

CREDAÎ



INDIA WAREHOUSING: A SUNRISE SECTOR



₹NY 2

FOREWORD

Harsh Vardhan Patodia President, CREDAI CMD, Unimark Group





There has been strong post-pandemic recovery in real estate sector. Most asset classes have undergone revival in terms of construction due to strong rise in the underlying demand which has also impacted warehousing sector.

Boom in supply chain and increased inclination of companies to hire 3PL services, have led to a strong demand for higher warehousing capacity.

The sector is already seeing a shift towards Grade-A warehouses from Grade B & C which has attracted a lot of domestic and foreign developers.

Given that, there has been low penetration in this sector, it has a greater scope to upgrade itself from partially unorganised space to organised space. Developers both domestic and foreign, have further potential to develop Grade-A warehouses even in Tier II and Tier III cities in India. We expect warehousing sector to further grow given the increase in demand.

Shobhit AgarwalMD & CEO
ANAROCK Capital Advisors





Warehousing in India has gained significant attention from investors as the country is poised to upgrade its supply chain to reach its goal towards a USD 5 Tn economy.

Supply chain is the backbone of business and economy; hence the Government is also trying to support the same by implementing large Infrastructure projects to improve connectivity and introducing National Logistics Policy in September 2022 at a macro-level. There is tremendous scope for this sector to continue growing, given that there is an increase in underlying demand for space from not only 3PL and e-commerce companies but across sectors like retail, FMCG, manufacturing, electronics etc.

Warehousing demand will continue to grow in future due to increasing demand resulting from increased consumption. Unceasing policy support from the Government in the last few years including infrastructure status to logistics sector, GST implementation, permitting 100% FDI in warehousing & storage has been crucial in attracting investments in this sector.



CHAPTER 1

India: One of the Largest Opportunities for Warehousing

6



CHAPTER 2

Current Status of Warehousing in India

14



CHAPTER 3

Green Warehousing and ESG

26



CHAPTER 4

Sunrise Sector: The Outlook

30



CHAPTER 5

ANAROCK Industrial & Logistics: Our Services

34





INDIA: ONE OF THE LARGEST OPPORTUNITIES FOR WAREHOUSING

India has seen a tremendous change in the warehousing sector over the decades from being unorganised godown structures to getting recognised as a prominent asset class.

Boom in organised retail, increase in the number of SKUs, increased consumption in tier-II & III towns, change in consumer buying patterns all led to a need to create an efficient supply chain infrastructure. This was not possible with the existing storage practices in godowns which had ground level storage, manual management of inventory and fulfilment. Increased focus on creating good labour working conditions, ESG, efficiencies needed in storage and retrieval, led to the creation of modern warehousing spaces which can support multi-tiered storage. support automation and improve picking efficiency.

Seeing this latent potential in 2007
Realterm set up their operations in India
with Everstone, which is now one of
India's largest developers of modern
industrial and logistics space (under the
name of Indospace). Based on their initial
success and the advent of ecommerce,
many other international developer
institutions started their operations in
India. Some of the prominent ones are
Ascendas, Blackstone, ESR, LOGOS,
Mapletree etc. Institutional investors also
set up platforms with Indian realty firms
like Warburg Pincus – Embassy, etc.

Users of these quality warehousing space saw an improved efficiency in their supply chain resulting in more accurate order fulfilment, reduction in 'Lost Sales' due to stock-outs, decrease in operational costs due to automation. Implementation of GST further fuelled the growth of this asset class as the state boundaries virtually blurred.

Companies could now consolidate their inventory in lesser number of storage points instead of spreading it across all the states and Union Territories due to the old Sales Tax, Service Tax, Central Excise Duty & VAT regime. As a result, the inventory levels across the supply chain came down resulting in improved margins and lower inventory carrying costs.

The pandemic also was a true test of this supply chain model and this model proved resilient and efficient in handling demand across the country when the whole nation was under a lockdown. Also, the pandemic resulted in improvisation of the supply chain with last mile delivery, in-city distribution and various other hybrid models. All these required a modern warehousing infrastructure which is now a focus area of developers and occupiers alike.

Central and State Government policies and increased emphasis on compliances whether it is zoning of land, fire NOCs. Environmental norms, workmen safety also led to increased demand for quality warehousing spaces. As a result, the warehousing industry has emerged as a strong asset class and continues to be a sunrise sector within the real estate sector as it seeks interest from investors.





The pandemic resulted in improvisation of the supply chain with last mile delivery, in-city distribution and various other hybrid models. All these required a modern warehousing infrastructure which is now a focus area of developers & occupiers alike.

FACTORS AFFECTING THE WAREHOUSING ECOSYSTEM IN INDIA

DEMOGRAPHIC

The growth of Indian warehousing market is highly related to the population of the country. Major demographic shifts can alter the course of structure and overall consumer demand in the following years, which would impact the industries depending on warehousing.



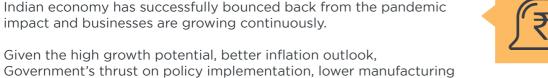
As per a report by the United Nations Population Fund ("UNFPA"), in 2011, India had ~61% of its population in the age group of 15 to 59 years, which is expected to reach ~65% by 2036. This indicates higher working population and lower dependent population, projecting higher economic growth potential.

ECONOMIC

Indian economy has successfully bounced back from the pandemic impact and businesses are growing continuously.

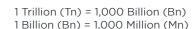
costs and availability of low cost labour compared to developed

countries, India stands as an attractive investment destination.





Country	GDP (USD Tn)	GDP Per Capita PPP (USD)	Population (Mn)	
India	3.17	7,334	1,390.0	
China	17.7	19,338	1,410.0	
France	2.94	50,729	67.5	
UK	3.19	49,675	67.3	
Canada	1.99	52,085	38.2	
USA	23.0	69,288	332.0	



Sources: United Nations Population Fund, USNews.com as of 2021



MAGNIFIED BUSINESS

Apart from manufacturing, sectors like organised retail, automotive, IT, cold storage, telecommunications, and pharmaceuticals / life sciences have evolved drastically over the last few years, driving up consumption leading to a strong demand, which has led to an organic growth of warehousing sector. We are also witnessing a slow but a sure shift in the EV automotive ecosystem giving birth to opportunities in EV manufacturing, battery manufacturing, EV technology & EV charging stations.



MAKE IN INDIA INITIATIVE

With the government propulsion, there has been an accelerated growth in the manufacturing sector and electronic sector, particularly in areas like textiles, pharmaceuticals/life sciences, telecommunications, automobiles, equipment and F&B to name a new which has been a catalyst for warehousing development.



ADVANCED TECHNOLOGY & DIGITALIZATION

Advancement in technology along with wider internet access has enabled growth drivers like robotic process automation, real time tracking, RFID for automated data collection and analysis, etc. Moreover, Warehouse Management Systems (WMS) and other IT/cloud-based solutions aid create an effective and efficient warehousing network that provides multi-level integration of various aspects of warehouse management like automatic material handling equipment, freight handling equipment, cross-docking, yard management, labour management, billing and invoicing, etc.



GOVERNMENT POLICIES

With the granting of new policies for industrial and logistics parks, there has been a significant interest in investing in the warehousing sector. Systematic reforms such as the introduction of goods and services tax (GST), focus on multi-modal logistics parks and corporate tax reforms have made investors keen to explore and invest in this asset class.

13

KEY INDUSTRIES & SECTORS IN WAREHOUSING SPACE

KEY INDUSTRIES



3PL / THIRD PARTY LOGISTICS

3PL players have always been and shall continue to be the largest occupiers of the warehousing space. Companies are increasingly realising the need to have an expert to manage their supply chain leaving them to focus on their core activities of manufacturing, product development, brand building etc. Hence, the 3PL is expected to grow in excess of 10% CAGR in 3-5 years.



E-COMMERCE

The pandemic has been a strong boon for ecommerce sector, where everything is available at a click, right from groceries, medicines, food & beverages (F&B) to fashion, lifestyle, electronic items, etc.

Given the high convenience and ease provided in terms of ordering, variety as well as secured online payments, there has been a strong increase in e-commerce growth which has further facilitated warehouse demands.



MANUFACTURING

There is buoyancy in manufacturing sector given friendly business policies. This development is set to further uplift the logistics and warehousing segment. Growth in sectors like automobiles, who are already relying on specialised warehousing for storing and final assembly of parts etc., are marking its way for the warehousing sector to evolve into a major support infrastructure for manufacturing.

KEY SECTORS

~78%

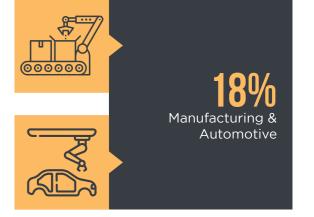
SHARE OF TOP 3 SECTORS
IN WAREHOUSE LEASING SPACE
ACROSS 7 INDIAN CITIES

3PL has the highest leasing space share at 42% across 7 cities given the upsurge in companies deploying their supply chain & logistics function to 3PL players.

Post pandemic, given the ease of online transactions and payments, ecommerce sector has gained substantial demand hence it stands second to 3PL in terms of warehouse leasing at 18% share.

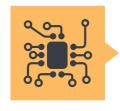








12%Retail



Consumer Electronics & FMCG

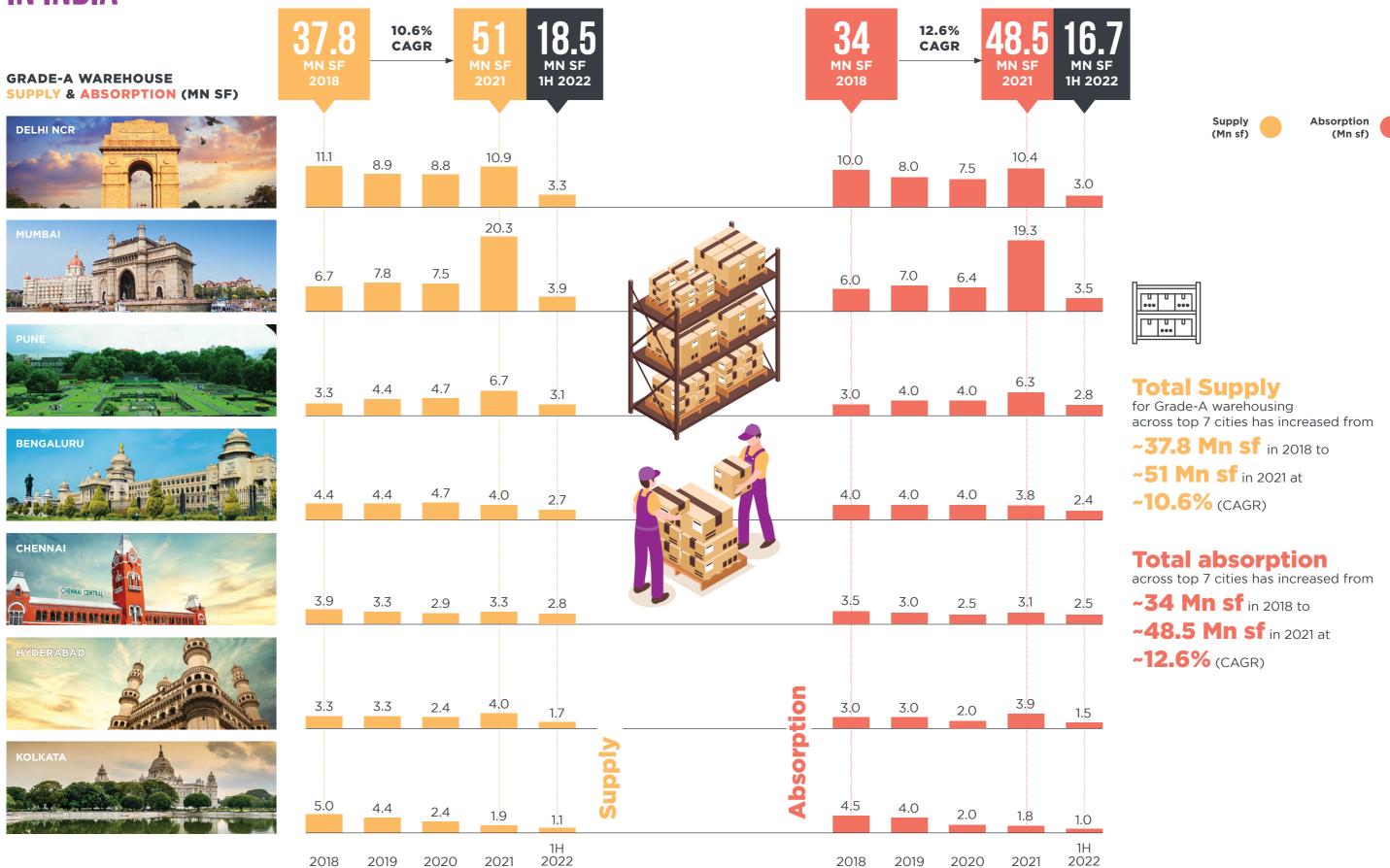


Source: CRE Matrix & ANAROCK Capital Markets Research





CURRENT STATUS OF WAREHOUSING IN INDIA



GRADE-A WAREHOUSE LEASING SCENARIO ACROSS TOP 7 CITIES

SHARE OF AREA LEASED BY REGION

4 9 DELHI NCR

Grade-A warehouse leasing across top 7 cities 160⁺ Mn sf

Western region (37%) has the highest share of leased area

followed by Southern region with 32% share. This can be attributed to the rise in 3PL sector.



29 CHENNAI

TOP 10 LEASING MICRO-MARKETS BY AREA

1. Chakan	22%
2. Sriperumbudur	18%
3. Bhiwandi	16%
4. Luhari	9%
5. Nelamangala	8%
6. Around Bilaspur Chowk	8%
7. Medchal	7%
8. Dankuni	5%
9. Farukhnagar	4%
10. Panvel / Taloja	3%

Out of the top 10 leasing micro-markets,

dominance is noted in Western region with a collective share of 41%

Region-wise Share of Area Leased (%)

Note: Map not to scale; for reference only

BENGALURU

comprising of Bhiwandi, Chakan and Panvel/Taloja.

North: Delhi NCR; East: Kolkata; South: Hyderabad, Bengaluru & Chennai & West: Mumbai (MMR) & Pune

CURRENT RENTALS ACROSS TOP 7 CITIES

CURRENT RENTALS BY CITY















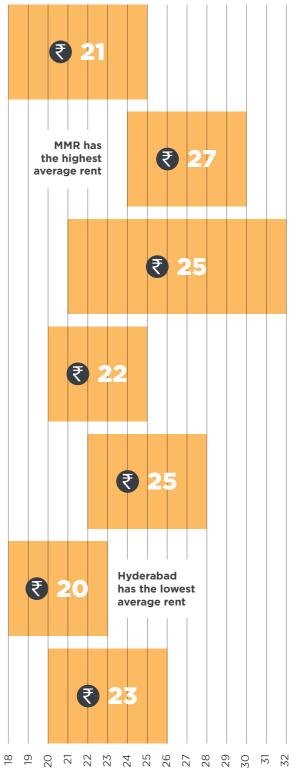
Note: Current Rentals for Grade-A & Grade-B USD 1 = INR 80 Source: ANAROCK Capital Markets Research

Rental Range (INR/sf/month)



Average Rentals (INR/sf/month)







HOW OCCUPIERS ARE OPTIMISING THEIR EFFICIENCY

BY UTILISING CUBIC SPACE

It is achievable by means of modern buildings where racking / shelving is done in a vertical structure method instead of the traditional method.



INCREASE IN IT INFRASTRUCTURE

IT infrastructure in modern warehouses helps in inventory management, unit counts and tracking stock levels. Stock management programmes aids clients monitor their stock without any hassle and are able to make quicker decisions.



INCREASED USAGE OF AUTOMATION

Automation systems like conveyors, auto-packaging & labelling, intelligent lighting systems enables warehouses to be managed efficiently and effectively. Digital as well as physical process automation like warehouse management system, mobile scanning devices, digital barcoding and RFID, IoT Sensors, etc collectively improve operations and minimise human error.



\$

CONSOLIDATING MULTIPLE FACILITIES INTO A LARGER SINGLE FACILITY

Consolidation of warehouses under one roof reduces cost, increases ROI and improves operational efficiency.

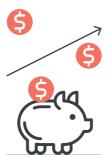


MODERN WAREHOUSE INFRASTRUCTURE

It can support renewable energy which reduces operational costs. For example, solar panels (PV Panels) can be fixed on warehouse rooftops which helps in reducing energy costs and it is Green Energy.



The above benefits are offered by Grade-A warehouses which results in productivity going up and increasing efficiency.



CURRENT WAREHOUSING SPACE IS NOT BIG ENOUGH TO CATER TO THE NEEDS OF THE COUNTRY

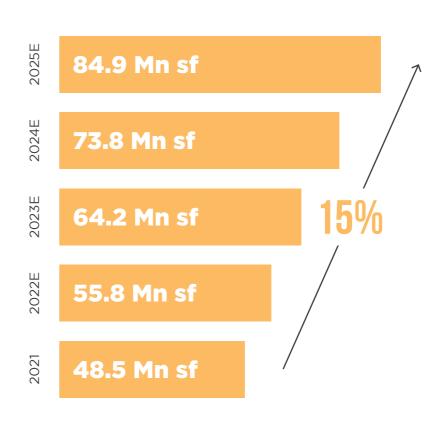
There is an increasing demand for Grade-A warehousing facilities as it has direct and indirect beneficial impact on operational efficiencies.

Grade-A warehouses are well equipped with additional floor-load capacity, better planned spaces, safety precautions as well as adherence to international standards. Grade-A warehousing is taking over Grade B & C.

~48.5 Mn sf of grade A warehouses have been leased in top 7 cities in 2021.



EXPECTED GROWTH IN GRADE-A WAREHOUSE SPACE



FUNDING REQUIREMENT

Based on our earlier analysis,

India will need to create adequate supply to meet an absorption of ~223 Mn sf of Grade-A warehousing demand over the next 3 years.

This will require an equity investment of ~USD 3.8 Bn to support this scale of development. Based on our data, the sector currently has dry powder of USD 900 Mn from existing commitments.

This signifies a latent investment opportunity of further USD 2.8 Bn in warehousing in the near future.



COUNTRY REQUIRES MORE DEVELOPERS IN WAREHOUSING **SPACE**

The demand for warehouse space is increasing not only in metro cities but tier II & III cities rapidly. The warehouse development cycle is a guarter of the office development cycle which can be of better interest to seasoned warehouse developers as well as new players for greenfield investments.

Major incentives have been provided by most states in India for warehouse development:

- 1. Ease of getting approvals
- 2. Single window clearances by many states
- 3. Transparent zoning & land conversion process
- 4. Land allotment through State Government
- 5. Faster environmental clearances

Significant underlying demand from the end-user base combined with industry favouring policies from government makes a strong case for investors as well as developers, to keep growing in the warehousing space over the next 5 years.

Warehousing sector is attracting many foreign and domestic players to enter the fray, which can be seen through recent deals such as with global developers like Panattoni venturing in warehouse development, and local developers like Lodha and RMZ diversifying into this space through investment platforms.

Homegrown warehousing developers such as Pragati and KSH Infra have also been able to capitalize on this wave by creating investment platforms for growth.

KEY PE INVESTMENT DEALS AND JV PLATFORMS IN WAREHOUSING



Capital Provider

Morgan Stanley*

Ivanhoé Cambridge & Bain Capital Blackstone GIC CDC Group Blackstone Mapletree Logistics Trust Blackstone

Recipient

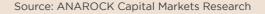
Macrotech Developers (Lodha) ESR	
Embassy Industrial Parks	
ESR	
TVS Industrial & Logistics Park	
Allcargo Logistics Ltd.	
KSH Infra Ltd.	
TARC	
Pragati	







,,	
1,000	May 2022
750	Dec 2020
709	May 202
600	Nov 2022
55	Dec 2020
50	Mar 2022
40	Jun 2020
40	Sep 202
12	Jul 2020





FINANCIAL PROPONENTS OF INVESTING IN WAREHOUSING SPACE IN INDIA

Warehousing as an asset class has been a preferred sector for many investors & developers alike to balance their real estate portfolio. Warehousing segment is range bound and high revenue generator. IRR would be higher; risk is lower, and production is faster. Moreover, this sector is consumption led unlike other sectors which are developer led.





SHORTER DEVELOPMENT **DURATION**

Warehousing has a shorter development duration compared to other traditional asset classes. This sector is growing faster than office segment.







LAND BANK

As the city expands, in future the current warehousing zones may come within the city limits and the land can be used for development of other assets.







EASE OF APPROVALS

Warehousing facilities are required not only in metro cities but also in other parts of the country given the demand.

Getting necessary approvals is easier for warehouses given single-window approval system whereas for other asset classes multiple approvals and multiple authorities are involved.





FASTER ROTATION OF MONEY

Given the lesser construction cycle for warehousing (9-12 months) compared to other asset classes (3-5 years); costs escalations are lower for warehousing sector.









GREEN WAREHOUSING + ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)

Sustainability is an important aspect of any business. Integrating green logistics and green channels for supply chain management into warehousing can also yield better business.

Warehouses produce environmental pollutants mostly from heating, cooling and lighting arrangements used as a part of maintenance of stock. The bigger warehouse parks are known to have larger carbon footprint which needs to be addressed effectively due to rising issues of climate change.

Developers can incorporate Building Management Systems (BMS) while constructing warehouses as this system ensures the buildings remain sustainable through its life. Usual applications of BMS in facilities can be light control, safety & security solutions, water management, security management, etc. It enables operational energy savings, enhancement of air quality, provision of safety of inventory from damages, etc.

Green warehousing business stands out from their competitors. Occupier demands for environmentally sustainable warehouse spaces are on a rise. Such warehouses get better recognised and gain better costs savings in the long run due to improved energy efficiency and tenant retention.

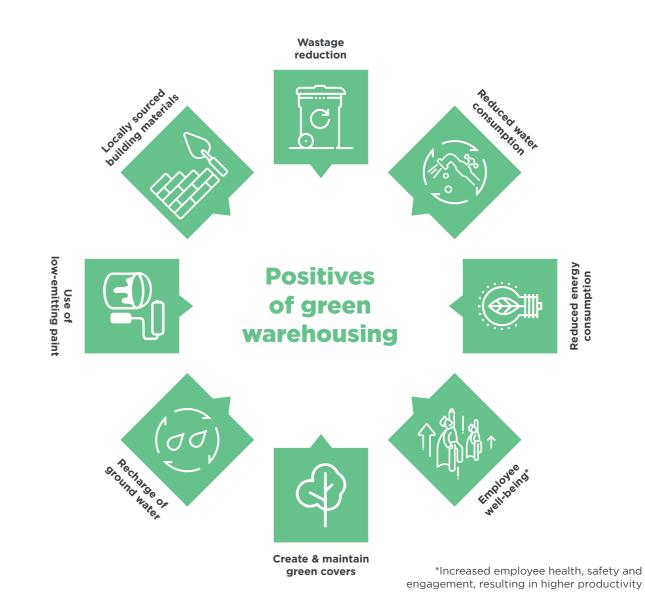
Even though the benefits of green warehousing may not be directly visible, supply chain managers who invest in going green see a fast and better ROI.

While adopting green practices for eco-friendly warehouses to cater to demands for reduction of carbon footprints; government regulations & framework and insurance requirements along with productivity upkeep, must be taken care of as well.

Companies are also focused on social impact and governance as well in today's time.

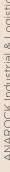
Seasoned developers have already pledged to their ESG goals of having not only considering the environmental impact, but also social and governance impact.

Their goals cover health and safety of labour as well as well focus on employee well-being like providing better empowering opportunities for rural women, childcare facilities, education facilities, increased diversity and inclusivity in the workforce, etc.













So far, the warehousing development were led by funds, which would now have

next round of funding by JV platform deals

We expect a warehouse sector specific REIT / InVIT in 2024



India has larger scope for air cargo, cold-chain & in-city multi-level structure warehouse development



ESG has become **an integral factor** for this sector as the projects that meet

ESG standards are experiencing easier planning process, tenant retention and investor trust



ANAROCK INDUSTRIAL & LOGISTICS SERVICES



INVESTMENT BANKING

Fund Raising

Assist domestic developers with good track record in raising equity platforms with capital providers.

Through collaboration with domestic & global partners, we advise domestic funds in raising equity platforms for industrial & logistics.

Debt Financing

Assist clients to raise capital for project finance, lease rental discounting finance or debt restructuring, from leading public & private sector banks and NBFCs through a seamless transaction process.



INVESTMENT SALES

Land / Asset Sale

Assist developers, corporates and investment funds acquire or dispose of land or built-out assets (Pre-leased or Forward Sale) either through Outright Sale or Joint Ventures (JV), Joint Developments (JD), Built-to-Suit, etc. through a transparent process.

Portfolio Sale

Assist asset owners in monetizing their investments in income generating assets, partially or fully, across a wide universe of funds, HNI clientele and developers.

Advise & run portfolio divestments for developers and funds for exit through sale to strategic or financial investor.



BROKERAGE & TENANT REPRESENTATION

Owner Services

Assist asset owners to lease out warehousing or industrial spaces to suitable tenants based on location, technical specifications, etc.

Our extensive network allows us to tap into a wide end-user universe to yield up your idle asset.

Occupier Services

Identify suitable spaces for setting up industrial or logistics facilities based on an analysis of the right location and business strategy on production, distribution, etc.

Work closely with the tenants during the requirement to finalisation lifecycle of both ready and Built-to-Suit warehouses.

Provide detailed market mapping for ongoing market rates, competition, future growth infrastructure for the tenant to make an informed decision.



ADVISORY SERVICES

Buy-side Advisory

Advise private equity (PE) funds on their entry strategy into India, both in terms of entry and exit for industrial & logistics investments. We also aid institutional players understand these industries in terms of capital and financing.

Development Advisory

360° advisory on location, re-generation, master planning, market mapping & city profiling, highest & best use studies, market trends & feasibility, development / disposal strategy & occupier mapping.

Financial Feasibility

Cashflow based techno-economic viability (TEV), ratification of reports for project cost, revenues, leasing assumptions, etc.

Asset Valuation

Valuation of assets for specific objectives.

ASSET CLASSES:



INDUSTRIAL



WAREHOUSING*

*Includes in-city warehousing & cold storage

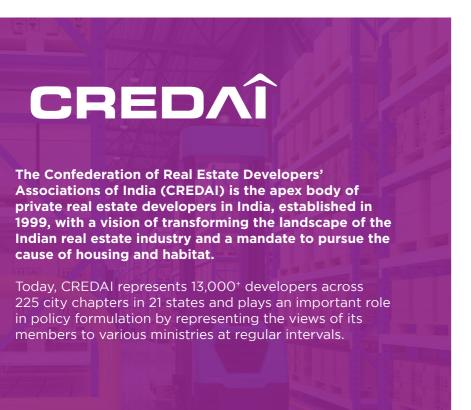


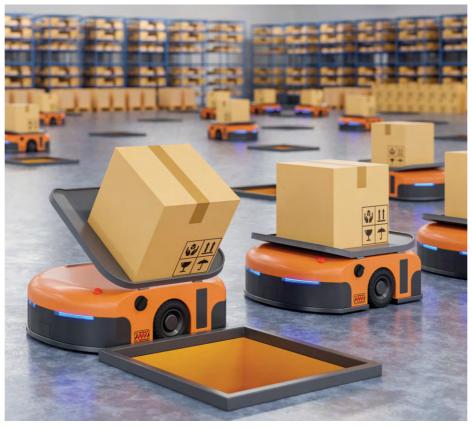
LAND

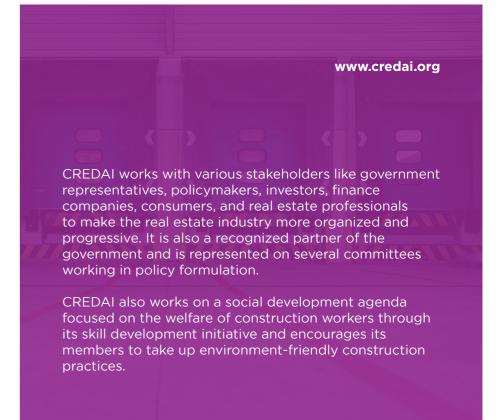


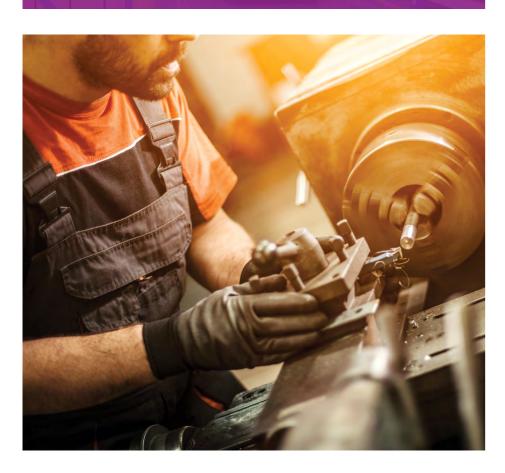
DATA CENTER

CREDAI PROFILE



















ANAROCK is India's leading independent real estate services company with a presence across India and the Middle East. The Company has diversified interests across the real estate lifecycle and deploys its proprietary technology platform to accelerate marketing and sales.

The ANAROCK services suite includes Residential Broking & Technology, Retail (in partnership with Vindico), Commercial, Investment Banking, Hospitality (in partnership with HVS), Land Services, Industrial and Logistics (in partnership with Binswanger), Investment Management, Research, Strategic Advisory & Valuations and Project Management Services (in partnership with Mace), Flexi Spaces (in partnership with myHQ & Upflex) and Society Management Services (acquisition of ApnaComplex, India / ANACITY, EMEA).

ANAROCK has a team of over 1,800 certified and experienced real estate professionals who operate across all major Indian and Middle East markets. ANAROCK also manages over 80,000 established channel partners to ensure global business coverage.

Our assurance of consistent ethical dealing with clients and partners reflects our motto - Values Over Value.

For more information, please visit www.anarock.com

AUTHOR

Janet Pottakaran

Sr. Associate - Research ANAROCK Capital

DESIGNER

Dr. Paridhi Gupta

Vice President - Design ANAROCK Capital

CONTRIBUTORS

Devi Shankar

President - Industrial & Logistics | Data Centers ANAROCK Capital

Vinay Thakkar

Sr. Vice President - Industrial & Logistics ANAROCK Capital

Virendra Joshi

Sr. Vice President - Research ANAROCK Group

Akshit Shah

Consultant - Research ANAROCK Capital

FOR BUSINESS ENQUIRIES, PLEASE CONTACT

FOLLOW US ON

Shobhit Agarwal

MD & CEO ANAROCK Capital shobhit.agarwal@anarock.com











For research updates, please visit our website



ANAROCK Capital Advisors Pvt. Ltd.

1002, 10th Floor, B Wing, G Block, ONE BKC Bandra Kurla Complex, Bandra (E), Mumbai - 400 051, India +91 22 4293 4206

© 2022 All rights reserved.

Disclaimer: All information in this report is provided solely for internal circulation and reference purposes. ANAROCK makes no statement, representation, warranty or guarantee as to the accuracy, reliability or timeliness of the information provided. No part of this report may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods without the expressed written consent of the organisation.