

भारतीय रिज़र्व बैंक Reserve Bank of India India's Central Bank **PROFILE GREEN VISION** JAMMU Q CHANDIGARHO SHIMLA The Central Bank of Bank has taken policy to construct all its Office Complex and India, a statutory body O DEHRADUN ITANAGAR Offices in all States (33 NEW DELHI . Residential Complex to have the GANGTOK KOHIMA locations) highest level of Green Rating. LUCKNOW O GUWAHATI JAIPUR O Subsidiaries As of now, 80% of the Office KANPUR DICGC, BRBNMPL, ReBIT, Buildings and 60% residential o RANCHI AHMEDABAD (KOLKATA 9 IFTAS, RBIH properties are green certified. To address the national issues of NAGPUR MUMBAI OOBELAPUR Establishments - CAB, energy efficiency, conservation of RBSC, CoS, ECCTI, IDRBT VIJAYAWADA natural resources, handling waste, HYDERABAD O 04 Institutes funded by water efficiency and reduction of PANAJI RBI - CAFRAL, IGIDR, fossil fuel use, RBI has IIBM, NIBM implemented green concept in all BENGALURU O CHENNAL 92 Owned Residential its Properties as a Culture. Complex. P KOCHI * THIRUVANANTHAPURAM OFFICE COMPLEX OF RESERVE BANK OF INDIA (RBI) AT IT PARK, DEHRADUN



JOURNEY OF OFFICE COMPLEX AT DEHRADUN





Inaugurated by Hon'ble CM of Uttarakhand, Shri N.D. Tiwari as a Sub-Office in June 2006, with 13 staff members & 02 departments.

	General Information
Plot Area	17989 SqM
Building Details	 Main Building block (Vault+2) Residential block (G+1) Parking block (G+3) Annex block (G+1) Security block (G)
Ground Coverage	34.14%
Built-up Area	15524 SqM



Keeping in view the need of efficient management of cash operations, offer regulatory oversights and provide direct public service interface service to the state of Uttarakhand Top Management of RBI decided to have own Office Premises in Dehradun to cater the need of public service reaching every corner of the state. Construction of the office complex started in 2018.



Inauguration of Office Complex of RBI at Dehradun in October 2023, by Deputy Governor of RBI, Shri M.D. Patra.

Currently, over 120 staff members

Currently, 10 departments

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UNIQUENESS OF PROJECT

OFFICE COMPLEX OF RESERVE BANK OF INDIA (RBI) AT IT PARK, DEHRADUN



- Dual-purpose facility
 - Cater sensitive and large scale operations of Currency Distribution and storage and disposal
 - Cater needs of general public through Banking Ombudsman and Consumer Education & Protection Department
- High-Security Meets Sustainability: State-of-the-art, multi-layered Security Infrastructure viz.
 Controlled Entry-Exit points, K8-rated Crash Rated Bollards, Turnstile Gates, X-ray Baggage System & Door Frame Metal Detectors, Integrated CCTV system, Electronic Access Control etc.
- Automation-compliant Mega-currency Basement Vault allowing seamless integration of automated & robotic systems in cash management operations
- Global Leadership in Construction of Highest Green Rated Buildings viz. Graded Solar PV System, EV charging facility, Heat-island reduction, Landscaping, Rainwater harvesting, Sprinkler water irrigation, Waste-water Treatment Plant, Water-efficient plumbing fixtures, in-house Sewage Treatment Plant, Eco-friendly refrigerants, Day-light illuminance, Energy efficient HVAC system, Usage of Certified Green Building materials (recycled content, wood-based material) and Low-emitting materials which were Locally sourced, Segregation of dry-and-wet waste and Centralized waste collection area, MERV-13 filters etc.

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REPLICATION POTENTIAL

- Model of Automation-compliant Mega-currency Basement Vault in Seismic Zone-IV and existing
 water channels at the foothills of Himalayas, resilient to urban floods, could be replicated in:
 - Currency Chests, especially the disaster-prone areas (~29% area falls under Seismic Zone-IV and V, and ~12.5% major flood prone land) e.g. there are 33 Currency Chests in State of Uttarakhand
 - Office Complexes of Reserve Bank of India, For e.g., project has already been replicated in Raipur Regional Office, Reserve Bank of India
 - Office Complexes of Commercial Banks
 - Public service institutions like insurance, hospitals
 - · Ware houses of e-commerce companies
- Naturally-aligned Drainage system could be replicated in similar projects involving construction of drainage system to existing water channels, especially in hilly terrains
- · Divyang-friendly infrastructure
- · Round the clock, state-of-the-art, multi-layered Security Infrastructure

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QUANTUM OF BENEFITS

TANGIBLE

- Annual Operational Savings
 - Energy Efficiency = ₹ 15 lakh
 Solar Generation = ₹ 14 lakh
 - Water Efficiency = ₹ 05 lakh
 - Waste Management = ₹ 05 lakh
 - Others (Transportation, = ₹ 53 lakh Police escort)
- Annual Operational Savings = ₹92 lakh
- Life Cycle Savings (30 years) = ₹ 27.6 Cr.

INTANGIBLE

- Indoor Environmental Quality: natural lighting and ventilation, air quality improvements, thermal comfort
- Better views and day lighting which significantly improves productivity of the occupants
- Enhanced health and well being
- Promotion of native species
- Enhanced Biodiversity
- Effective Waste Management
- Universal design: accessible to all
- Promotion to Make in India locally sourced materials, Gwalior-mint stone, Jaisalmer stone
- Green Corporate Image

Environmental Benefits

Economic Benefits

Social Benefits

SUSTAINABLE DEVELOPMENT

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CHALLENGES AND RESOLUTION





Construction of proper drainage system to a very old existing channel of water without hindering natural flow of water as well as making office premises, flood-resistant and earthquake-resistant, green building



Construction of ultrasecure basement vault in challenging topography



Preservation of mature trees, natural contours throughout the construction



Automation-compliant
Mega - currency
Basement Vault in
Seismic Zone-IV and
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NATIONAL BENCHMARKS AND STANDARDS

- Use of Indian Standard certified structural materials and interior and exteriors.
- National Building Code
- Local Building Bylaws and Statutory Regulations on Environment
- Divyang friendly infrastructure as per guidelines issued by Ministry of Housing and Urban Affairs.
- · ISO 14064
- Energy Conservation Building Code (ECBC)
- LEED and IGBC
- BEE certified highest rated electrical appliances and fixtures.
- Refrigerants and fire suppression in alinement with international environmental protocols
- Use of Green Certified Products viz. Forest steward council(FSC) and GreenCo certified materials.

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PRINCIPLES OF GREEN BUILDING AND GREEN PROTOCOLS ADHERED FOR THE PROJECT

Energy Efficiency Renewable Energy Sources Water Conservation Sustainable Materials

Natural Lighting and Ventilation

Waste Reduction and Recycling Green Roof and Green Spaces

Indoor Air Quality

Smart Building Technologies Transportation Alternatives

Ban on Single use Plastic (bottles, folder) Reusable visitors ID Card, Steel Bin<u>s</u>

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BEST PRACTICES DURING PROJECT IMPLEMENTATION

- Sustainable Site Planning aligning long term sustainability goals of the Organisation
- Landscaping choosing appropriate plants, material etc, to mitigate heat island effect.
- Focus on Resource reduction and waste reduction and Segregation
- Construction of artificial swales with check dams, RWH for rain water retention and conservation
- Implementation of erosion and sedimentation control plan in hilly terrain
- Use of cavity walls in exteriors, for better temperature management
- Building orientation, form, fabric, air infiltration, ventilation, passive solar heater and cooler for lowering energy bill during operation
- Creating awareness and providing trainings on sustainable goals of the Organisation to all the employee
- Automation-compliant Vault allowing seamless integration of automated & robotic systems in cash management operations
- · Rational management of public expenditure
- Use of Key Principle of Circular Economy 7 R's (reduce, reuses, recycle, regenerate, rethink, refuse and repair).

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