak, OAS, Special Secretary, Industries Department, Government of Odisha, highlighted Odisha's resilience and commitment to sustainable urbanization at the GRIHA Regional Conclave in Bhubaneswar.

"After Cyclone Fani devastated Odisha in 2019, the World Bank and the state government took significant steps to rebuild disaster-resilient housing, while ORDR played a key role in restoring infrastructure. Odisha's massive investments reflect its dedication to resilience and long-term growth. IDCO is driving responsible industrial growth, and Paradip Port is adopting green hydrogen for a clean energy transition. GRIHA has played a crucial role in promoting energy-efficient and sustainable urban planning, aligning with Odisha's vision for climate resilience and sustainability."



Special Address

Shri Rajesh Prabhakar Patil, IAS, Commissioner, Bhubaneswar Municipal Corporation, and Special Secretary, Housing and Urban Development Department, Government of Odisha, emphasized the need for sustainable urbanization at the GRIHA Regional Conclave in Bhubaneswar.

“As urbanization accelerates, sustainability must be our priority to create liveable cities for future generations. Bhubaneswar has the opportunity to lead by integrating green technology, sustainable planning, and climate-conscious policies. Tackling traffic congestion, urban flooding, and green cover expansion reflects our commitment to balanced growth. However, this transformation demands collective effort—government, developers, and citizens must work together to ensure development and sustainability go hand in hand.”



Keynote Address

Shri Babu Singh, MLA, Ekamra Bhubaneswar Constituency, highlighted Bhubaneswar’s leadership in sustainable urban development at the GRIHA Regional Conclave.

“As one of India’s fastest-growing cities, Bhubaneswar is setting new benchmarks in sustainable urban planning. With climate-smart policies, green mobility, and smart city initiatives, we are ensuring growth without compromising heritage or ecological balance. Investments in renewable energy, electric mobility, and waste management are transforming the city into a modern urban hub rooted in its identity. Odisha is poised to lead in sustainable development, green industrialization, and cultural conservation.”

He further emphasized Odisha’s spirit: ***“Bande Utkal Janani is not just an anthem but a call to action—urging us to uphold our state’s pride, heritage, and prosperity. With collective effort and commitment to sustainability, we will build an Odisha that future generations will be proud of. Jai Jagannath!”***



GRIHA Updates

Smt. Shabnam Bassi, Deputy CEO and Secretary, GRIHA Council, emphasized collaboration at the GRIHA Regional Conclave:

"Sustainable development isn't the responsibility of one entity alone—it requires a collective effort from governments, businesses, academia, and civil society. Together, we can build an energy-efficient, environmentally conscious future that enhances quality of life."

She further highlighted GRIHA Council's role: "We stand for credibility, integrity, and inclusiveness. Our approach extends beyond rating buildings to providing continuous guidance from design to post-occupancy. We work closely with projects to ensure sustainability is achieved in both planning and execution."



Special Remark



Smt. Dikshya Jyoti Mishra, Principal, JNV Jajpur, Odisha, delivered the Vote of Thanks on behalf of Smt. Vidhu Bajpai, Deputy Commissioner, NVS, Ministry of Education.

"The ratings we have achieved are a result of the collective efforts of our students, teachers, and GRIHA Council, setting a benchmark for sustainability in educational infrastructure."

She added, *"Beyond empowering our current workforce, we are shaping future leaders by integrating green skills into curricula and fostering a culture of sustainability in academics."*



Mr Sanjay Seth, Vice President and CEO, GRIHA Council and Senior Director, TERI felicitating Shri Subhendra Kumar Nayak, OAS, Special Secretary, Industries Department, Government of Odisha



Mr Sanjay Seth, Vice President and CEO, GRIHA Council and Senior Director, TERI felicitating Shri Rajesh Prabhakar Patil, IAS, Commissioner, Bhubaneswar Municipal Corporation and Special Secretary, Housing and Urban Development Department



Mr Sanjay Seth, Vice President and CEO, GRIHA Council and Senior Director, TERI felicitating Shri Babu Singh, MLA, Ekamra Bhubaneswar Constituency, Member of Odisha Legislative Assembly, District President Bharatiya Janata Party Bhubaneswar



Ms Shabnam Bassi, Shri. Rajesh Prabhakar Patil, Mr Sanjay Seth, Ar. Sudipta Singh (from L to R)

Plenary Session 1

"Green and Blue Infrastructure Planning – A Regional Perspective"

This session highlighted the role of **green and blue infrastructure** in building climate-resilient cities. **Green infrastructure** includes parks and urban forests that enhance biodiversity and air quality, while **blue infrastructure** encompasses water bodies and wetlands that aid in flood control and ecological balance.



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

As the moderator, emphasized the transformative power of **green and blue infrastructure** in shaping climate-resilient cities. She highlighted how **green spaces** enhance biodiversity and air quality, while **water bodies and wetlands** serve as natural defences against floods and environmental degradation. Her insights set the tone for a forward-thinking discussion on sustainable urban planning.

Shri Veerendra Singh, Regional Officer, National Highway Authority of India, Bhubaneswar, stated that Green flyovers are more than just roads; they are pathways to a cleaner, cooler, and greener future. Sustainable cities need smart solutions—energy-efficient materials, green spaces, and eco-friendly mobility. Turning waste into opportunity, fly ash and gypsum make our roads stronger while reducing environmental impact. Efficient transport isn't just about speed; it's about sustainability, connectivity, and a pollution-free future. Expanding metro and railway networks paves the way for smarter, cleaner, and more accessible cities.





Shri. K.K. Mitra, President, Lloyd Insulations (India) Limited and Member of ASHRAE

He stated “Cool cities are the future, where green roofs, reflective surfaces, and tree plantations help combat the urban heat island effect. Smart cooling solutions, including energy-efficient HVAC and passive cooling, are essential for reducing energy waste. Green rooms not only enhance air quality but also improve insulation and mental well-being. Innovations like hollow cabins and insulated platforms boost thermal comfort while promoting sustainability. With growing water challenges, rainwater harvesting and smart water management systems play a crucial role in conservation. A central monitoring system further optimizes energy use, ensuring a more efficient and eco-friendly urban landscape.”

Shri Bilash Kumar Behera, City Engineer, Bhubaneswar Municipal Corporation (BMC), Bhubaneswar

He highlighted “Smart cities need smart solutions— integrating digital parking, EV charging, and multi-level systems to optimize urban space. As pollution rises in metro cities, electric mobility and sustainable planning are the way forward. Bhubaneswar’s eastern expansion and Greater Capital Region development promise balanced growth with green, smart infrastructure. With the right policies, funding, and public-private partnerships, urban challenges can turn into opportunities for a more sustainable future.”



Ar. Mousumi Nanda, Vice-Chair Person, Indian Institute of Architects (IIA) Odisha Chapter

She stated “Odisha’s architectural legacy, rooted in Kalinga design, showcases climate-responsive structures using locally sourced materials. Wetlands serve as nature’s water filters, supporting biodiversity and flood control. Inspired by China’s Sponge City model, integrating permeable surfaces and green spaces can make cities more resilient. Green roofs with poured pigment add beauty while reducing heat and improving air quality. Multi-purpose vertical garden plazas, seen in Moscow and Italy, redefine urban spaces by blending greenery with functionality, fostering community and sustainability.”



Prof. P.P. Karmakar, HoD, Department of Architecture, College of Engineering & Technology, BPUT, Bhubaneswar

He stated “Climate-responsive design must be at the core of architectural education. Design studios should encourage sustainability-driven innovation, while GRIHA certification should be integrated into the curriculum. This will equip future architects with the skills to create eco-friendly, resilient structures. Education must align with the urgent need for sustainable urban development.”



Smt. Shabnam Bassi, Smt. Ar. Mousumi Nanda, Shri. Rajesh Prabhakar Patil, Shri. K.K. Mitra, Prof. P.P. Karmakar, Shri Veerendra Singh and Shri Bilash Kumar Behera (from L to R)

Plenary Session 2

“Smart Building Service For Net Zero Future”

This session deliberated on “**Smart Building Services for Net Zero Future.**” The speakers highlighted innovative solutions, including automated lighting and HVAC systems, smart meters, renewable energy integration, and water-efficient technologies that align with green building standards like GRIHA.




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Ar. Akash Deep, Deputy General Manager & Treasurer,
GRIHA Council

As a moderator, he stated “Smart buildings pave the way for a net-zero future by optimizing energy use through AI, IoT, and renewable solutions. With intelligent systems for lighting, HVAC, and water management, they reduce carbon footprints while enhancing efficiency. The future lies in buildings that sustain themselves and the planet.”

Shri. Bijoy Tripathy, Chairman, Indian Building Congress (Retd. EIC Buildings, PWD and CGM (P&C), IDCO, Govt. of Odisha)

In his discussion he highlighted “Smart buildings are the key to a net-zero future, combining efficient design, sustainability, and resilience. Sloped roofs aid water drainage, reducing reliance on tankers and preventing urban flooding. Adhering to GRIHA ratings, ECBC, and the National Building Code ensures energy efficiency and eco-friendly construction. These buildings also tackle pollution, and disaster resilience, creating urban spaces that are sustainable, efficient, and future-ready.”





Prof P. Dinakar, Dean, Sponsored Research and Industrial Consultancy (SRIC), School of Infrastructure, Indian Institute of Technology (IIT) Bhubaneswar.

He stated “Academic-industry collaboration is the foundation for Odisha’s net-zero future. By harnessing rich industrial by-products, integrating cutting-edge technology, and adopting eco-friendly building materials, we can create resilient infrastructure. A holistic approach to water recharge and sustainable construction will drive Odisha toward a greener, self-sustaining tomorrow.”

Prof. (Dr.) K. Mohan, Head & Dean, Faculty of Architecture, Sri Sri University, Cuttack

He highlighted “Transforming Odisha’s future starts with education—integrating sustainability into academic curriculums is key. Once unfamiliar, GRIHA is now shaping discussions on net-zero buildings, vernacular mud architecture, and modern sustainable designs. Bridging practical knowledge with innovation will empower future architects to build climate-resilient, eco-friendly cities.”



Sheikh Mairajul Haque, Co-Founder & Director, Acrerise, (Member, CREDAI)

He stated "Public awareness of GRIHA is the catalyst for Odisha’s net-zero future. As user demand for sustainable spaces grows, green-certified buildings will no longer be a luxury but a necessity. Cost-effective green solutions, driven by informed choices, will shape a resilient, energy-efficient urban landscape for generations to come.”

Ar. Ruchipurna Jena, Founder, Prakriti Architects, Bhubaneswar

In his discussion, he stated "Awareness of GRIHA among the public is pivotal in accelerating Odisha’s transition to a net-zero future. As sustainability shifts from an option to a necessity, informed user demand will drive the adoption of energy-efficient, cost-effective, and high-performance buildings. The push for green building structures will not only minimize environmental impact but also optimize long-term savings and resilience. By integrating green technologies, efficient resource management, and regulatory incentives, Odisha can pioneer a future where sustainable construction is the norm, fostering a built environment that harmonizes economic growth with ecological responsibility.”





Shri. Ar. Akash Deep, Shri. Ar. Ruchipurna Jena, Shri. Shri. Bijoy Tripathy, Shri. Prof. (Dr.) K. Mohan, Shri. Prof P. Dinakar and Shri. Sheikh Mairajul Haque (From L to R)



Shri. Ar. Akash Deep, Ar. Ruchipurna Jena, Shri. Bijoy Tripathy, Shri. Prof. (Dr.) K. Mohan, Shri. Prof P. Dinakar and Shri. Sheikh Mairajul Haque (From L to R)

Closing Session

“Climate Policy Advocacy in Odisha”

The session stressed that Odisha’s climate policy advocacy must drive resilience through green infrastructure, renewable energy, and sustainable urban planning. Speakers highlighted public awareness and industry collaboration for achieving net-zero goals. The session deliberated on integrating local solutions with global best practices, strong governance and innovation that will shape a sustainable future for the state.



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

In the session, he highlighted that climate change and emphasized its far-reaching impacts on ecosystems, infrastructure, and communities. As a moderator, he underscored the urgency of integrating climate resilience into policy and urban planning. His insights reinforced the need for sustainable solutions, industry collaboration, and proactive governance to combat the growing environmental challenges.

Shri. Pyari Mohan Mishra, Engineer-In-Chief (Electricity) cum Principal Chief Electrical Inspector (PCEI), Bhubaneswar, Odisha.

He emphasized “the transformative journey of green building expansion and policy implementation in Odisha. He highlighted the crucial role of energy conservation, the evolution of power supply strategies, and the impact of the 2008 ECBC in driving sustainable development. His insights underscored the need for scaling energy-efficient practices to support a net-zero future.”





Smt. (Prof.) Kajri Mishra, Academic Dean, School of Human Settlements, Xavier Institute of Management (XIM)

She underscored the need for a systematic approach to sustainable architecture, integrated water management, and policy-driven climate action in Odisha. She emphasized “India's role as a policy leader and the importance of academic partnerships with the government to create expertise through research and training programs. Addressing Odisha’s resource balance, she called for innovative solutions to bridge awareness and implementation for a resilient future.”

Shri. Ambika Prasad Nanda, Head CSR- Odisha, Tata Steel Ltd.

He underscored “the crucial role of CSR in addressing climate action and disaster resilience in Odisha. He emphasized the need for sustainable urban development, energy efficiency, and responsible resource management, particularly for vulnerable communities. Highlighting the impact of climate change on agriculture and urban populations, he called for ecosystem conservation and proactive engagement in public policy. He stressed the importance of integrating CSR initiatives with long-term sustainability goals to create a balanced and resilient future.”



Shri Chirag Khaitan, Executive Director, SPD Construction Pvt Ltd., Bhubaneswar.

He emphasized “the importance of early education in water conservation and sustainability. He advocated for integrating conservation policies into construction frameworks, ensuring responsible resource use. Highlighting GRIHA-certified projects, he promoted eco-friendly materials like cow dung, mud houses, fly ash, and recycled red bricks. His vision focuses on merging traditional building practices with modern sustainability, creating a greener and more responsible construction industry.”



Ar. Sudipta Singh, Founder & MD, Sustainability Leaders Odisha Pvt. Ltd., Bhubaneswar

She emphasized “Odisha’s rapid economic growth and its pioneering role in ECBC implementation. However, she pointed out the slow progress in sustainability and climate action, stressing the need for systemic change beyond existing policies. Quoting Greta’s proverb, ‘Climate is changing but not politics,’ she highlighted the challenges in policy implementation on the ground. She advocated for political reform and change in the government system to achieve the net zero ambition by 2047. She stressed, “There is no time to play by rules or quick fixes; we must treat climate change as a crisis not as one of the problems, since there is no substitute for real climate action.”



Shri. Sanjay Seth, Shri. Pyari Mohan Mishra, Shri. Ambika Prasad Nanda, Smt. Prof. Kajri Mishra, Shri. Chirag Khaitan and Ar Sudipta Singh (From L to R)



Shri. Sanjay Seth, Shri. Pyari Mohan Mishra, Smt. Prof. Kajri Mishra, Ar Sudipta Singh, Shri. Ambika Prasad Nanda and Shri. Chirag Khaitan (From L to R)



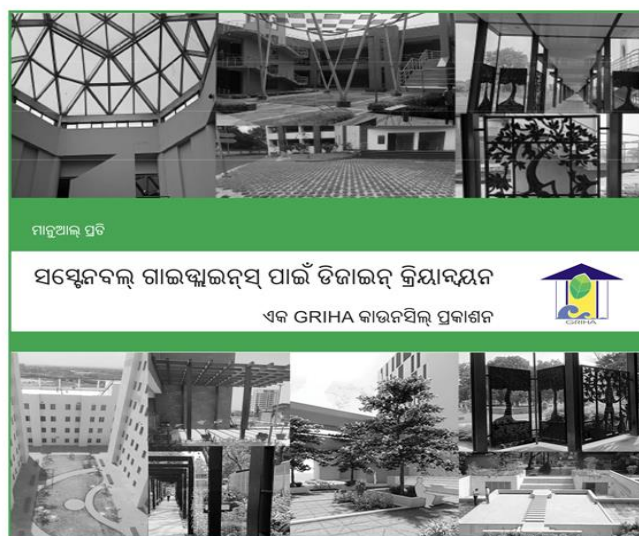
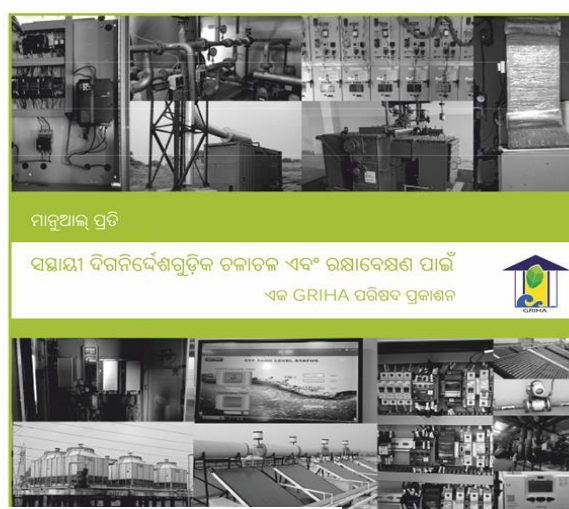
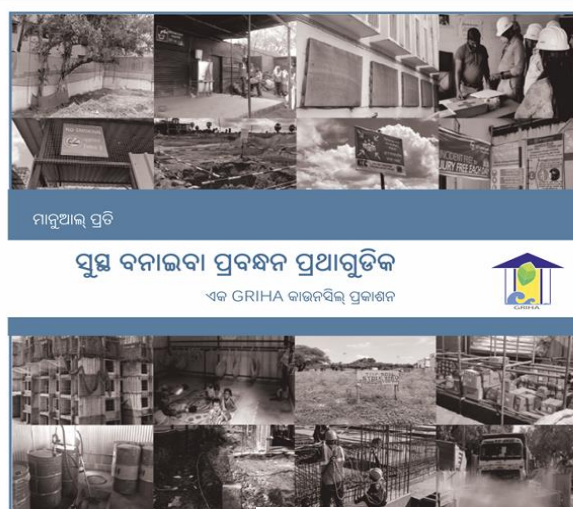
Release of GRIHA Publications

Sustainable Guidelines for Design Implementation, Construction Management

During the conclave, the following set of guidelines was officially launched in the regional language i.e Odia.

- 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 **Odia**, 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.

Signing of Memorandum of Understanding (MoU)

At the GRIHA Regional Conclave in Bhubaneswar, a landmark MoU was signed **between GRIHA Council and Siksha 'O' Anusandhan, Odisha**, to advance sustainable architecture and infrastructure. This collaboration fosters knowledge exchange, research, and capacity building, promoting green building design and climate-responsive urban planning. By integrating expertise, the partnership strengthens sustainability education and innovation, reinforcing Bhubaneswar's leadership in climate action within the built environment.



Smt. Sabnam Bassi, Deputy CEO, GRIHA Council and Shri P K Patra, Dean, SRIC, Siksha 'O' Anusandhan, Odisha signed a Memorandum of Understanding during the event

GRIHA Felicitation Ceremony

S.No	Name	State	Rating type	Rating
GRIHA Rating Awards				
1	Redevelopment of Birsa Munda Stadium and Construction of Multi Level Car Parking Building at Rourkela	Odisha	GRIHA Provisional Rating	4 Star
2	Construction of Netaji Bus Terminus at Cuttack	Odisha	GRIHA	3 Star
3	NEW BMC CORPORATION BUILDING INCLUDING THE INTELLIGENT CITY OPERATION CENTRE, BHUBANESWAR	Odisha	GRIHA Provisional Rating	3 Star
4	Municipal Market on Bada Danda, Puri	Odisha	GRIHA	3 Star
GRIHA for Existing School Rating Awards				
1	PM Shri School Jawahar Navodaya Vidyalaya, Jagatsingpur	Odisha	GRIHA Existing Schools	5 Star
2	PM Shri School Jawahar Navodaya Vidyalaya, Landiguda, Koraput	Odisha	GRIHA Existing Schools	5 Star
3	PM Shri School Jawahar Navodaya Vidyalaya, Paschim, Medinipur	West Bengal	GRIHA Existing Schools	5 star
4	Jawahar Navodaya Vidyalaya, Hooghly	West Bengal	GRIHA Existing Schools	4 star
5	PM Shri Jawahar Navodaya Vidyalaya, Tudipaju, Phulbani	Odisha	GRIHA Existing Schools	4 star
6	PM Shri School Jawahar Navodaya Vidyalaya, Angul	Odisha	GRIHA Existing Schools	4 star
7	PM Shri School Jawahar Navodaya Vidyalaya, Balasore	Odisha	GRIHA Existing Schools	4 star
8	PM Shri School Jawahar Navodaya Vidyalaya, Jharsuguda	Odisha	GRIHA Existing Schools	4 star
9	PM Shri School Jawahar Navodaya Vidyalaya, Kalahandi	Odisha	GRIHA Existing Schools	4 star
10	PM Shri School Jawahar Navodaya Vidyalaya, Konark, Puri	Odisha	GRIHA Existing Schools	4 Star
11	PM Shri School Jawahar Navodaya Vidyalaya, Mundali, Cuttack	Odisha	GRIHA Existing Schools	4 star
12	PM Shri School Jawahar Navodaya Vidyalaya, Panikoili, Jajpur	Odisha	GRIHA Existing Schools	4 Star
13	PM Shri School Jawahar Navodaya Vidyalaya, Sundargarh	Odisha	GRIHA Existing Schools	4 star
14	PM Shri Jawahar Navodaya Vidyalaya, Tarbha, Sonapur	Odisha	GRIHA Existing Schools	4 star

GRIHA Felicitation Ceremony





GRIHA Green Building Tour

On March 26, 2025, GRIHA Council organized a Green Building Tour at Vastukar Design Studio in Bhubaneswar, a distinguished 5-star SVAGRIHA-rated project. Participants were introduced to the innovative sustainability measures and passive design strategies implemented on-site. We extend our sincere appreciation to Ar. S.S. Ray, Principal Architect & Director of Vastukar Design Studio, and his team for providing an in-depth walkthrough of the project. The tour marked the concluding event of the GRIHA Regional Conclave, held in Bhubaneswar on March 25, 2025.



GRIHA Team with Prof S. S. Ray, Founder, Vastukaar

Key Highlights

Inaugural Session

The session emphasised on:

- Odisha's leadership in climate action and sustainable urban development.
- Integrating sustainability into policy frameworks and infrastructure planning.
- Importance of academia-industry collaboration for promoting green building practices.

Plenary Session 1: Green and Blue Infrastructure Planning – A Regional Perspective

The session stressed on:

- Role of green and blue infrastructure in urban resilience and climate adaptation.
- Strategies for integrating wetlands, urban forests, and sustainable drainage systems.
- Importance of ecosystem-based solutions for mitigating climate change impacts.
- Case studies on successful regional implementation of water-sensitive urban planning were also discussed.

Plenary Session 2: Smart Building Services for a Net Zero Future

The session emphasized on:

- Innovative technologies for energy efficiency, water conservation, and smart automation.
- Role of IoT and AI in optimizing building performance and reducing carbon footprint
- Challenges and opportunities in implementing smart infrastructure in Odisha.
- Nneed for policy support and industry collaboration for scaling up smart buildings

Closing Session: Climate Policy Advocacy in Odisha

The session emphasized on:

- Addressing climate change through robust policies and governance frameworks.
- Strengthening carbon sink strategies and sustainable land-use planning.
- Enhancing public awareness and capacity building for effective climate action.
- Role of research institutions, policymakers, and industries in driving sustainability.

Way Forward - Action Points

The GRIHA Regional Conclave 2025, Bhubaneswar, centred on “Accelerating Climate Action in the Built Environment,” provided key insights and action points for fostering sustainable urban development. The conclave emphasized climate resilience, sustainable infrastructure, and decarbonisation in the construction sector. The following strategic action points emerged:

Advocacy & Policy Implementation Facilitating Green Building Adoption:

- Encourage the implementation of GRIHA ratings and certifications to integrate sustainability into the built environment.
- Collaborate with state governments to develop smart and climate-resilient infrastructure and promote net-zero carbon impact cities.
- Strengthen public-private partnerships to enhance sustainable urban planning through policies and regulations.

Sustainable Infrastructure Development Green Construction Materials:

- Promote the use of low-carbon and energy-efficient materials, such as bamboo, cross-laminated timber, and recycled steel, to minimize environmental impact.
- Implement circular economy strategies to optimize resource utilization, reduce construction waste, and improve water conservation practices.
- Encourage prefabrication, modular construction, and smart design technologies to improve the building's energy efficiency and reduce emissions.

Capacity Building & Training Stakeholder Engagement:

- Organize awareness programs and training workshops for government officials, architects, urban planners, and builders on sustainable construction practices.
- Provide hands-on training for industry professionals on eco-friendly building materials, renewable energy integration, and climate adaptation strategies.

Regional & Grassroots Initiatives Localized Sustainability Resources:

- Ensure the availability of sustainable building manuals in regional languages to make green practices accessible at the grassroots level.
- Promote citizen participation in urban sustainability projects, fostering inclusive growth and resilience against climate challenges as part of community-led climate action.

GRIHA Council intends to drive these initiatives along with government bodies, industry leaders, and academic institutions, with a shared vision of ensuring a transition toward sustainable and climate-responsive urban environments.

GRIHA Regional Conclave in News

ଓଡ଼ିଶାରେ ହେବ ଗ୍ରୀନ୍ ବିଲ୍ଡିଂ

[illegible][illegible]

ସୋଆ ଓ ଗ୍ରହ କାଉନସିଲ୍ ମଧ୍ୟରେ ଏମିତି

ଗ୍ରିହା କାର୍ତ୍ତବ୍ୟମାନ ପକ୍ଷରୁ ଏସ୍ତ ଆଷ୍ଟମିକ ସମ୍ପାଦନା ଅନୁଷ୍ଠିତ



ଉପରେ ଅନେକକା କରାଯିବେ । ତେଣୁ ଦିନେ ୨୦୩୦, ଦିନଟିର ଗୁଣତ ୧୨୦୪୫ ଗଠା ହେଉ ଯିବନେ ପ୍ରାୟ ସରକାରୀତ ୭୦ ବାହୁର ବିଶିଷ୍ଟା ଗୁଡ଼ାକପୁରୁ ପ୍ରୋହାଦନ କରିନ ଗେଷ୍ଟଗରେ ଏହି ସମ୍ପରକା ପାଠେଯିବ ହୋପିବ ।

କାର୍ଯ୍ୟକ୍ରମରେ ଗଣ୍ୟ ଯୋଗଦାନ ଶିଳ୍ପ ବିଭାଗ
ବିଭାଗ ସଚିବ ଶ୍ରୀମତୀ ସୁମିତ୍ରା ମହାନ୍ତି, ବିଏମସି
କର୍ମଚାରୀ ଶ୍ରୀମତୀ ପ୍ରମିଳା ପଣିଆ ଏବଂ ସୁବିଜ୍ଞାନୀ

[illegible]

Source: Prameya Newspaper
Dated 26th March 2025

Source: Sambad Newspaper Dated 26th March 2025

ସମ୍ପାଦ

ଗୃହ କାଉନ୍ସିଲର ଆଞ୍ଚଳିକ ସମ୍ମିଳନୀ



ଭୂବନେଶ୍ୱର, ୨୫/୩(ଭମିପ): ଗ୍ରହ କାଉନସିଲର ସଭା ଆଞ୍ଚଳିକ ସମିଳନୀ ହୋଟେଲ ମେଁ ଫୋୟାରରେ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି। ଏସ୍ଏଲ୍ ଓ ପ୍ରାଇଭେଟ୍ ଲିମିଟେଡ୍ ଓ ଏଏସ୍ଏଆଇ ସହଯୋଗରେ ଆୟୋଜିତ ‘ଆସମେଲେରେନ୍ଟ୍ କ୍ଲାଇମେଟ୍ ଆସ୍କାନ୍ସ ଇନ୍ ଦି ବଲ୍ମ୍ ଏନଭାର୍ଣ୍ଣମେଣ୍ଟ’ ଶୀର୍ଷକ ଏହି ସମିଳନୀରେ ନାତି ନିର୍ମାତା, ଶିଳ୍ପପତି, ସ୍ଥପତି, ସ୍ଥିରତା ବିଶେଷଜ୍ଞ ଓ ଡାକ୍ତର ପ୍ଲାନର୍ସ ମାମିଲ ହୋଇ ଜଳବାୟୁ ରୋପକ ସ୍ଥାୟୀ ଏବଂ ତର୍କୀ ପକ୍ଷ ଭିତ୍ତିଭୂମି ବିକାଶ ପାଇଁ ବିଭିନ୍ନ ରଣନୀତି ଉପରେ ଆଲୋଚନା କରିଥିଲେ। ନେଟ୍ ଲିସର୍ ୨୦୨୦ ଓ ବିଶ୍ୱବିତ୍ ଭାରତ ୨୦୪୭ ଲକ୍ଷ୍ୟ ହାମକ ବିନିଗେ ଲିସର୍ ଗ୍ରହା ସହରୀକରଣ ଏବଂ ସମନ୍ୱିତ ଭିତ୍ତିଭୂମି ପ୍ରକଳ୍ପଗୁଡ଼ିକୁ ପ୍ରୋତ୍ସାହନ କରିବା ଉଦ୍ଦେଶ୍ୟରେ ଏହି ସମିଳନୀ ଆୟୋଜିତ ହୋଇଥିଲା। ଶିଳ୍ପ ବିଭାଗ ସ୍ୱତନ୍ତ୍ର ସଚିବ ଶୁଭେନ୍ଦୁ କୁମାର ନାୟକ, ବିଏମ୍ପି କମିସନର ରାଜେଶ ପ୍ରଭାକର ପାଟିଲ, ବିଧାୟକ ବାବୁ ସିଂ ପ୍ରମୁଖ ଅତିଥି ଭାବେ ଯୋଗ ଦେଇଥିଲେ। ଗ୍ରହ କାଉନସିଲ ଉପାଧ୍ୟକ୍ଷ ତଥା ମୁଖ୍ୟ କାର୍ଯ୍ୟନିର୍ବାହୀ ଅଧିକାରୀ ସଞ୍ଜୟ ସେଠ୍ ଭାରତର ନିଜସ୍ୱ ନ୍ୟାସନାଲ୍ ଗ୍ରୀନ୍ କଲିଚିଂ ଚେଟିଂ ସିଷ୍ଟମ୍ ଗ୍ରହ ବିକ୍ଷୟରେ ଆଲୋଚନା କରିଥିଲେ। କାଉନସିଲର ସମ୍ପାଦକ ଶବିନମ ବାସୁମି ଯୋଗଦେଇ ସ୍ଥାୟୀ ବିକାଶ ଲାଗି ସମନ୍ୱିତ ସହଯୋଗ ଓ ଉଦ୍ୟମରେ ଆବଶ୍ୟକତା ଉପରେ କହିଥିଲେ।

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GRIHA

Regional Conclave 2025

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