LTIMindtree

BROCHURE

SMART SPACES

The journey towards smart building transformation

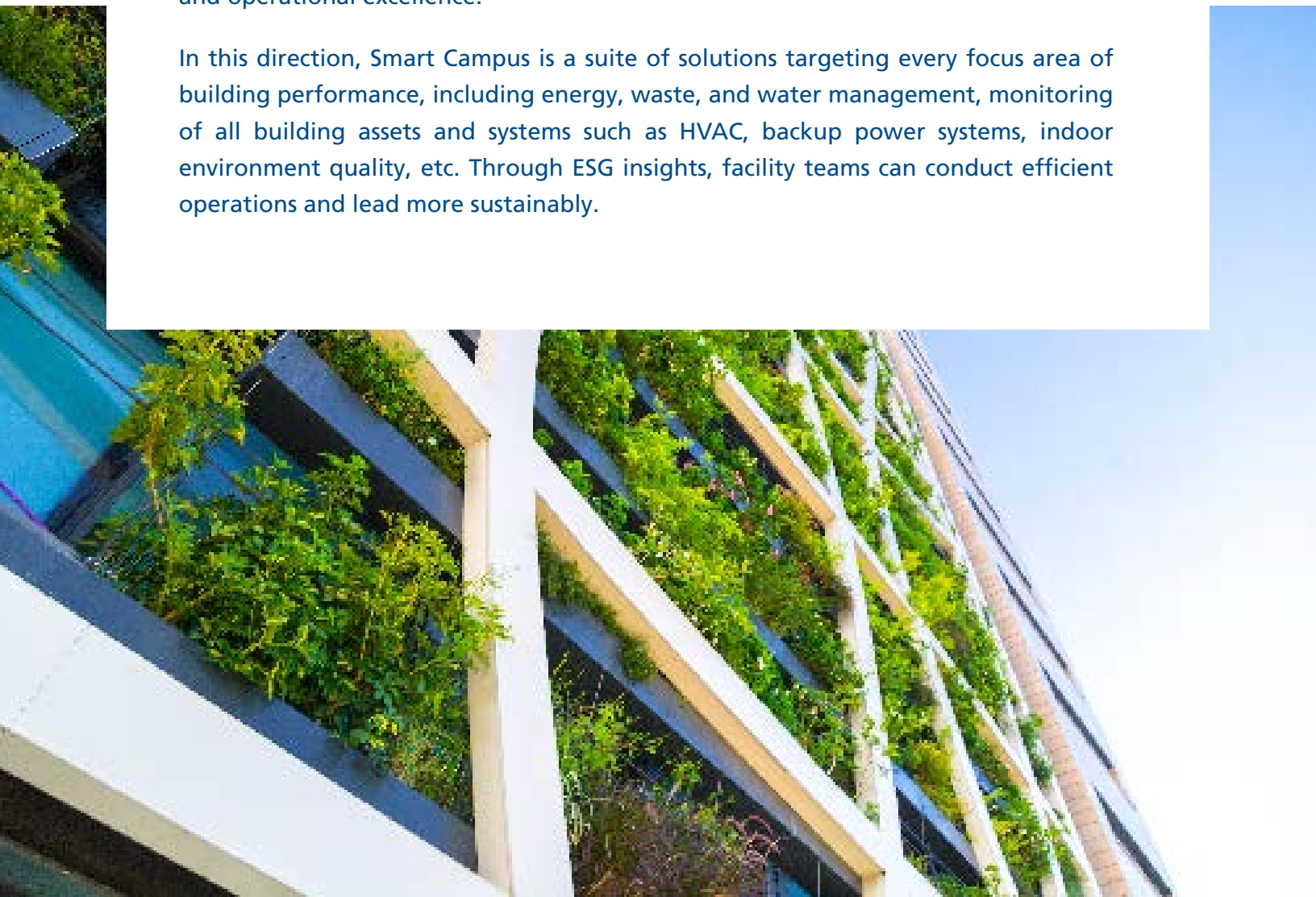
Overview

Advancements in building science have long been defined by physical and tangible aspects: architectural design, structural integrity, building materials, mechanical components, and the like.

Though these factors will be constant forever, there are new benchmarks for creating modern structures that will perform to greater standards and expectations.

As a building's physical infrastructure grows more sophisticated, its digital infrastructure, the information and operational technology network embedded in every atom, becomes more vital. Digital transformation has been revolutionizing buildings for the last two to three decades, just as it has overturned many aspects of the human experience over the last several years. A new era is dawning for sustainably designed, digitally enabled buildings with unmatched user experiences and operational excellence.

In this direction, Smart Campus is a suite of solutions targeting every focus area of building performance, including energy, waste, and water management, monitoring of all building assets and systems such as HVAC, backup power systems, indoor environment quality, etc. Through ESG insights, facility teams can conduct efficient operations and lead more sustainably.



Existing Business Challenges Why are Smart Cities the Future?

Buildings and super-structures across different geographies and industries are constructed at different times, with various objectives, needs, principles, and technologies that keep evolving. With several aspects, sub-systems, assets, edge components, and technologies, it is incumbent to converge them as connected facilities to operate at benchmarked indices.

- **Total Building Performance, Energy and Water Efficiency, and Sustainability:** Need for a single system to monitor the total building performance, facility-wide sustainability quotients, and integrated platform to monitor the performance and control all the building sub-systems without the need to switch over to different BMS, local HMIs, etc.
- **Central Unified System for Connected Building operations:** At the enterprise level, organizations lack the vantage point to see all facilities across the country and the globe for leadership to implement a foresighted plan.
- **Decentralized Decisions - Systems Thinking:** All systems, assets, and processes must be intelligent and autonomous to achieve optimal asset-level, plant-level, building-level, and enterprise-level efficiency.
- Optimization of operating cost, downtime, maintenance expenditures, and planned OpEx costs when operations are interconnected.

Global Urge for Sustainability

- Major consumer of energy, water and other resources
- Major source of emissions and effluents
- Global challenges of climate change, pollution, pandemic, etc
- Compliance to national and international building codes

Transform Enterprises into Future-proof Intelligent Building Spaces

Lead and Accelerate Smart Building Transformation

Energy Optimization ▸ **Safety & Security** ▸ **Intuitive User Experience** ▸ **Sustainability**

Conventional Buildings

- Systems with local controls operating in silos
- No / limited analytics
- Regular and prescribed maintenance and operations
- Reactive maintenance
- No impact on building occupants and their health
- Unplanned energy and sustainability goals
- Building as an asset

Transformation ▸

Smart Buildings

- Connected systems with a central brain
- Business intelligence is driven by advanced analytics
- Smart maintenance enabled by predictive analytics
- Integrated maintenance and operations workflows
- Interactive user experience, healthy environment for building occupants
- Leader in building performance, energy optimization, and sustainable operations
- Encapsulation of smart, green, interactive, autonomous, adaptive buildings with a brain

Key Features

- Asset insights
- Performance trends
- Alert monitoring
- Predictive analytics
- Smart maintenance
- Asset onboarding
- Sustainability window
- Scalable architecture
- Actionable insights
- Remote operations

Smart Campus
Building Systems Covered

- Energy Insights
- Onsite Solar yield tracking
- Smart Chiller
- Smart AHU
- UPS Monitoring System
- Transformer Monitoring System
- STP Management
- WTP Management
- FHS Monitoring System
- DG Monitoring System
- Air Quality Monitoring
- Plantation Health Monitoring

Business Values and Benefits

- Global insights empowering organizational leaders with current trends, OpEx, and forecast of energy demand across the globe
- Facility-wide insights for building energy and operating cost savings of 10-30%
- Optimization of major load segments like HVAC-chillers, AHUs, and lighting loads and enhanced energy efficiency by up to 30% and energy cost savings
- Smart maintenance enables reduced downtime, repair costs, production losses, and occupant discomfort
- Higher reliability and stable OpEx
- Improved productivity in workspaces with better IAQ and occupants' dynamic care
- Sustainability compliance with national and international building codes, ensuring environmental-friendly operations

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700+ clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by nearly 90,000 talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit www.ltimindtree.com.