

Case Study: Infrastructure Project Warehousing and Logistics Strategy



Case Study: Tier 1 – Infrastructure Storage and Logistics Solution.

Project Overview

A Tier 1 infrastructure project required a secure, high-capacity storage solution for high-value equipment and products, ensuring safe handling, optimised logistics, and long-term risk mitigation. The facility was designed to accommodate large-scale deliveries, implement structured storage methodologies, and streamline transport coordination for critical installations.

Challenges Identified

During the initial phase, several operational challenges were identified:

- Storage footprint optimisation Balancing inventory levels with available space while ensuring safe handling.
- Handling equipment selection & aisle configuration Determining the best lifting and transport methods without compromising manoeuvrability.
- Transport planning & booking Establishing a structured approach for inbound and outbound deliveries.
- Pest control & risk mitigation Implementing preventative measures to protect stored assets.
- Regulatory & Compliance Ensuring storage meets relevant industry safety standards and operational best practices.

Solutions & Implementation

The project was structured into phased consultation stages, ensuring all aspects of storage planning were carefully assessed and refined.

✓ Optimised storage plan – Implementing a gradual space scaling as inventory increased.

Standardising handling operations – Ensuring all specialist lifting equipment was available, reducing complexity in operations.

Integrated logistics strategy – Introduced a Warehouse Management System and transport booking workflows to align with warehouse inventory movements.

Cost negotiation framework – Developed a pricing structure that adjusts with storage demand as equipment arrived or was dispatched.



Stakeholder alignment – Coordinating efforts between logistics teams, procurement specialists, and operational leads to ensure efficiency.

Process for completing the project

WTA Energy sat with the client and identified the key issues at hand, established a straightforward questionnaire to identify further specifics for the project before providing an initial Scope document along with a Supplier Specification Sheet.

This provided a clear scope to work with and then provided a clear set of requirements for all potential suppliers, this allowed us to quickly identify a short list of suitable suppliers. Some areas that were firmed up by this process:

- Final validation of required footprint of storage width adjustments for optimised equipment access.
- Refining transport booking processes to ensure cost-effective scheduling.
- Additional risk assessment measures for long-term asset security.
- Scalability strategies Evaluating future growth potential, ensuring adaptability for increased storage demand.
- Technology integration Exploring RFID/barcode solutions and automated inventory tracking to streamline asset management.
- Sustainability initiatives Investigating energy-efficient storage solutions and optimised transport routes to reduce environmental impact.

Outcomes

Upon completion, the storage facility served as a highly efficient logistics hub, providing:

- Streamlined storage and retrieval with optimised space utilisation.
- Improved handling processes with standardised lifting operations.
- Reduced transport inefficiencies through structured booking systems.
- ☑ Risk mitigation through robust security and pest control measures.
- Scalable infrastructure that can adapt to evolving project demands.
- Sustainable logistics framework reducing unnecessary energy use and waste.



Additional Value-Added Services

In addition to the original consultancy programme, WTA Energy further enhanced the efficiency and cost-effectiveness of the project, by offering a range of value-added services were provided, addressing critical logistics and financial considerations:

- Logistics Plan Reviews Conducting in-depth evaluations of transport scheduling, warehouse space utilisation, and inbound/outbound management, ensuring seamless operations.
- Load-Out Management Streamlining equipment dispatch processes, ensuring optimal sequencing for installations while minimising handling risks.
- Customs Consultancy Advising on import/export regulations, clearance requirements, and documentation to prevent delays and ensure compliance with international trade standards.
- Cost Reduction Programme Implementing a structured cost-saving strategy, including warehouse pricing negotiations, load efficiency improvements, and transport optimisation measures, reducing overall project expenses.