



# Building a Sustainable Airport Ecosystem in Bengaluru

At Kempegowda International Airport Bengaluru (BLR Airport), sustainability is a guiding philosophy shaping infrastructure, operations, growth, resilience and workplace culture.

As India's aviation sector enters a phase of unprecedented expansion, airports are increasingly expected to do more than facilitate travel. They must become engines of sustainable growth, balancing economic development with environmental and social responsibility. Bengaluru's Kempegowda International Airport (BLR Airport) has emerged as one of the country's most compelling examples of how this balance can be achieved.

Operated by Bangalore International Airport Limited (BIAL), BLR Airport has steadily transformed sustainability from a set of environmental initiatives into a comprehensive organisational philosophy that influences every aspect of planning, operations and future growth. Today, sustainability is deeply embedded within the airport's infrastructure, governance frameworks, workplace culture and long-term business strategy.

Guided by the airport's vision



"Touch lives by nurturing a sustainable future through initiatives that drive economic, social and environmental transformation," the Sustainability Roadmap is built on six key pillars: Water Stewardship, Net Zero Carbon Emission, Community-aligned Noise Management, Circular Economy, Sustainable Procurement and Sustainable Mobility. These pillars are supported by core foundation values: Corporate Social Responsibility (CSR), Behavioural Change and Compliance.

BLR Airport has successfully translated its sustainability strategy into actionable, organisation-wide initiatives that deliver measurable environmental and cultural impact.

What distinguishes BLR Airport is its ability to integrate these priorities into everyday decision-making, rather than treating them as standalone programmes. The result is a model that delivers measurable environmental outcomes while strengthening operational efficiency and long-term resilience.

In the area of energy efficiency, BLR operates entirely on 100% renewable electricity and leverages smart energy management systems to optimise consumption across terminals and offices. BLR is the first airport in Asia to achieve the highest Level 5 carbon accreditation under the Airports Council International (ACI) Airport Carbon Accreditation programme.

The airport achieved an impressive 95.6% reduction in its Scope 1 and 2 emissions, seven years ahead of its original 2030 target. It has also developed a

green landscape with a biodiversity index of 5.18, further reinforcing its commitment to natural capital and ecological stewardship.

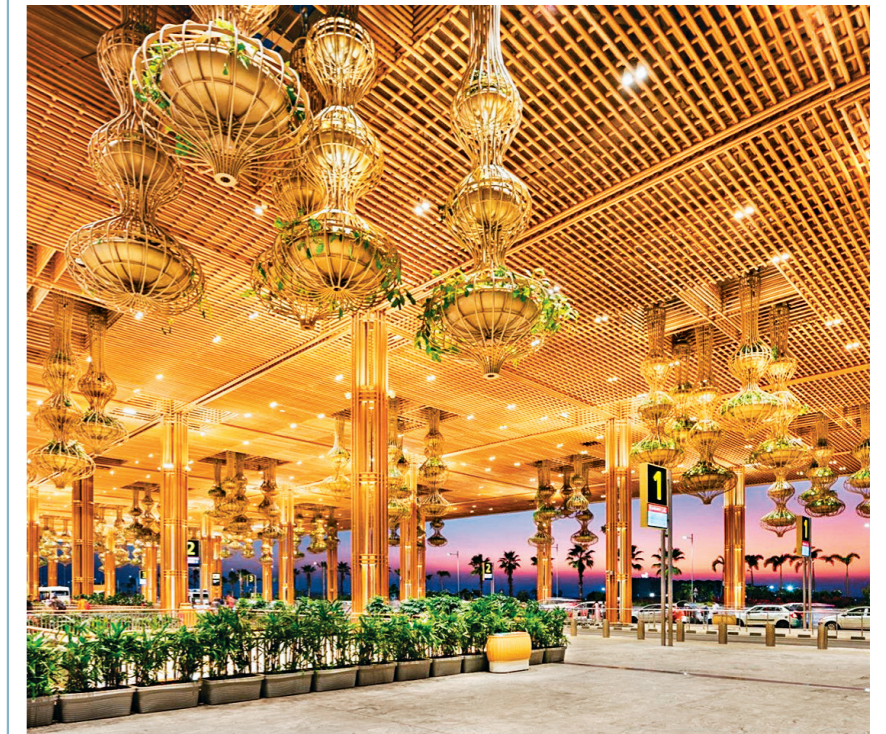
Such measures demonstrate how environmental responsibility and operational excellence can work together.

However, sustainability at BIAL extends well beyond carbon management. Water security has become a critical issue for urban centres across India, particularly in regions vulnerable to periodic shortages and climate variability. Recognising this challenge early, the airport has invested extensively in rainwater harvesting, wastewater recycling, and intelligent water management systems. These measures have enabled to achieve a water positivity index of 2.36, replenishing more than twice the

amount of water it consumes.

The airport has also established itself as a leader in circular economy practices. Managing waste at one of India's busiest aviation hubs requires both scale and innovation. Through its Integrated Solid Waste Management Centre, organic and inorganic waste streams are segregated and processed efficiently and responsibly. Organic waste is converted into valuable resources such as compressed biogas, compost and organic manure, while recyclable materials are channelled through authorised recycling networks. BLR Airport diverts 98% of the waste from landfill and achieved Zero waste to landfill status - a significant milestone in its sustainability journey.

Sustainable mobility is another key aspect of the airport's





strategy. Electrification initiatives across operational fleets and mobility systems are reducing emissions from airport activities and supporting wider clean transport objectives. These investments aim not only to enhance environmental performance today but also to prepare the airport ecosystem for future mobility solutions.

The airport's commitment to biodiversity and ecological responsibility is equally significant. Sustainability at BLR Airport is approached holistically, recognising the interconnectedness of climate action, natural ecosystems, and community well-being. This broader perspective has enabled the airport to build environmental resilience while supporting responsible growth.

The most distinctive aspect of BLR Airport's sustainability efforts, however, is its focus on people. The organisation understands that meaningful transformation cannot be achieved through infrastructure alone. Through dedicated behavioural change initiatives, sustainability has become a shared responsibility across the workforce. Employees are encouraged to integrate sustainable practices into daily operations, including resource conservation, waste reduction, energy efficiency, and informed decision-making.

This culture of participation has fostered a workplace where sustainability is not limited to specialist departments but is embraced across all functions and levels. The result is stronger employee engagement, greater collaboration, and a sense of

collective ownership in achieving long-term goals.

Looking ahead, BLR Airport continues to view sustainability as a journey rather than a destination. Future expansion projects are being planned with the same sustainability-led principles that have guided its recent growth. The airport is also focused on expanding renewable energy adoption, strengthening resource security, and supporting the wider aviation ecosystem's transition towards lower-carbon operations.

As Sridhar L, Assistant Vice President and Head – ESG at BIAL, observes, "Sustainability is integrated into how we plan, operate, and expand the airport ecosystem. As India's aviation network continues to expand, BLR Airport offers an important lesson: sustainability delivers its

greatest impact when it becomes part of an institution's culture, shaping every decision, every investment, and every opportunity for growth."

This philosophy has enabled BLR Airport to move beyond compliance and establish itself as a benchmark for responsible infrastructure development.

In an era when sustainability claims are increasingly scrutinised, BLR Airport's achievements stand out because they are measurable, integrated, and future-focused. By aligning environmental responsibility with operational excellence, employee participation, and long-term business value, the airport has created a model that demonstrates how aviation infrastructure can contribute meaningfully to a more sustainable future.

