

PLAYBOOK

PLANNING FUTURE-READY LOGISTICS REAL ESTATE

Location, Automation & Decarbonization

DHL Supply Chain



INTRODUCTION

A GUIDE TO PLANNING REAL ESTATE FOR FUTURE GROWTH

This playbook explores some of the challenges our customers encounter, and the choices that need to be made, when developing a logistics real estate strategy. By focusing on these issues your supply chain real estate can help to drive your business growth.

It covers the following topics:



1.

Finding the optimal
LOCATION



2.

Preparing for
AUTOMATION



3.

Meeting ESG targets
and supporting
DECARBONIZATION



WHY **NOW IS THE TIME** TO FUTURE-PROOF YOUR SUPPLY CHAIN REAL ESTATE

Demand for logistics real estate is at a record high.

According to real estate specialists JLL - who attribute this to “permanent structural change of supply chains and more goods coming through the consumer front door via e-commerce” - the logistics sector represented nearly a quarter of all commercial real estate investment in 2021.¹

With interest rates on an upward trajectory, and in such a booming, fast-moving market - where vacant space only stays on the market for 4-6 months - there is pressure on businesses to act quickly, while making the right real estate decisions so that they can achieve growth.

In a survey by JLL of over 700 logistics experts, 75% believed demand for logistics space would increase **>5% in the next three years¹**

¹ <https://www.us.jll.com/en/trends-and-insights/investor/can-real-estates-hottest-sector-stand-the-heat-in-2022>



WHY IS **WAREHOUSE SPACE** SO IN DEMAND?

There are three main megatrends that are driving the demand for warehouse space. These are:

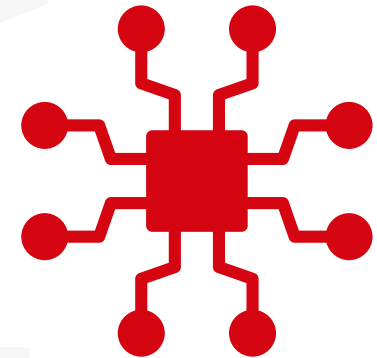
1. Accelerating levels of **e-commerce** are causing businesses to reconsider their whole distribution operation and warehousing strategy.
2. Globally, increasing amounts of regulation governing the environmental performance of buildings means that **ESG** considerations in logistics real estate are under the spotlight.
3. The pandemic demonstrated to businesses the potential vulnerability of supply chains, and the importance of using real estate to build **resilience** that minimizes future risk exposure.



FIVE KEY QUESTIONS IN LOGISTICS REAL ESTATE DECISION-MAKING

Businesses should consider the following questions:

1. What is the best **model** – owning or leasing your real estate?
2. Where is the optimal **location** to reach your customers?
3. Is there sufficient qualified **local labor** to operate the facility?
4. Can it accommodate **technology** that will increase efficiency and productivity?
5. How will it help you meet **environmental, social and governance (ESG) targets?**





1. FINDING THE OPTIMAL LOCATION



WHAT ARE THE **OCCUPATION OPTIONS** FOR OWNING OR LEASING LOGISTICS REAL ESTATE?

This decision begins with mapping out the current supply chain facilities (owned and leased) and the desired future state. Once this stage is completed an action plan should be developed detailing the shift from existing to future state.

The 'own vs. lease' decision is largely about committing capital to supply chain assets versus investing in core R&D, production and marketing, etc.

Leasing facilities typically provides more flexibility and the facilities can be '**Build-to-suit**': designed and custom built to your unique specifications.

If space is needed more quickly than the typical 12-18 month build-to-suit timeline, then **leasing an existing facility** may be an attractive option: for an agreed time you pay for the use of space in a facility.

In the US,
CBRE report that
companies signed a
**record 57 leases of
1 million+ sq ft in
2021.²**

²<https://www.freightwaves.com/news/big-box-warehouse-lease-activity-sets-record-in-2021>



WHAT **TRANSPORT INFRASTRUCTURE** DO YOU REQUIRE NEARBY?

The proximity of your real estate transport infrastructure will determine how quickly you can reach your customers and increase your confidence that goods will arrive on time and on budget.

Consider for example in the UK, one of the two state-of-the-art warehouse facilities that DHL Supply Chain has recently designed for its customer the Mars Group, is situated at the East Midlands Gateway - optimally located for transport links.

The Gateway is adjacent to East Midlands airport and close to the M1 motorway, which allows excellent connectivity to the UK road network. The site features an integral rail terminal, through which trains can transport goods across the UK and link to other rail freight interchanges and major UK ports.



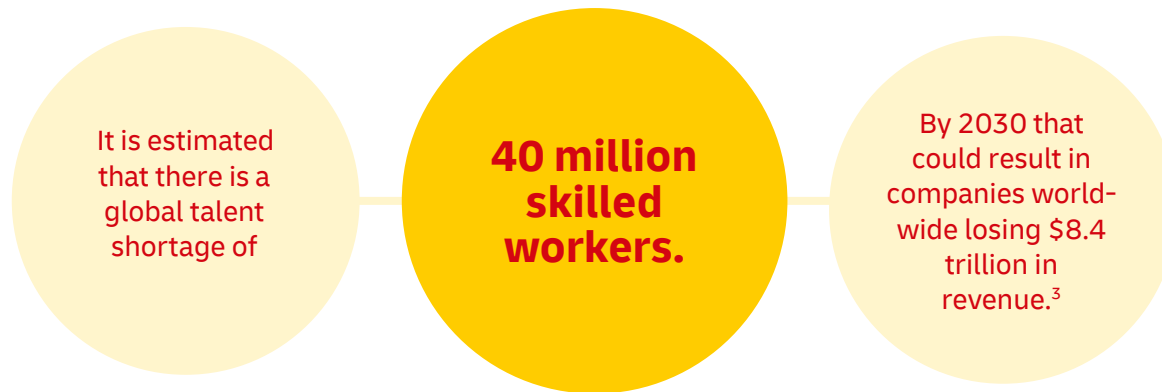
IS THERE A **SUITABLY SKILLED WORKFORCE** READILY AVAILABLE NEAR THE LOCATION?

Do you know the local demographics and employment statistics?

What are the typical local wage expectations?

Could there be opportunities to share labor and training with nearby facilities?

Will you be in competition with other local employers for supply chain talent?



³<https://www.forbes.com/sites/benjaminlaker/2021/10/11/how-to-lead-through-the-global-talent-shortage>



ARE THERE ANY **TAX INCENTIVES** THAT COULD BENEFIT YOUR BUSINESS?

It is important to understand the tax implications of a location, and whether there are any economic incentives, such as grants or other funding, that you could benefit from.

In the US, for example, with different types of companies having different levels of exposure to major state and local taxes, distribution centers face large property tax burdens.

DHL Supply Chain recently negotiated on behalf of one customer in the US a 13-year tax abatement, worth \$5 million in the first five years of the contract and \$12 million over the total life of the abatement.

Research in the US has found that the typical effective tax rate for a research and development center is **12%**, whereas the rate for a distribution center is **over 34%**.⁴

⁴<https://taxfoundation.org/state-tax-costs-of-doing-business-2021/>





2. PREPARING FOR AUTOMATION

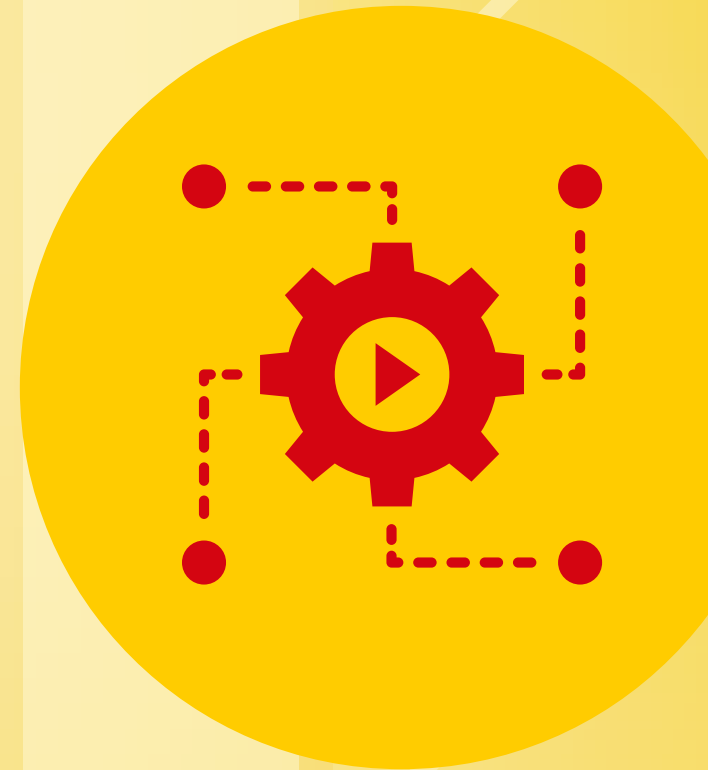


WHY DO YOU NEED **AUTOMATION** IN THE WAREHOUSE?

To improve **productivity and efficiency.**

E-commerce, with its fast turnaround times and high volumes, has led to an increasing need for warehouses to employ automation and robotics.

It has also increased the deployment of technology that delivers end-to-end visibility across the supply chain.



HOW DOES THAT **AFFECT** REAL ESTATE **DECISIONS?**

Today's facilities are increasingly **being designed around automation.**

Next-generation warehouses are much taller, with up to twice the clearance height and storage capacity per square meter, compared to previous generation buildings. The height advantage, along with the implementation of automated storage and retrieval systems, maximizes operating efficiency.

Another feature of next-generation warehouses is much thicker floor slabs, to accommodate the extra weight of automation, and completely flat floors to enable the safe, accurate operation of the automated storage/retrieval systems.



Recent research found that most proposed industrial developments now have a **36'** clear height, rather than **32'**.⁵

⁵<https://methodarchitecture.com/industrial-clear-height-36/>



AUTOMATION IN **ACTION**

It isn't only height that differentiates the new design of warehouses. At DHL Supply Chain's Smart Warehouse in Beringe, robots handle picking tasks using machine vision technology and can pick 600 items per hour, 24/7.

Autonomous mobile robots (AMRs) work alongside humans to improve existing processes or create new ones.

By implementing wireless tracking technology, the movement of equipment and people through the warehouse can be optimized and enhances safety.

Warehouse robots can boost **productivity by more than 25%** and allow human employees to **focus on higher value tasks.**





3. MEETING ESG TARGETS AND SUPPORTING DECARBONIZATION



WHAT ARE THE **ENVIRONMENTAL IMPACTS** OF WAREHOUSING?

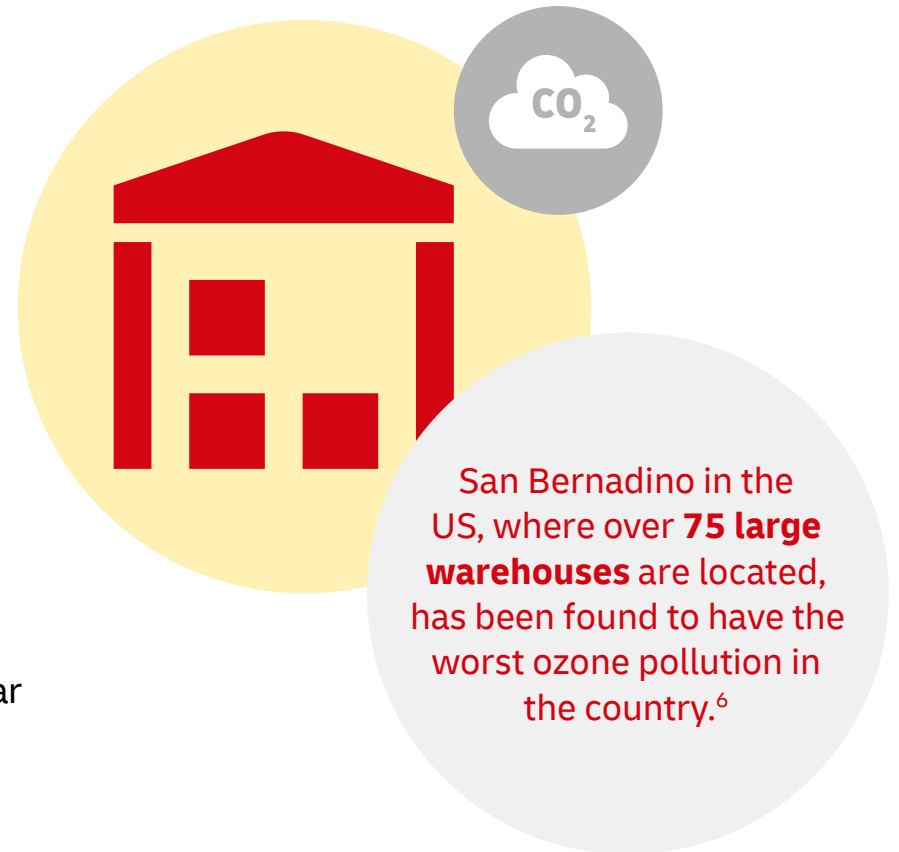
Warehousing and its associated logistics activities such as road transportation - one of the most polluting sectors globally - are associated with a number of environmental impacts.

These range from carbon dioxide emissions to noise and light pollution, and road safety.

What can be done to limit those impacts?

Property developers, investors, and warehouse occupants are incorporating renewable power and energy efficiency measures into facilities to achieve net zero-carbon warehouses.

Examples of technologies built into new warehouses include solar panels, heat pumps, daylight harvesting, intelligent LED lighting and the use of 'grey water' for toilets and landscape irrigation.



⁶<https://www.theguardian.com/technology/2021/apr/15/amazon-warehouse-boom-inland-empire-pollution>



ASIDE FROM THE ENVIRONMENT, WHAT ELSE CAN BE DONE IN WAREHOUSES TO **MEET ESG TARGETS?**

During a shortage of warehouse workers, potential recruits are basing their choice of workplace on the working environment and conditions.

Operations that **ensure safety and focus on the employee experience and wellbeing** will reap the benefits of higher retention rates and attract new talent in the immediate term.

According to the Fellowes Workplace Wellness Trend Report, 87%⁷ of workers would like their company to offer healthier workspace benefits such as wellness rooms, healthy lunches and ergonomic seating.

⁷ https://assets.fellowes.com/documents/corporate/Forbes_Office_Space_Impacts_Employee_Well-Being.pdf

⁸ <https://www.adb.org/sites/default/files/institutional-document/633886/adou2020bp-improving-workplace-wellness-asia.pdf>



A survey of office-based businesses in the Asia Pacific region found that around 60% of companies surveyed either had, or intended to, start a **workplace wellness program** in the near future.⁸



NET ZERO-CARBON WAREHOUSING FROM DHL

DHL Supply Chain is committed to achieving 100% net zero-carbon warehousing by 2025.

All our new buildings have a carbon neutral design. Electricity from renewable sources will account for more than 90% of the energy used by 2030. Also by then, sustainably-powered sources of heating will have been rolled out to over 50% of our buildings.

Our promise is that as a trusted partner we will do everything in our power to make sure our customers reach their ambitious ESG goals. DHL Supply Chain is certified as a Great Place to Work and Top Employer, with all of our new warehouses incorporating employee wellness considerations in the offices, break areas and the warehouse itself - from natural light, to noise reduction and a focus on Health and Safety.



“Our goal is to help customers meet and exceed their ESG ambitions. We open conversations early with them so they can take meaningful social and environmental steps through real estate developments, rather than play catch-up later when they may be forced to do so.”

**Jan Gora, Global Head of Strategy,
Real Estate Solutions,
DHL Supply Chain**



WHERE CAN YOU FIND **REAL ESTATE EXPERTISE** THAT'S INFORMED BY OPERATIONAL KNOW-HOW?

DHL Real Estate Solutions (RES) is where market-leading real estate expertise meets unparalleled logistics knowledge and know-how. With a global team of 70+ experienced and well-connected real estate professionals, we leverage our global reputation and financial strength to create integrated, sustainable and future-proofed real estate solutions to drive your business vision.

Our unrivalled commitment to develop carbon-neutral warehouses, unmatched commercial creativity, on-the-ground knowledge and operational excellence, allow us to achieve what others can't. From single site to multi-usersites, our competitive leases, local relationships and purchasing power can free up investment opportunities, stimulate growth and add value in ways you'd never imagined.

We're more than a provider, we're your **collaborative partner**. When we work together, your goals become our goals, your challenges become our challenges and together we will build your future success.

If you're looking for the right facilities in the right location, we're the right people.



FOR FURTHER INFORMATION

Contact our supply chain experts **here** >
or visit our **website**

