

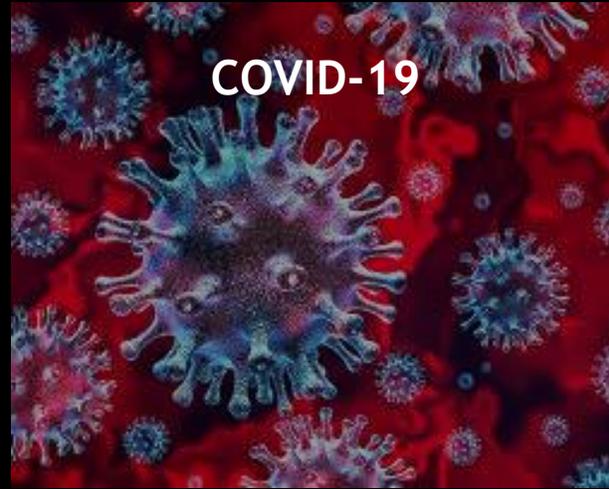


What intermodal supply chains need to be competitive - an outsider's perspective

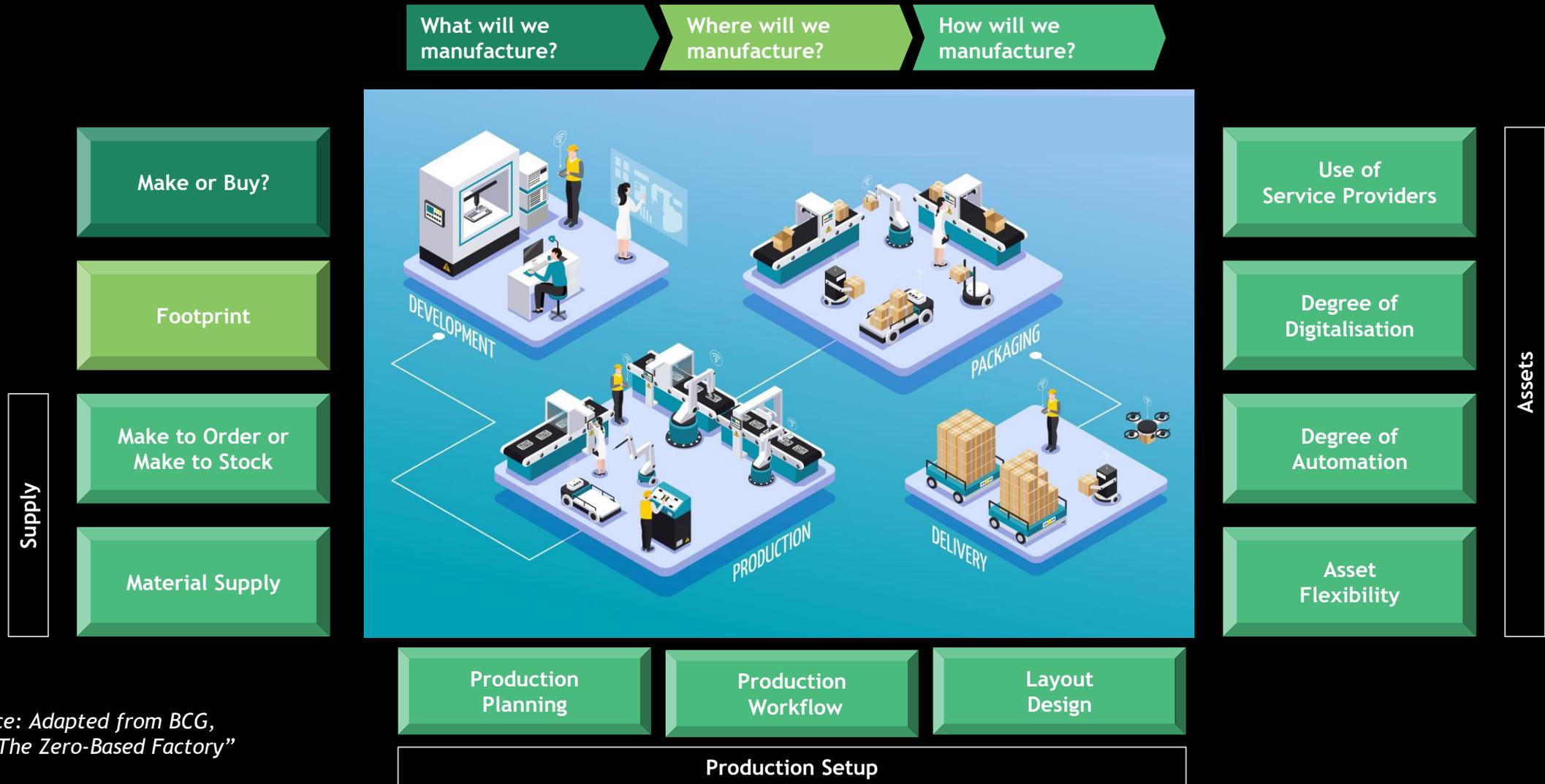
David Yang, Regional CEO, PSA Euromed-Americas

HUPAC INTERMODAL FORUM, 26 May '23

TREND 1: Increased supply chain stresses demonstrate the need for resilience

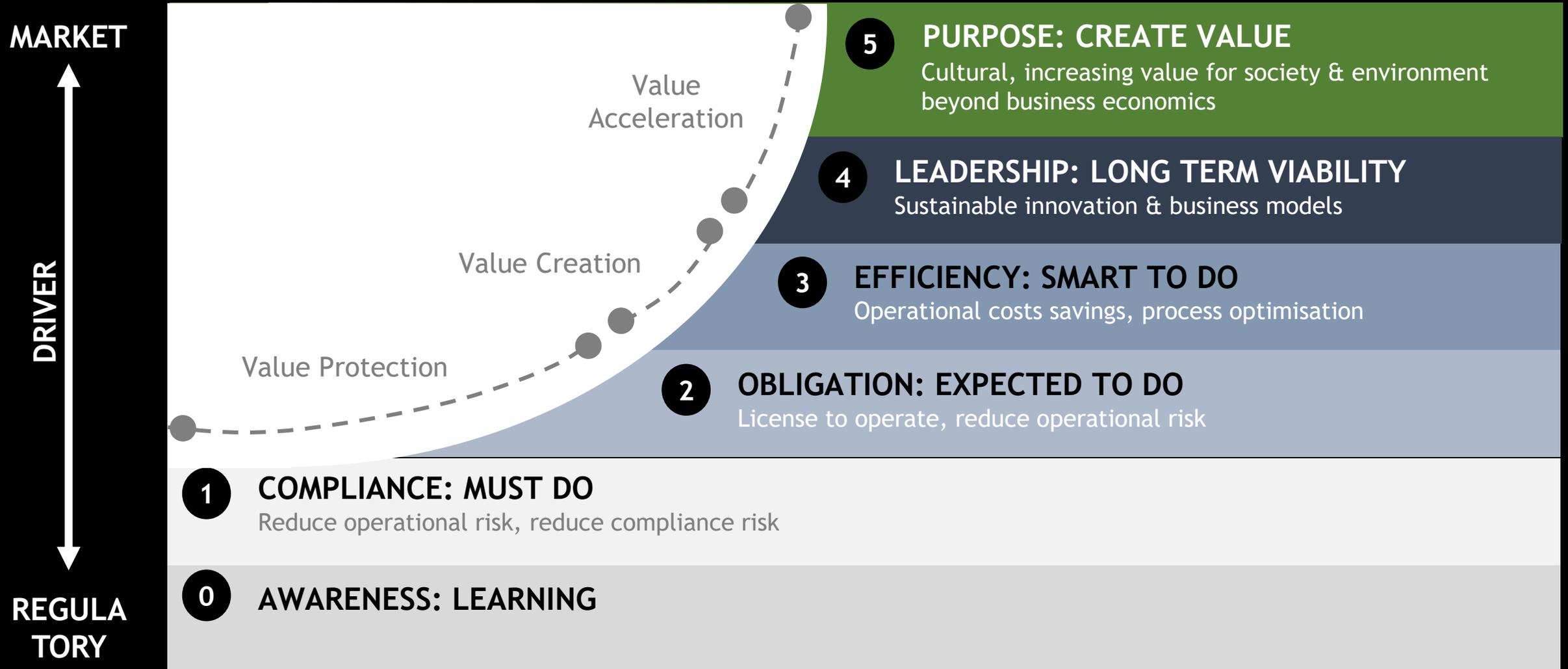


TREND 2: Global and complex production systems are seeking for agility to respond to future stresses



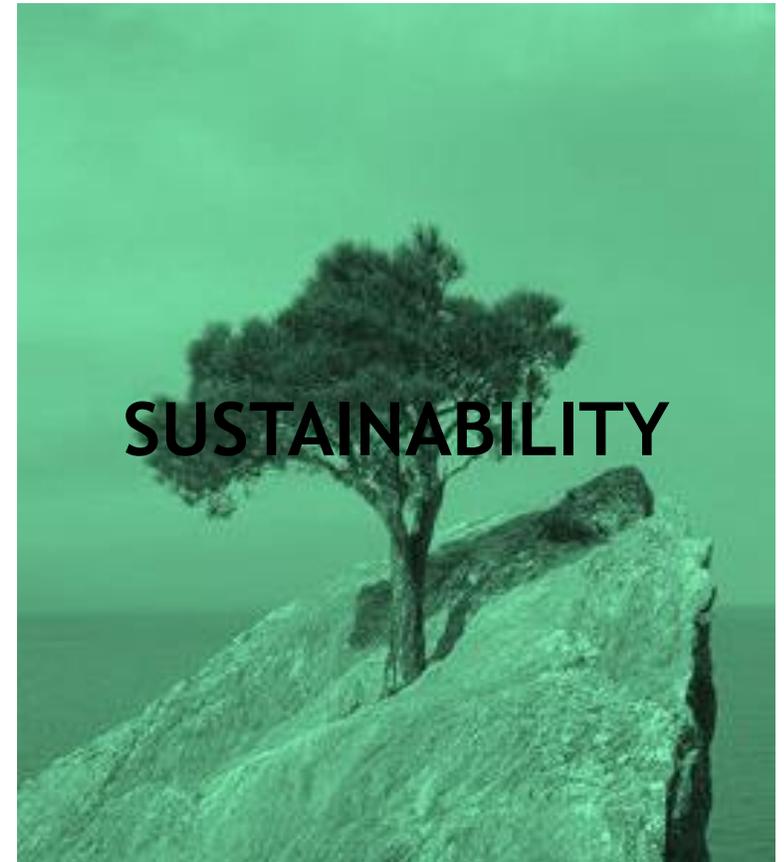
Source: Adapted from BCG, 2021, "The Zero-Based Factory"

TREND 3: Sustainability is becoming commercial



Source: PWC

As a result, future producers and supply chain owners must balance complex needs leading to the **re-industrialization of Europe**



Global EV sales has grown 10x over the last 5 years

(representing an increase from 2% to 14% of total car sales)



Establishment of EV battery gigafactory supply chains in Europe is huge opportunity for intermodal transport!



Source: Battery news



But European intermodal growth is hampered by overarching capacity and regulatory issues

EUROPEAN COURT OF AUDITORS / Report

Special report 08/2023: Intermodal freight transport: EU still far from getting freight off the road

27/03/2023 Energy, environment and climate action Transport and mobility Regional policy and cohesion



The EU's Green Deal in transport requires €7.7 billion of investment in intermodal

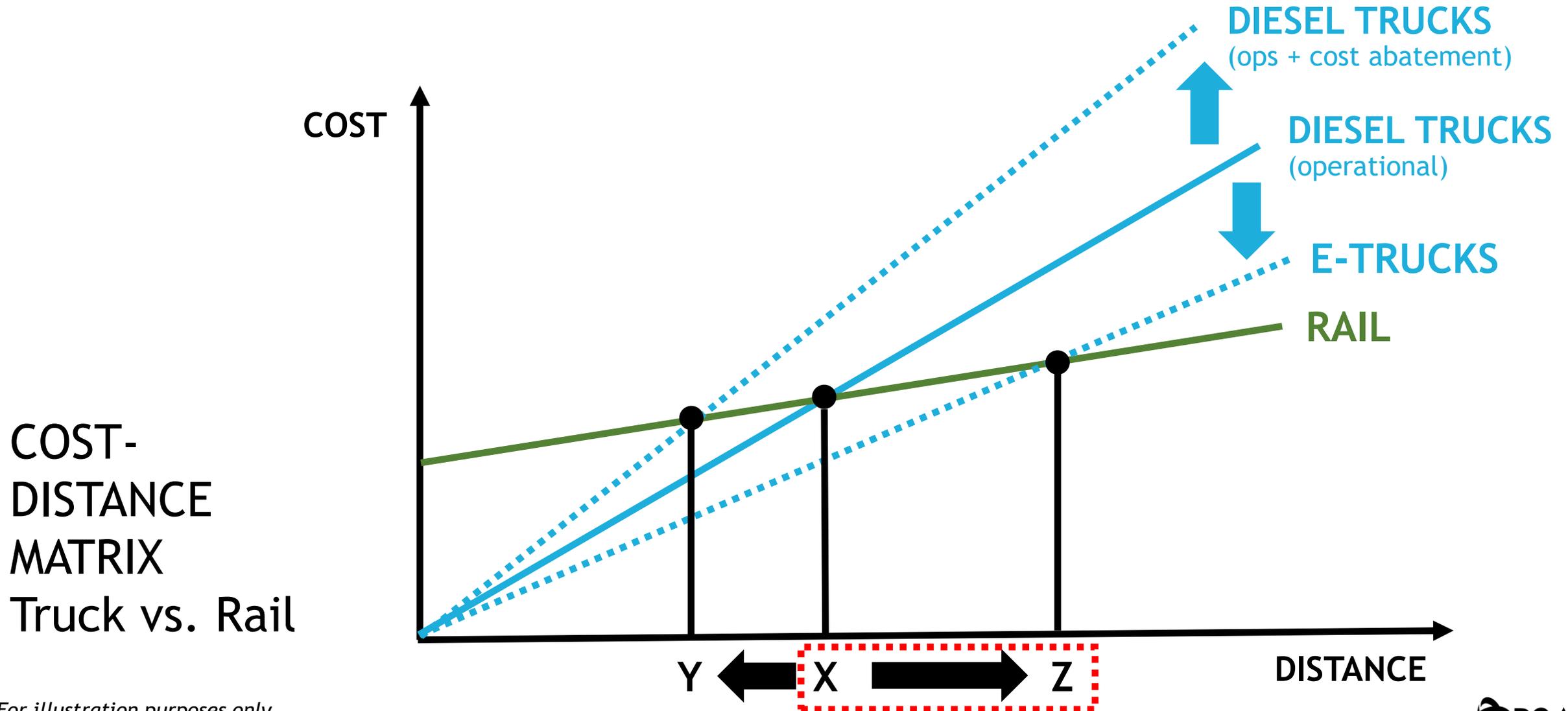
The Directorate-General for Mobility and Transport of the European Union (DG MOVE) carried out an analysis of the efficiency of the different types of intermodal transport and the capacity of the transport infrastructure to take over road freight. Vertical loading was considered the most effective method of introducing units on wagons. At the same time, serious infrastructure constraints were pointed out, which hinder the development of intermodal transport in Europe.



Image: Flickr. © European Parliament

France's Prime Minister Elisabeth Borne claimed that the French government is ready to allocate 100 billion euros for the execution of the plan presented by the Infrastructure Orientation Council (COI). The plan analyses the necessary investments for mobility in France between 2023 and 2042, with a strong emphasis on rail.

Is rail losing its unique selling point as most sustainable mode of intermodal transport?

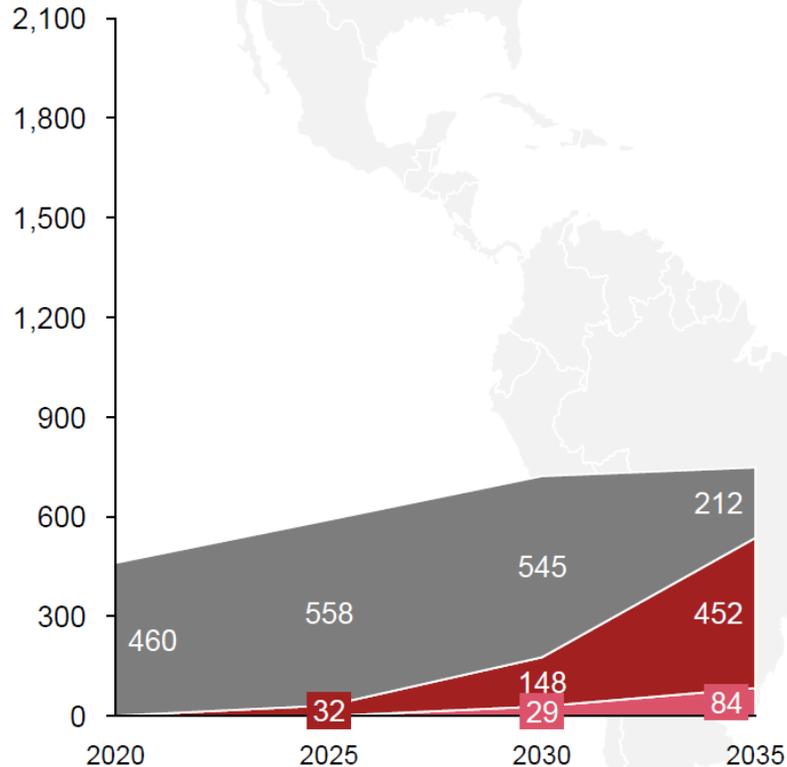


For illustration purposes only

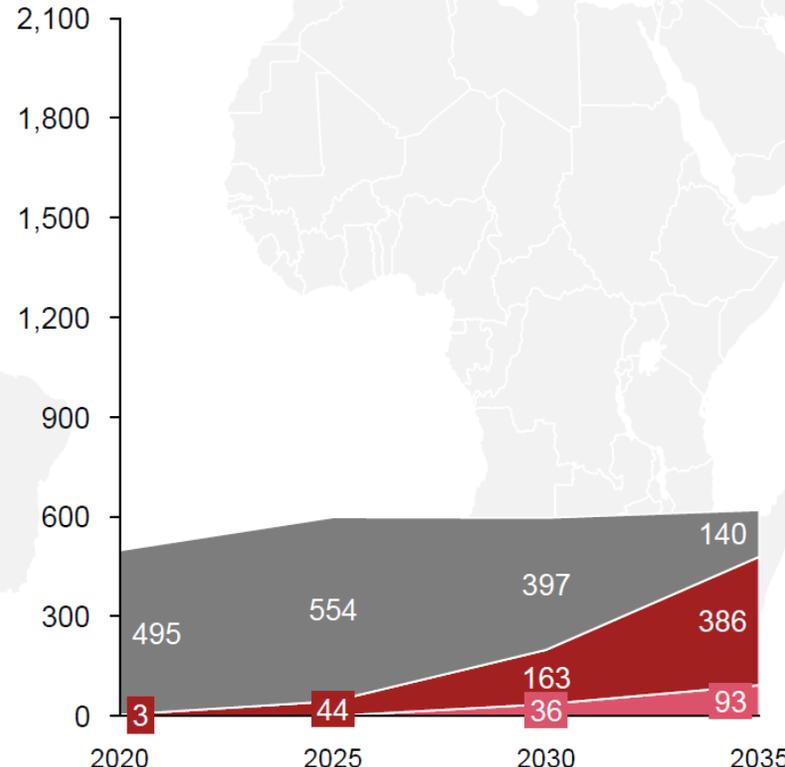
>75% of trucks produced worldwide will be electrified (battery or fuel cells) by 2035

Truck electrification ramp-up 2020-2035 in selected regions¹

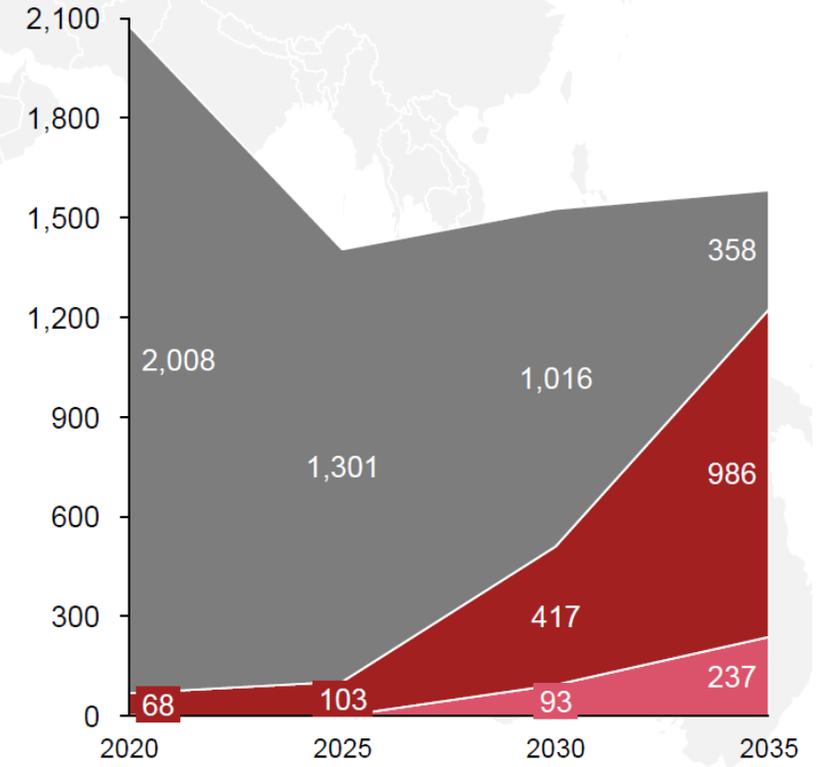
North America (k vehicles)



Europe (k vehicles)



Greater China (k vehicles)



Source: PWC

ICE / other BET FCT

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ZERO EMISSION SERVICES

Shareholders of Zero Emission Services:



ALPHENAAR



Will we fall behind the
pace of change and
become a
LIABILITY?

Or will we enable
sustainable trade as a

**GAME
CHANGER?**

PSA Today

Leading global port operator and total supply chain provider

91 MILLION TEUS

1 in 10 containers passed through a PSA terminal in 2022



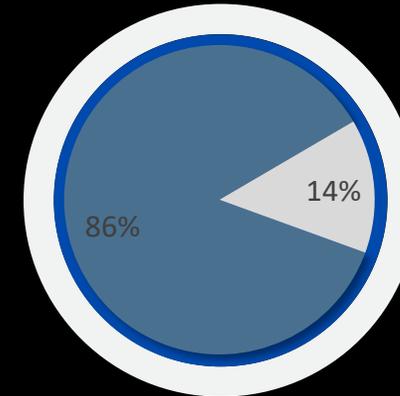
49,000 STAFF GLOBALLY

A diverse global team with deep expertise in supply chain management, logistics, digital, marine services



2 Classes of Business

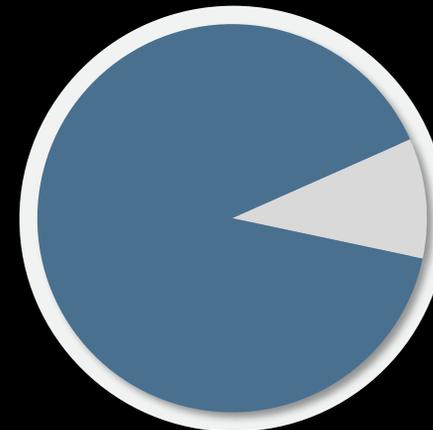
Ports



Cargo Solutions

% Share of Net Revenue

Ports



Cargo Solutions

% Staff Strength

PSA GLOBAL NETWORK

Powering supply chain orchestration with a global network of port hubs, cargo solutions nodes and digital services

BELGIUM
• PSA Belgium

PHILADELPHIA
• PSA BDP HQ

SINGAPORE
• PSA Global HQ
• PSA Singapore

PSA
42 Countries
160 Locations
66 Terminals

ASIA

- Bangladesh
- China
- India
- Indonesia
- Japan
- Malaysia
- Oman
- Qatar
- Saudi Arabia
- Singapore
- South Korea
- Thailand
- Turkey
- UAE
- Vietnam

EUROPE

- Belgium
- Czech Republic
- Denmark
- France
- Germany
- Ireland
- Italy
- Netherlands
- Poland
- Portugal
- Sweden
- Switzerland
- Spain
- United Kingdom

THE AMERICAS

- Argentina
- Brazil
- Canada
- Chile
- Colombia
- Panama
- Peru
- Uruguay
- USA

AFRICA

- Egypt
- Morocco

OCEANIA

- Australia
- New Zealand

CRIMSONLOGIC

Present in 20 Countries
Implemented >60 Projects
Digital solutions in >40 Countries

Not included in PSA Global Network count

-  Deep Sea / Coastal Terminals
-  PSA BDP Offices
-  Rail / Inland Terminals
-  Inland Container Depots / Container Freight Stations / Warehouses
-  PSA Marine
-  CrimsonLogic

PSA invests massively in port infrastructure...



1

PSA BELGIUM

EUR 800m investment to future-proof Europa Terminal



2

PSA SINES

EUR 400m investment to double handling capacity to 4.1m TEU



3

BALTIC HUB

EUR 450m investment to increase capacity with 1.5m TEU



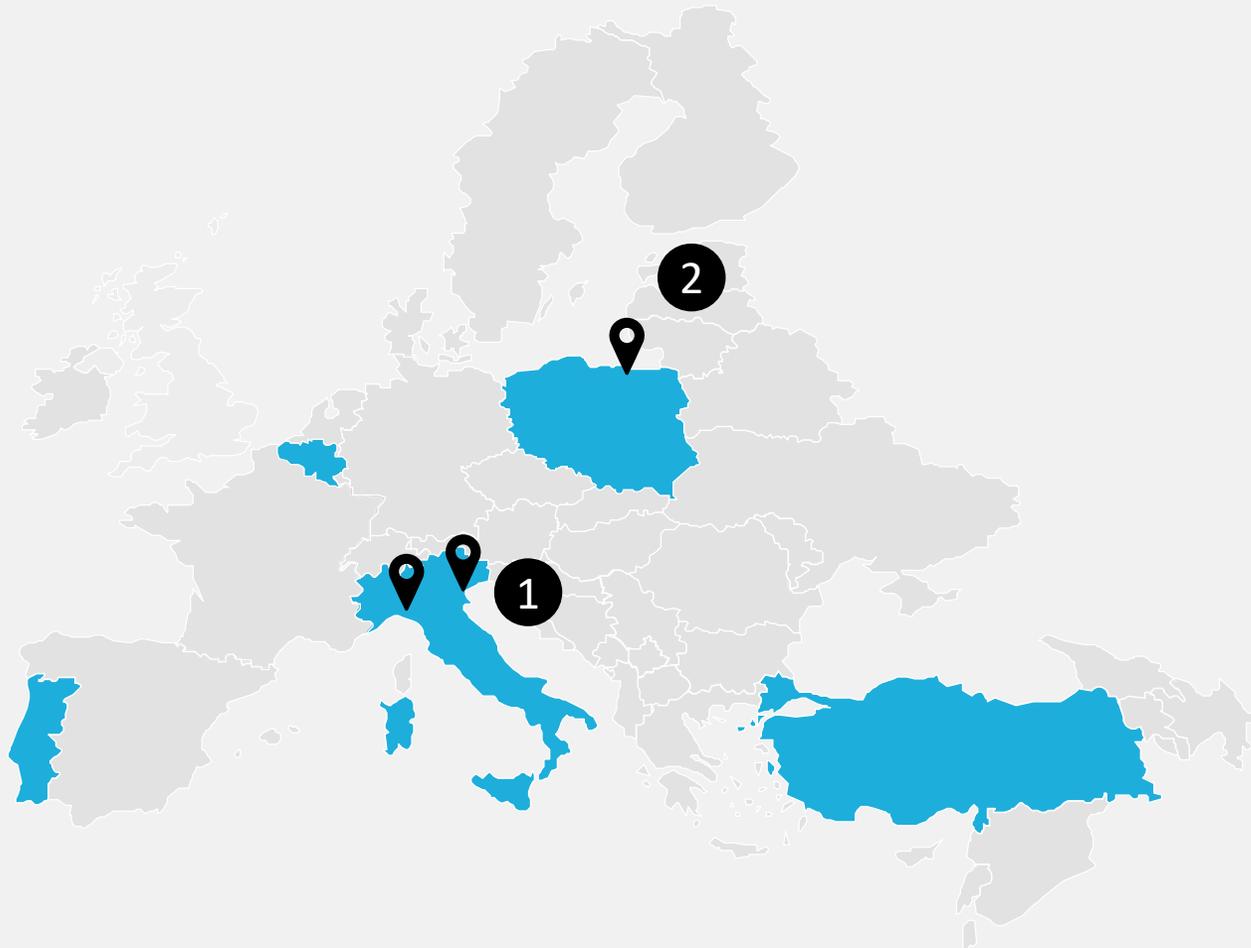
4

PSA VENICE

EUR 80m investments to future-proof the terminal



... and rail infrastructure within Europe.

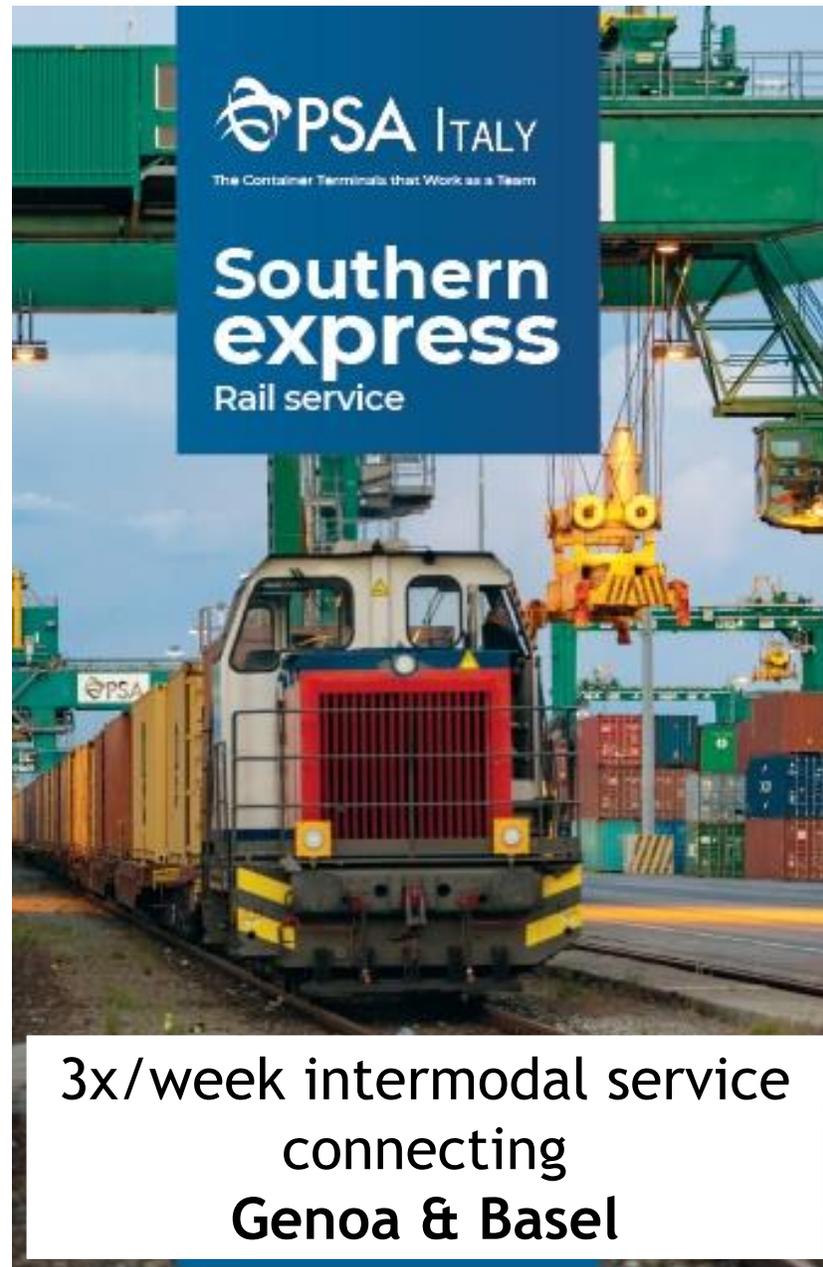


- 1 PSA ITALY**
EUR 12.5m investment in rail infrastructure and handling equipment at PSA GP & PSA Sech
Adding 520K TEU capacity



- 2 BALTIC HUB**
EUR 17m investment in extension and addition of railway tracks and rail handling equipment
Adding 300k TEU capacity

Direct
PSA
PORT+
Southern
Gateway
rail products
reduce carbon
emissions with
up to 40%



PSA ITALY
The Container Terminals that Work as a Team

Southern express
Rail service

3x/week intermodal service connecting Genoa & Basel

The advertisement features a blue and white train engine pulling a long train of colorful intermodal containers. In the background, a yellow gantry crane is lifting a container. The PSA logo is visible on the train and the crane.



PSA ITALY
The Container Terminals that Work as a Team

Stuttgart express
Rail service

PRODUCT LAUNCH IN MAY 2023

THE NEW STUTTGART CONNECTION TO GENOA SOUTHERN GATEWAY

2 DIRECT TRAINS PER WEEK ROUND TRIP

TRANSIT-TIME 24 HRS

2x/week intermodal service connecting Genoa & Stuttgart

The advertisement shows a yellow gantry crane lifting a blue intermodal container. In the background, a train is visible with several containers. The PSA logo is on the crane and the train.



International
PSA
PORT+
Land-Sea
Trade Corridor
saves Chongqing
shippers
12-15 days
of transit time

PSA designs and builds new inland supply chain set-ups to address specific supply chain needs of cargo owners



PSA BDP logistics for ACC gigafactory

News 27 Apr 2023 by WCN Editorial

PSA BDP, a leading provider of globally integrated and port-centric supply chain, transport, and logistics solutions, has been appointed as the logistics service provider for Automotive Cells Company (ACC).



WorldCargo
news

ACC, a joint venture between Saft, Stellantis NV and Mercedes-Benz, has the ambition to become a leader in the production of electric vehicle (EV) batteries. PSA BDP will handle the contract logistics and hinterland transport for ACC's first gigafactory in Europe, located in Billy-Berclau, France.

“PSA BDP has over half a century of experience in developing bespoke and sustainable supply chain solutions for customers in high-care industries, and its entry into the EV battery vertical is a natural extension of its capabilities and expertise,” said PSA BDP.



PSA BDP's warehouse in the Port of Dunkirk

Only through partnerships, we will be able to capture re-industrialisation & energy transition opportunities and develop sustainability as business model



Let's be
**GAME
CHANGERS!**



What intermodal supply chains need to be competitive - an outsider's perspective

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THANK YOU