

GREENER FOOTPRINT. GREENER BUSINESS.



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www.mindspaceindia.com



GREENER WORKSPACES. AT THE CORE OF GREEN BUSINESSES.

“The world today faces serious and impending threat from global warming and climatic change affecting the environment. With the emission of green house gasses, and global temperatures set to rise at a rate of 2-3 degree Celsius, the scenario is likely to seriously affect developing countries like India. The environmental impact of a building design, construction and operation industry is significant considering the fact that it is one of the major generated energy in this country. Keeping this in mind, the vision of K Raheja Corp is to be at the forefront of being environmentally responsible albeit voluntarily, there by paving a way for others to follow. The company has decided & is committed to have their projects as LEEDTR certified Green buildings”

- **Mr. C.L. Raheja**, *Chairman, K Raheja Corp*

“Green workspaces appeal to the well-read, responsible millennial generation, who form a large part of our workforce. They are aware of the importance of sustainability and committed to playing their role in achieving it. Green workspaces synergize seamlessly with their mindset.”

- **Shabbir Kanchwala**, *Senior Vice President, K Raheja Corp*



Commercial spaces have a crucial role to play in helping organizations adopt more sustainable business practices. By enhancing occupant well-being and productivity, moderating resource consumption, and reducing operating costs, greener workspaces make measurable contributions to business profitability, while minimizing negative upstream and downstream impact on the environment.

At K Raheja Corp, green buildings are integral to our very ethos. It was back in 2007 that we signed a memorandum of understanding with the Confederation of Industry’s Indian Green Building Council (CII-IGBC) formalizing our resolve to keep raising the bar on green building development in India. Since then, brick-by-brick, building-by-building, business park-by-business park, our commitment to the green cause has only widened and deepened. It flows from the beliefs of our Group Chairman, Mr. C.L. Raheja, and shapes everything we do.

Our cumulative green building footprint stands at 4.57 crore square feet*. This includes our iconic business parks, ‘Mindspace’ and ‘Commerzone’. From organizations opting for their first green office, to those wanting to take their green practices to the next level, K Raheja Corp has been a valued real-estate partner to the most demanding corporates, pacing them at every step.

We are delighted to be participating in The World Green Building Week. Through this book, we invite you to walk the green path with us.

Regards,

Vinod Rohira
Managing Director and CEO
Commercial Real Estate & REIT
K Raheja Corp

*across the residential and commercial business



LEADERS IN GREEN WORKSPACE DEVELOPMENT

From the materials and technologies used, to the philosophies and processes implemented, we continue to innovate through our buildings and business parks, purpose-built for modern commercial use. Creating greener commercial spaces that produce less waste and consume less energy and water.

- **Our green building footprint stands at 4.57 crore square feet* as on September 2018**
- **All the commercial buildings we have constructed since 2007 are LEED certified**
- **Our green workspaces result in substantial savings in operating costs for tenant organizations - as much as 30 to 40%**

*across the residential and commercial business



SITE SELECTION INTEGRATED IS THE NEW ICONIC

Location, location, location, the time-honored real estate mantra, is just the starting point for us. Our all-round approach, encompassing siting, land use, building design, construction, and long-term operation, ensures that the built environment co-exists harmoniously with the natural environment.



HIGHLIGHTS

- The location of each business park is meticulously researched and hand-picked
- Brownfield sites are revitalized
- Projects exceed local zoning open space requirements by 25%
- Excellent accessibility to public transportation is ensured
- Erosion and sedimentation control measures reduce pollution from construction activities





MATERIALS AND MANAGEMENT STEWARDSHIP IS THE NEW GOVERNANCE

The traditional business model of maximizing shareholder wealth has given way to a more inclusive one that seeks to benefit all stakeholders. Our integrated approach dovetails with this stewardship model, resulting in commercial environments that are resource-efficient, reliable and responsible.



HIGHLIGHTS

- Energy-efficient green building materials, originating within 250 miles of the project site, reduce carbon emissions, support the local economy and minimise transportation impact on the environment
- Materials with high recycled content, including fly ash blocks, Portland Pozzolana cement, and glass, steel, and aluminium from certified vendors, constitute at least 20% of materials cost, reducing the impact of processing virgin materials while improving building envelope properties
- Extensive replanting activities are undertaken to replenish green cover lost during construction

WATER MANAGEMENT

WATER IS THE NEW 'OIL'

World War III, it has been said, will be fought over water. Finite and irreplaceable, water resources are renewable only if used responsibly. Our business parks, designed to minimize use and optimize re-cycling of water, have resulted in the reduction of daily water demand by as much as 20 to 30%.



HIGHLIGHTS

- All public spaces draw on low-water-use landscaping techniques and reduced flow fixtures
- Stormwater and rainwater harvest-and-use systems help maintain watershed hydrology, lessen load on the drainage system, mitigate flooding, and cut down dependency on bore wells and demand for potable municipal water
- World class technologies like MBBR and SAFF are used for sewage treatment, to deliver environmentally safe waste-water that is used for flushing, landscaping and HVAC



Commerzone, Yerwada | Pune



ENERGY CONSUMPTION LESS IS THE NEW 'MORE'

Modern workspaces – filled with cooling, heating, lighting, computing and communicating devices are energy-guzzlers. Currently, about 4-5% of the power used across our business parks is derived from green sources. Our vision is to become net electricity generators rather than consumers.

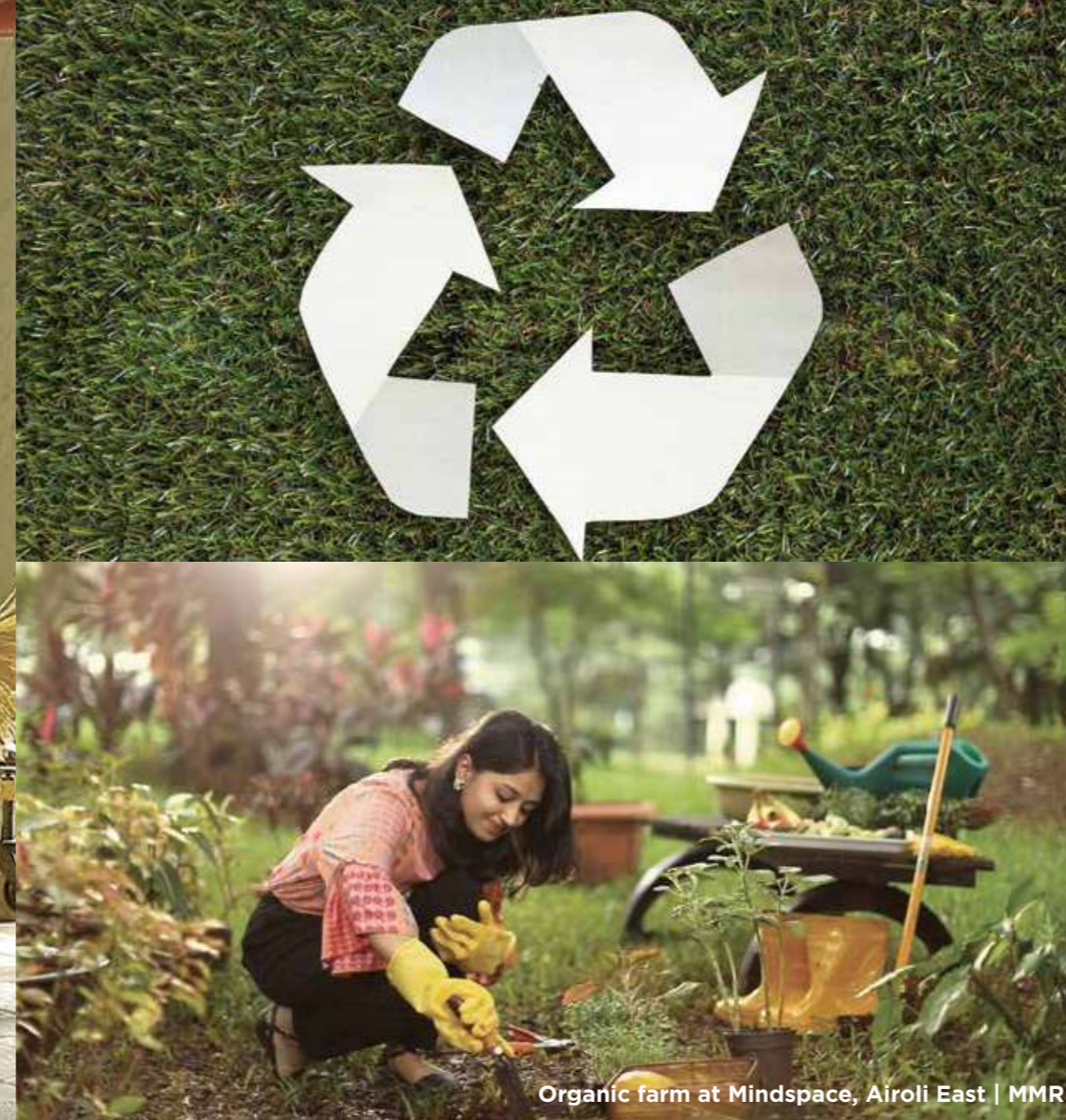


HIGHLIGHTS

- K Raheja Corp is the only private sector power distribution company for IT Special Economic Zones (SEZs) in India; our tariff structure is the lowest in the market – 40% lower than state discom
- Use of high performance façade glass results in energy-efficient building shells
- Noise-free central Heating, Ventilation and Air Conditioning (HVAC) systems, centralized IBMS-controlled AHUs and cooling towers, and LED lighting deliver substantial savings
- Rooftop solar photovoltaic modules at Mindspace Madhapur, Hyderabad, generate 1.47 megawatts of power, resulting in lower electricity bills for clients
- Availability of harmonics-free, pure sine wave power, critical for high-end software testing



Waste Management set up: Mindspace, Airoli East | MMR



Organic farm at Mindspace, Airoli East | MMR

WASTE MANAGEMENT NIL IS THE NEW TARGET

Everything that's thrown away gets recycled! Our business parks implement an end-to-end waste management program at the site level, and do not put any waste back into the municipal system.

HIGHLIGHTS

- Colour coded bins are provided in public spaces and food courts for segregation of waste
- All non-organic dry waste is sent to an external vendor for recycling; there is a centralized storage facility for storing segregated waste hygienically until it is sent for recycling
- All organic wet waste is recycled at on-site composting plants; the compost produced is used to maintain the site landscape
- Urban Farms inside our business parks give employees a unique avenue to unwind, while utilizing the rich compost produced on-site to grow vegetables and fruits that they can take away



Mindspace, Pocharam | Hyderabad



View from an office at Airoli East | MMR



Corporate Office, Raheja Towers | Mumbai



Comarzone, Yerwada | Pune

BUILDING EXTERIORS

PERFORMANCE IS THE NEW AESTHETIC

Today's commercial buildings need to be more than vanity projects with show-stopping architecture. We adopt a whole-building approach to synergize all subsystems, optimizing building performance in terms of construction time, comfort, functionality, energy efficiency, longevity and lifecycle value.

HIGHLIGHTS

- Use of double-glazed façade glass ensures greater comfort and energy savings
- Roof areas are covered with Albedo paint for lower energy consumption for cooling interiors
- Large roof overhang and window louvres control temperature and glare; skylights and light shelves increase the penetration of natural light for greater well-being
- Use of standards-compliant Integrated Building Management System (IBMS) for centralized control of heating, ventilation, air conditioning, and lighting, leading to greater security, enhanced occupant comfort and more efficient operation



INDOOR AIR QUALITY (IAQ) PURITY IS THE NEW PERK

A number of studies have established a direct link between IAQ and productivity – given that a substantial part of our time is spent at the workplace, poor IAQ directly affects health, comfort and morale, and results in poor performance. All our buildings are designed to create a superior workplace by delivering 30% more fresh air in flow.

HIGHLIGHTS

- Demand control ventilation system with sensors installed in all occupied areas help maintain differential CO2 of 530ppm
- Air filters with Minimum Efficiency Reporting Value (MERV) of 13 in all air handling units which address and maintain PM 2.5 levels and eliminate other health hazardous chemical pollutants

PROJECTS

At K Raheja Corp, we are committed to green workspace development. We have **31 LEED**-certified commercial buildings across the country, and **69 commercial** projects registered with LEED rating system by the US Green Building Council.



Mindspace, Airoli East | MMR

- Land Area: c.50 (acres)
- Nature of Project: SEZ and IT Park
- New-age business district that balances business and recreation perfectly
- Located close to the upcoming international airport

Mindspace, Airoli West | MMR

- Land Area: c.50 (acres)
- Nature of Project: SEZ and IT Park
- Cutting edge work environment
- Well planned infrastructure, best in class amenities, vast green spaces on site

Mindspace, Junagar | MMR

- Land Area: c.55 (acres)
- Nature of Project: SEZ and IT Park
- Gated commercial hub located close to the upcoming international airport
- Uninterrupted power supply, high-speed broadband connectivity and comprehensive security



Mindspace, Madhapur | Hyderabad

Mindspace, Madhapur | Hyderabad

- Land Area: c.97 (acres)
- Nature of Project: SEZ and IT Park
- Hyderabad's first business park certified green at the site level
- 360° business ecosystem designed to international standards by renowned architects, RSP Consultants

Gera Commerzone, Kharadi | Pune

- Land Area: c.33.2 (acres)
- Nature of Project: SEZ and IT Park
- Major IT hub in the eastern corridor of Pune, near proposed metro station
- Designed using Biophilic design to connect workspaces with nature

Commerzone, Yerwada | Pune

- Land Area: c.26 (acres), including non-KRC share
- Nature of Project: IT Park
- Established IT park in the eastern IT corridor of Pune, near airport, station and metro station
- High-end ecosystem with state-of-the-art facilities and ample provision for leisure



Commerzone, Yerwada | Pune



Gera Commerzone, Kharadi | Pune



Mindspace, Shamshabad | Hyderabad

Mindspace, Pocharam | Hyderabad

- Land Area: c.104 (acres)
- Nature of Project: SEZ and IT Park
- Close to educational institutions and upcoming technology hub, Uppal
- Scope to accommodate 2000 families in the campus vicinity

Mindspace, Shamshabad | Hyderabad

- Land Area: c.305 (acres)
- Nature of Project: SEZ and IT Park
- Self-sufficient business district close to the new international airport
- Mixed use project also offering, retail spaces, high-end residences, recreational facilities



Mindspace, Pocharam | Hyderabad



Rendered image: Commerzone, Porur | Chennai



Rendered image: Commerzone, Pallikaranai | Chennai

Commerzone, Porur | Chennai

- Land Area: c.6.2 (acres)
- Nature of Project: IT Park
- Compact and specialized business realm located close to the airport and city centres
- Finest colleges, entertainment centers and residential neighbourhoods in easy reach

Commerzone, Pallikaranai | Chennai

- Land Area: c.12.3 (acres)
- Nature of Project: IT Park
- State-of-the-art office space located close to the OMR IT corridor
- Close to high end homes, international schools, outstanding healthcare, public transport



Building and Construction
for Commitment to Environmental
Best Practices - 2017



Mindspace, Madhapur - 2018



Sustainable Project of the Year
- Mindspace, Airoli East - 2018



Best Real Estate Development Firm -
K Raheja Corp - 2016



Developer of the Year,
Commercial - Mindspace,
Madhapur - 2018



Most Eco-conscious Land Acquisition
Specialist, India - 2017
Best Commercial Complex
Development - 2017



Environmental Best
Practice Awards - Mindspace,
Hyderabad - 2016



Environmental Friendly Project of
the Year - Mindspace - 2016



Green Project
of the year - Mindspace, Airoli
(Runner Up) - 2016



Developer of the Year,
Commercial - Mindspace,
Airoli East - 2018



Best Commercial Business Park -
Commerzone Pune - 2018



Developer of the Year
Commercial - K Raheja Corp
- 2018

CASE STUDY

MINDSPACE, MADHAPUR | HYDERABAD

The first and only commercial business park in Hyderabad to receive the IGBC Gold Rating

The Overview

It was on the morning of August 29th, 2003 that the foundation stone to create IT | ITeS infrastructure at 'MindSpace Hyderabad' was laid, at Madhapur. The project executed by K Raheja Corp, was launched in collaboration with the Andhra Pradesh Industrial Infrastructure Corporation (APIIC), with a clear mandate to convert the 110-acre site into a mecca for corporates.

Backed with its expertise and success in creating MindSpace in Mumbai's Malad suburb, the team took on the extremely challenging task, at a time when two of its contemporaries refused the project saying it was a daunting task to achieve, with a high possibility for failure. It was against this setting that K Raheja Corp took up the challenge to convert the land enveloped

with boulders and rocks, into what stands today as one of the largest and most successful IT Parks of the state.

The team got to work and K Raheja Corp successfully delivered the first office set up for an American bank, in record time as had been promised. This marked the beginning, and from hereon there was no looking back. From technology to tools, manpower to machinery, all was put into place to ensure timely delivery of the best quality commercial IT Park of international standards.

The Solution

- Holistic 360° business ecosystem spread over 97 acres and 28 buildings
- Designed by India's most renowned architects – RSP Consultants – to foster a high level of productivity
- World-class infrastructure, including high-performance buildings, high-speed broadband, high-availability of power, high-end security
- Provision for SEZs, non-SEZ commercial space, high-end retail, hospitality, food courts, entertainment hubs, and premium residences
- Use of new technologies for waste and water management, energy conservation and reduction in running costs



2003



Present



MindSpace, Madhapur | Hyderabad

The Results

- MindSpace Madhapur is Hyderabad's only IT Park to be certified as green at the site level; 60% of the green building footprint is registered, the remaining 40% is certified
- The integrated campus, which epitomizes the Green Building movement, has 21% landscape cover and 3500 trees planted campus-wide, offers 10 million sq ft built-up commercial space (including one of India's biggest retail outlets, Inorbit Mall), and houses 80,000 occupants
- The IT park is living example of green best practices such as rainwater harvesting and wastewater treatment and reuse, generation of solar power on-site (1.47 MW), integrated solid waste management
- Nothing is sent to local municipal landfills, all wet organic waste is recycled on-site
- LPD reduction that is 50% over ASHRAE
- Timely delivery of the project within 4 years, in spite of multiple revisions made to the plan on account of on-ground conditions