

# Create an Intelligent-Crafted Future Towards Net-Zero Port Operation



WESTWELL



**Digital Readiness**

**Opportunities**

**Challenges**

**Decarbonization Transformation**





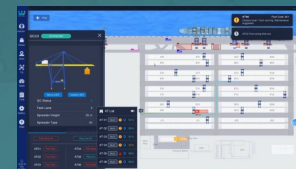
WESTWELL

Sailing to a more sustainable future of  
AI and Renewable Energy

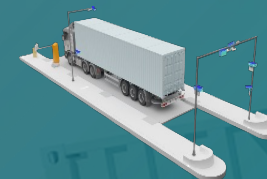
We provide  
**Full-stack AI Solution**  
employing Smart and Green Technology  
to digitalize and decarbonize Global Container Logistics

**20** Countries & Regions

**200+** Clients



Smart Port Ops Systems



Smart Process Solution



NEVs



Smart Supply Chain



Charging & Swap Facilities

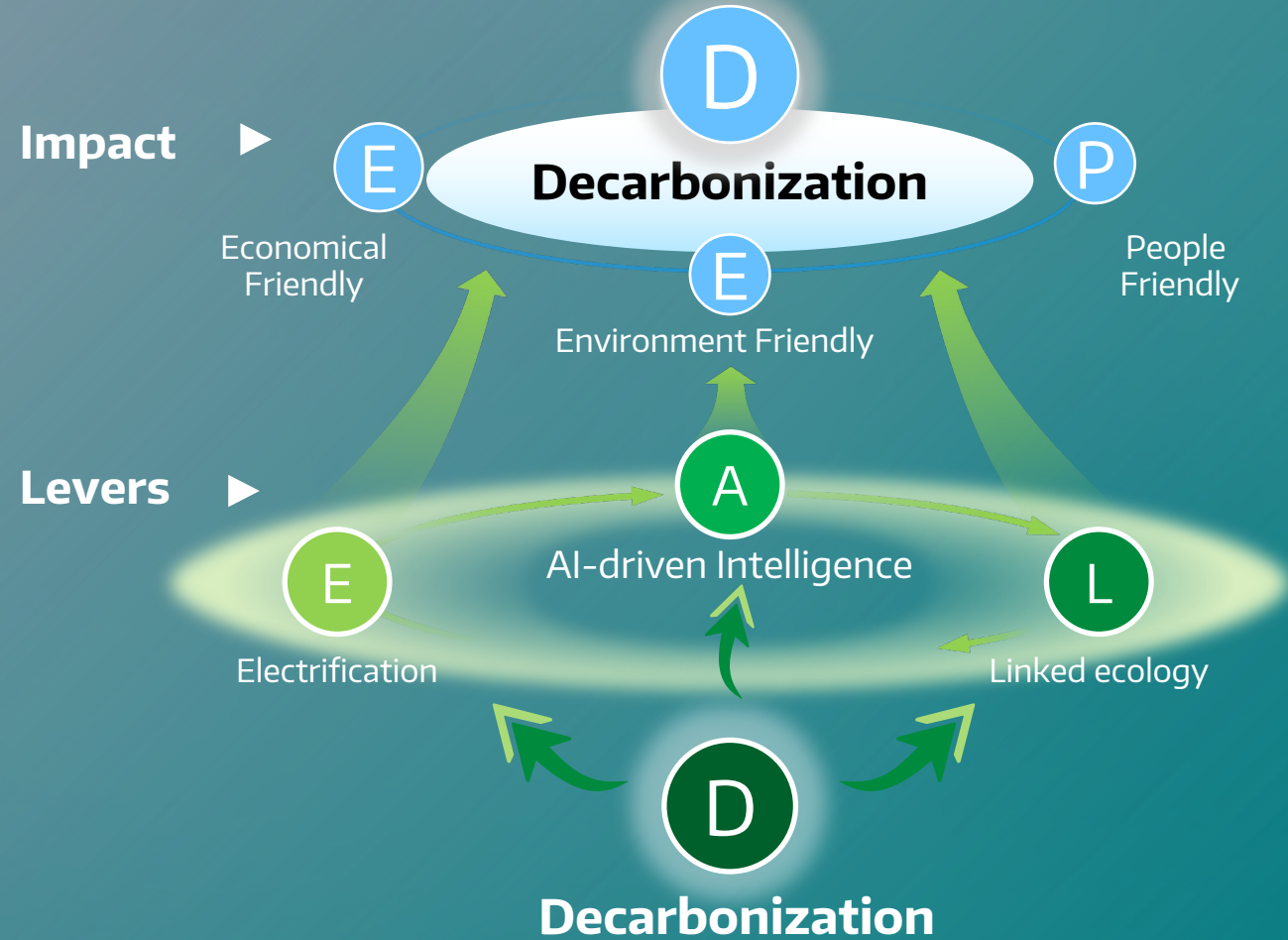
2024

Freight Logistics  
Decarbonization Whitepaper:

**LEAD the green wave,  
bring the DEEP impact**



# Our Methodology







## Westwell NEV Matrix

With Forward Engineering, we have developed a series of NEVs and supporting facilities to meet the operational demand of various logistic hubs

# Electrification

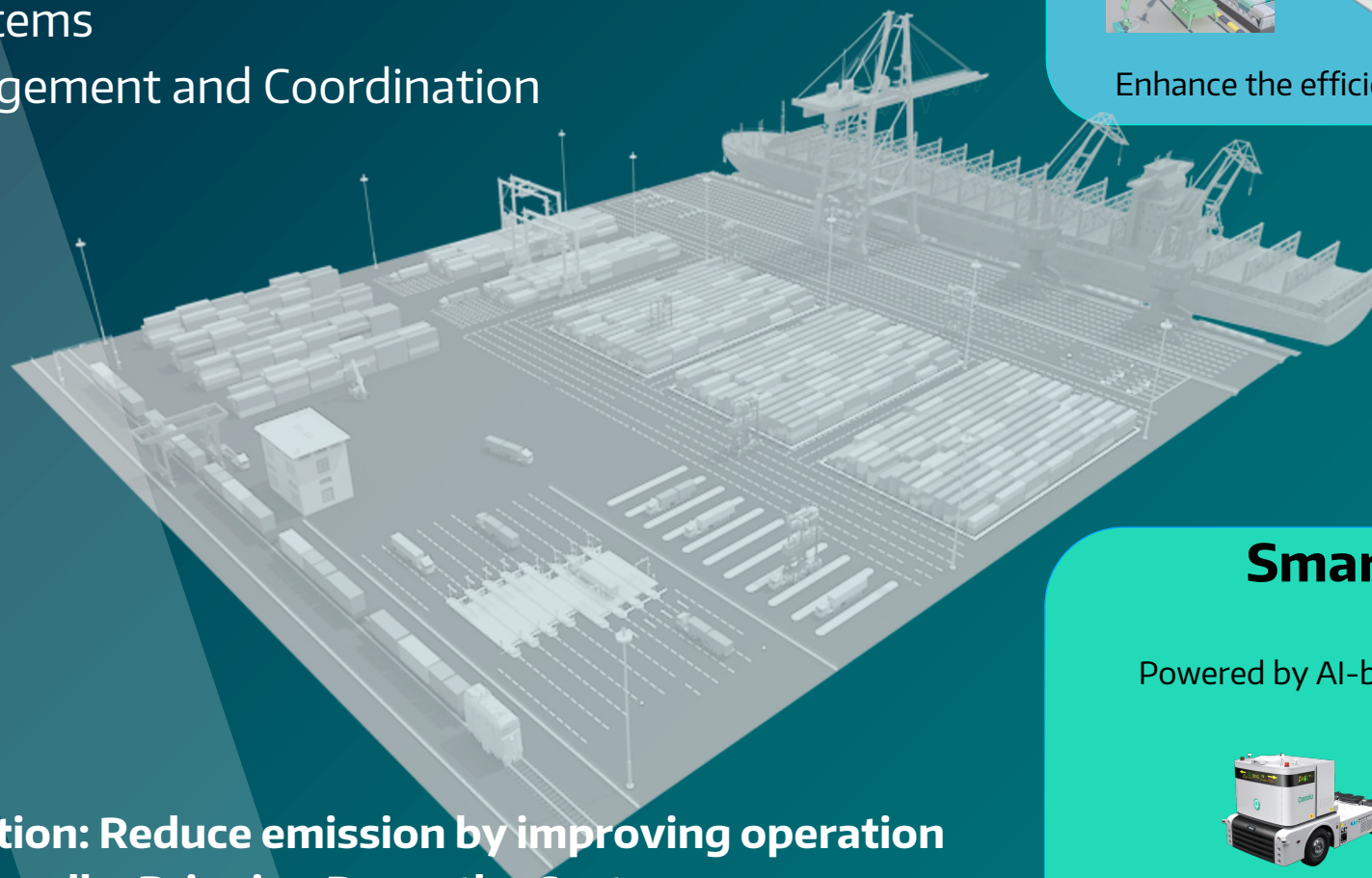
Switch to E-powered  
From diesel-powered

# AI-driven Intelligence

Smarter Vehicles

Smarter Systems

Better Management and Coordination



**Decarbonization:** Reduce emission by improving operation

**Economic Friendly:** Bringing Down the Cost

**People Friendly:** Better Working Condition

## Smart Process Solution

Powered by AI-backed OCR/IOT etc.



Enhance the efficiency of each operational node

POWERED BY WESTWELL   
**WELLOCEAN**

POWERED BY WESTWELL   
**Qomolo KEWE**

## Smart & Green Horizontal Transportation

Powered by AI-backed autonomous driving capabilities, route planning, etc.



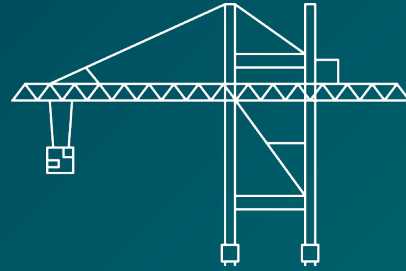
Enhance the efficiency, safety and reduce the carbon emission of horizontal yard transportation



## Linking Information

---

Restructured TOS backed by AI algorithm to enable more integrated and intelligent operation



## Linking Energy

---

Holistic Green Energy Architecture form green electricity generation, to storage, to smart energy management, to electric vehicles and facilities



## Linking Materials

---

Building Circular Economy for the Port



# Linked Ecology

Interconnected ecosystems of  
Information  
Energy  
Materials

**How do we get there?**



# How Do We Get There?

**E2E Solution:** A Turnkey Solution from Consulting to Implementation, No matter where you are.

## Consulting

- **Conduct internal diagnosis** of operation process
- **Identify** pain points of CO2 emissions
- **Explore** optimization potential of seaport layout
- **Design** systematic implementation roadmap

## Solution & Implementation

- **Solution:** Proposal to implement necessary system and vehicles onto current layout and infrastructure.
- **Implementation:** On-site commissioning of management systems and deployment of Fleets/ Facilities/ IoTs to ensure the functioning of the holistic architecture.

**Extensive Platform:** An open architecture which is compatible with current combination of systems and with the potential to incorporate modules from different suppliers, to build a diverse ecology.

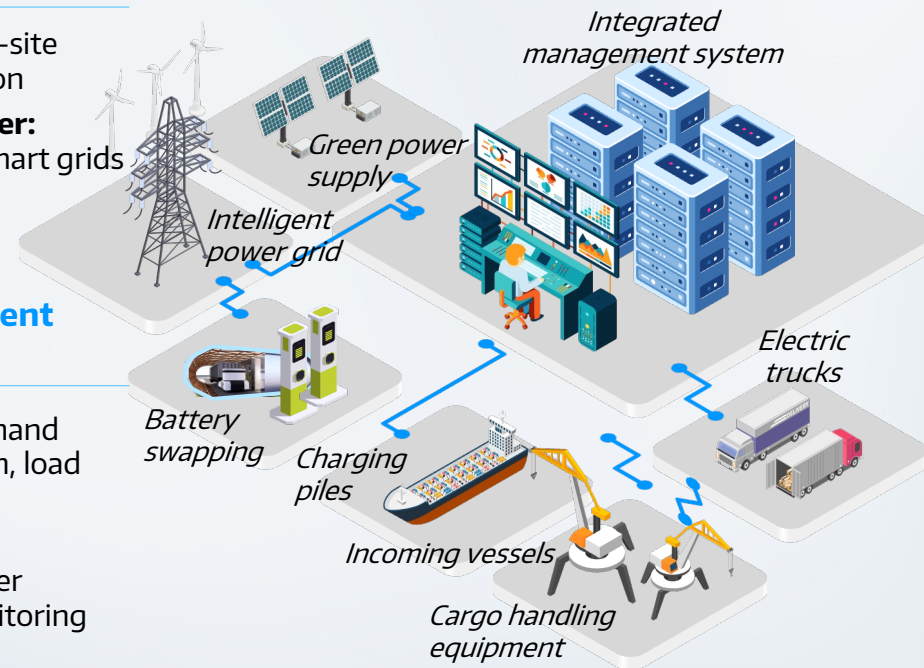
## End-to-end green energy network

### Power Station

- **Power plants:** on-site green power station
- **Storage & transfer:** energy storage, smart grids

### Energy Management System

- **Dispatching:** Demand forecasting system, load management and scheduling system
- **Monitoring:** Power consumption monitoring



## Full life-cycle material circulation network

### Recycle

- **Circulation :** materials, machinery, battery, container
- **Carbon capture**

## Holistic port operation system architecture

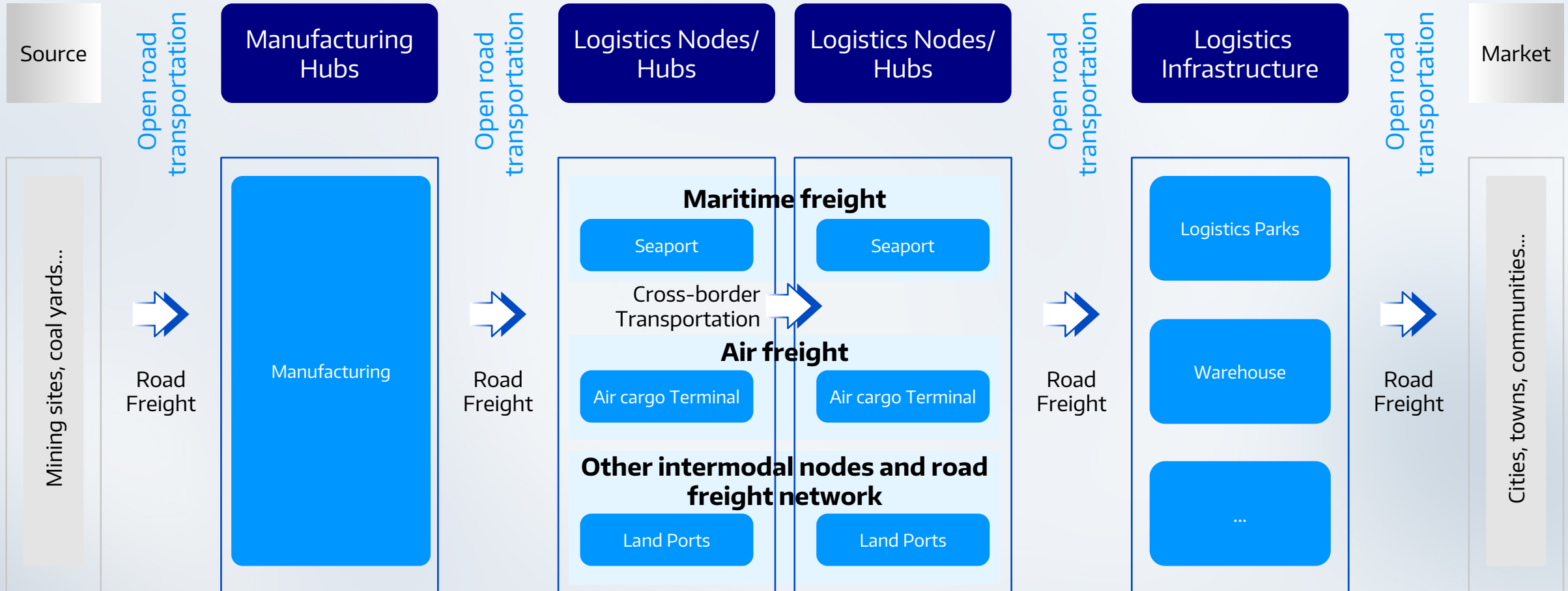
### Vehicles

- **Vehicles:** E-power CHes
- **Software:** FMS, Smart driving system

### Device/Equipment

- **Hardware:** IOT devices, digital infrastructure
- **Sensor:** Sensor and cameras

# From the Terminal (Port) To sustainable Global Freight Logistics Network



Networked Intelligence for better connectivity and supply chain visibility



# Welcome to Westwell Booth

## Find more about the offerings of the Whitepaper



Booth No.B54  
JUNE 11-13 2024

make a well change