

MICHELIN SUPPLY CHAIN AND ITS STRATEGIC TRANSFORMATIONS

Ihédate – 13 Nov.-25





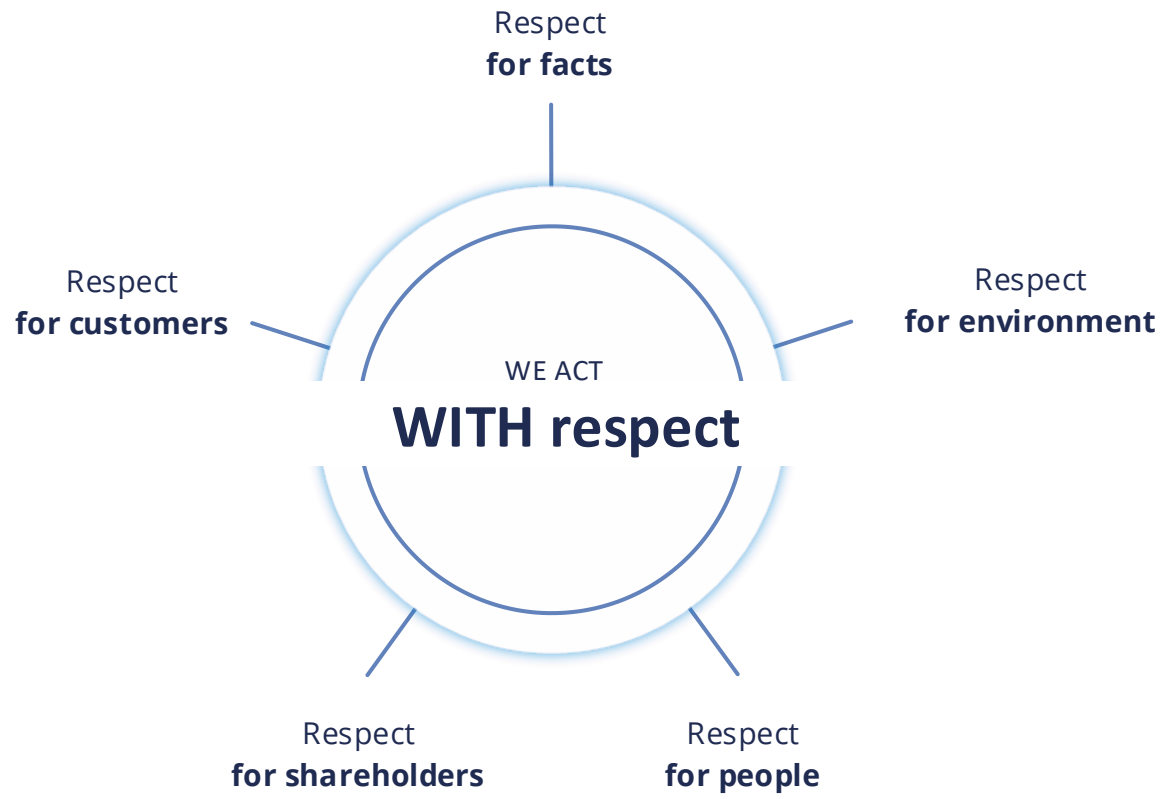
AGENDA

- **MICHELIN GROUP & ITS SUPPLY CHAIN**
- **STRATEGIC SUPPLY CHAIN TRANSFORMATIONS**
- **ZOOM ON**
 - **Supply chain decarbonization and circularity**
 - **Supply resiliency and risk management**
 - **Supply chain competences of the future**

MICHELIN GROUP AND ITS SUPPLY CHAIN



Our values nourish our corporate culture



Michelin is building a world-leading manufacturer of life-changing composites and experiences

Pioneering engineered materials for more than 130 years,

Michelin is uniquely positioned to make decisive contributions to human progress and to a more sustainable world.

Drawing on its deep know-how in polymer composites, **Michelin is constantly innovating to manufacture high-quality tires and components for critical applications** in demanding fields as varied as mobility, construction, aeronautics, low-carbon energies, and healthcare.

The care placed in its products and deep customer knowledge inspire Michelin to offer the finest experiences. This spans from providing data- and AI-based connected solutions for professional fleets to recommending outstanding restaurants and hotels curated by the MICHELIN Guide.



Michelin All Sustainable approach: a daily requirement and a compass for the future

We are talking about the balance between mutually beneficial and interdependent dimensions:



The development and fulfillment of people

The economic and financial performance, guarantee of longevity and independence

The positive contribution to our planet and its inhabitants

“

No development project can be imagined without considering all its economic, social and environmental impacts. Similarly, no single player can meet the collective challenges facing the world. Michelin's All Sustainable approach exemplifies this multifaceted need for collaboration.

Florent Menegaux
President of the Michelin Group

”



OUR PURPOSE

“WE CARE ABOUT GIVING PEOPLE A BETTER WAY FORWARD”

OUR DREAM FOR 2050:

help the world through critical innovations to meet humanity's major challenges



Global warming



Social progress



Earth resources



Health



OUR ASSETS



A powerful and widely recognized Brand



Highly engaged and talented teams



Innovation leadership in R&D and Manufacturing



The excellent quality of our products and services

MICHELIN IN MOTION 2030

OUR STRATEGY

Our All Sustainable ambitions
to create value



X



X



Our where to play
Life-changing
COMPOSITES & EXPERIENCES

Tires

Connected solutions

Polymer composite solutions

Lifestyle

Our transformations levers

All in action for the environment

Data driven company

Innovation acceleration

Agile Michelin

Customer centricity

I am Michelin

Our values of
RESPECT

Our
ICARE
leadership model

OUR “ALL SUSTAINABLE” APPROACH IS EMBEDDED IN OUR SCORECARD

Michelin All Sustainable approach: a daily requirement and a compass for the future

We are talking about the balance between mutually beneficial and interdependent dimensions:



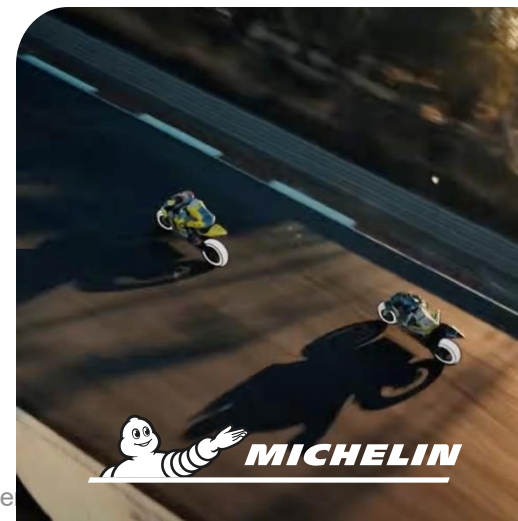
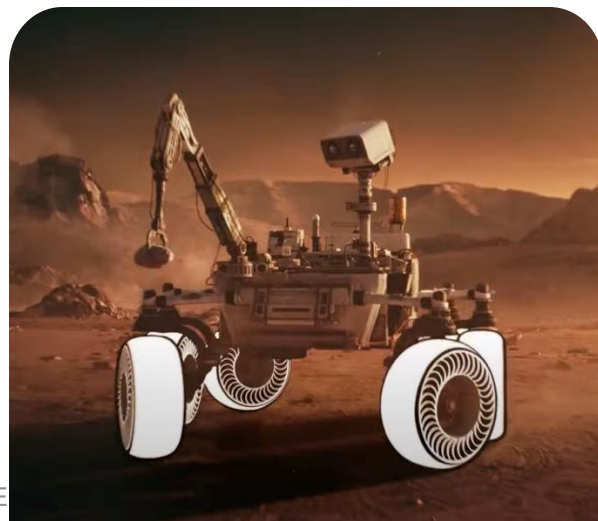
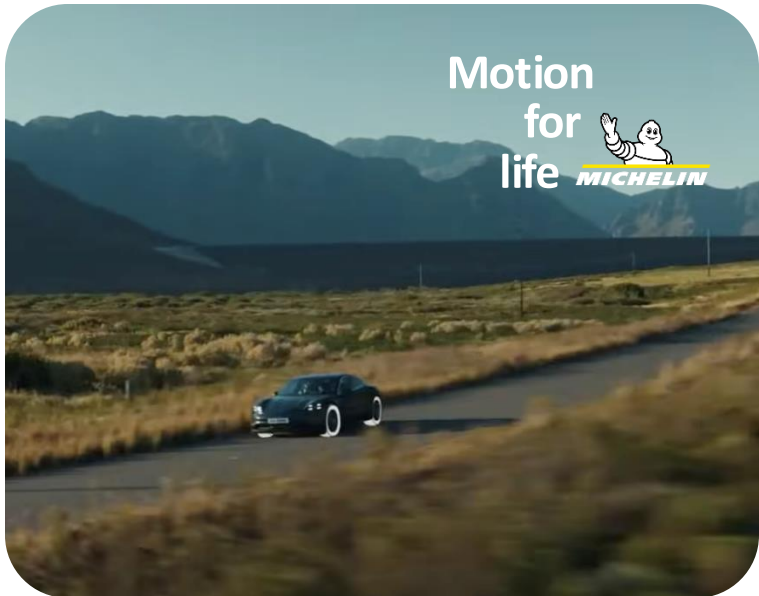
The development and fulfillment of people

The economic and financial performance, guarantee of longevity and independence

The positive contribution to our planet and its inhabitants

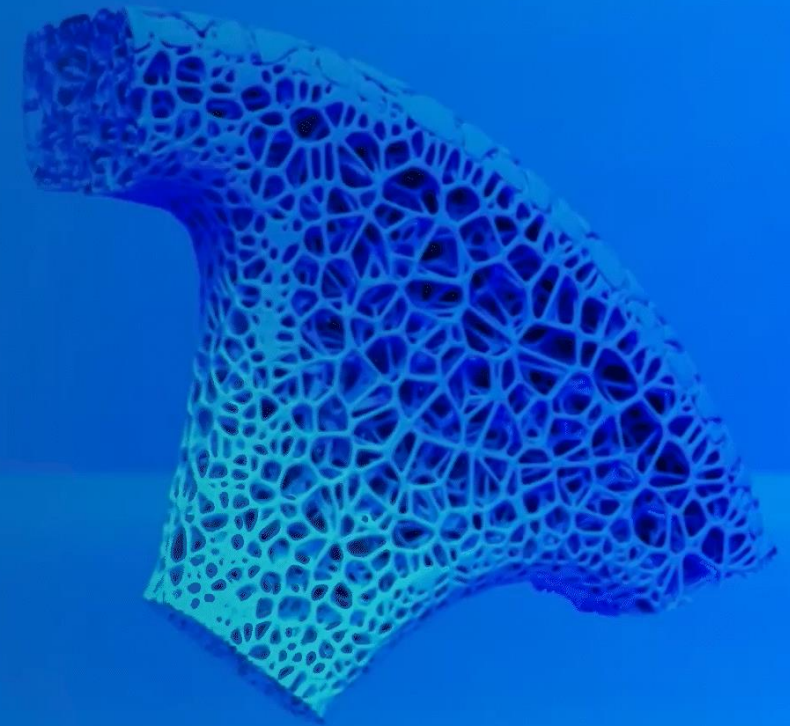
	AMBITIONS	INDICATEURS	2022	2023	2024	2030 SUCCESS
People	Be world-class in employee engagement	Engagement Rate	82.5%	83.5%	84.7%	>85%
	Be world-class in employee safety	TCIR	1.07	1.01	1.03	< 0.5
	Be a reference in diversity and inclusion	IMDI	70	72	73	80
	Be best-in-class in value created for customers	NPS	41.6	42.7	40.2	50 (+10pts vs 2020)
Profit	Deliver substantial growth	Total Sales	28.6 Bn€	28.3 Bn€	27.2 Bn€	5% CAGR 23-30
	Deliver continuous financial value creation	ROCE	10.8%	11.4%	10.5%	>10.5%
	Maintain MICHELIN brand power	Brand Vitality Quotient	68	73	72	65 (+5pts vs 2020)
	Maintain best-in-class innovation pace in products & services	Offer Vitality Index	31.0%	30.8%	29.4%	> 30%
Planet	Reach net zero emissions by 2050 (scopes 1&2)	CO ₂ emissions (scopes 1&2) vs 2019	-20%	-28%	-37%	-47%
	Improve the energy efficiency of our products to contribute to net zero emissions	Product energy efficiency (scope 3)	101.8	102.9	104.3	+10% vs 2020
	Be best-in-class in environmental footprint of industrial sites	i-MEP vs 2019	-11.2%	-16.1%	-17.4%	- 1/3
	Increase the proportion of renewable or recycled materials in our tires	Renewable and Recycled Materials Rate	30%	28%	31%	40%

Michelin supports all forms of mobility



Toward a fully sustainable tire

Michelin has set itself an unprecedented innovation challenge. The Group is committed to acting at each stage of the tire life cycle, from the choice of raw materials to tire recycling solutions.



ON THE PATH TO REACH FULL CIRCULARITY OF PRODUCTS

with 40% renewable and recycled raw materials by 2030, 100% by 2050

28% in 2023



* European project funded by the EU's Horizon 2020 research and innovation programme under grant agreement Nr. 869625

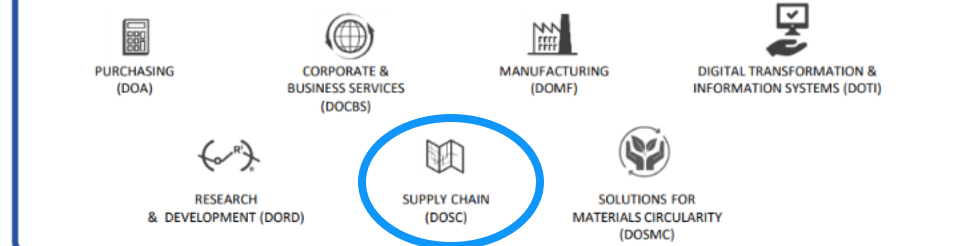
**with the support of ADEME (French Environment & Energy Management Agency)

MICHELIN GROUP ORGANIZATION

CORPORATE DIRECTIONS



OPERATIONAL DIRECTIONS



BUSINESS DIRECTIONS

DB1
AUTOMOTIVE,
MOTORSPORT, 2 WHEELS

DB2
ROAD TRANSPORTATION

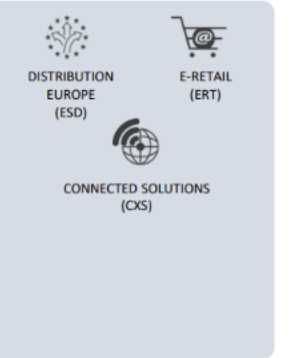
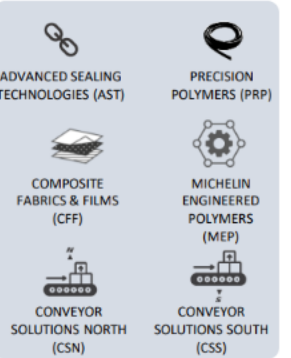
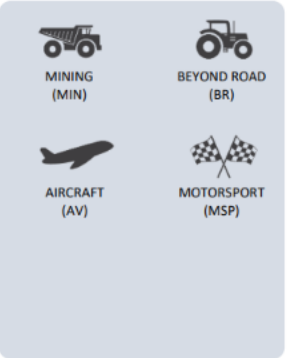
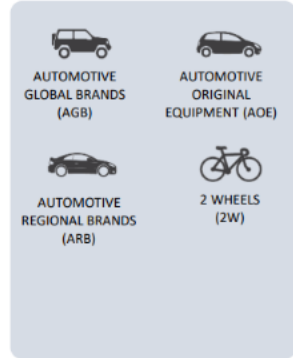
DB3
SPECIALTIES

DB4
POLYMER COMPOSITE SOLUTIONS

DB5
DISTRIBUTION AND SERVICES & SOLUTIONS

LIFESTYLE (LIF)

BUSINESS LINES AND BUSINESS AREAS

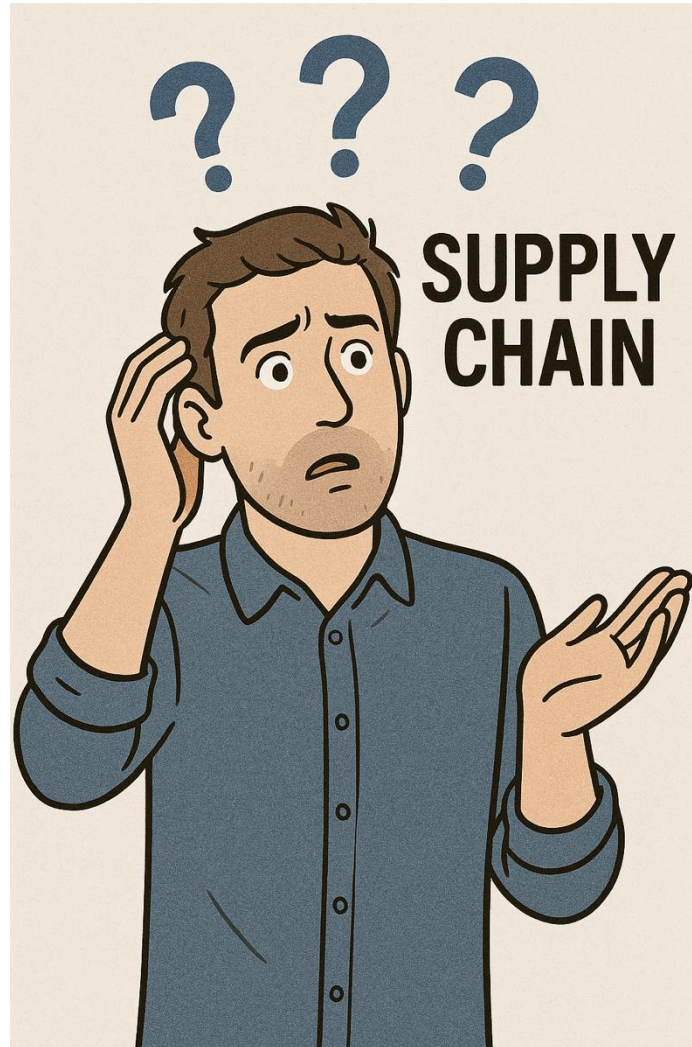


REGIONS

CENTRAL AMERICA (AMC), NORTH AMERICA (AMN), SOUTH AMERICA (AMS), EUROPE CENTRAL & CENTRAL ASIA (ECA), NORTHERN EUROPE (EUN), SOUTHERN EUROPE (EUS), AFRICA / INDIA / MIDDLE EAST (AIM), CHINA (CHN), EAST ASIA & AUSTRALIA (E2A)

MICHELIN SUPPLY CHAIN





WHAT IS supply chain ?

Supply Chain is the flow of products, services and financials from the supply of RAW materials, to the distribution and invoicing of the finished product or service to the end customer.



With a very specific goal



+

while **reducing** environmental impact

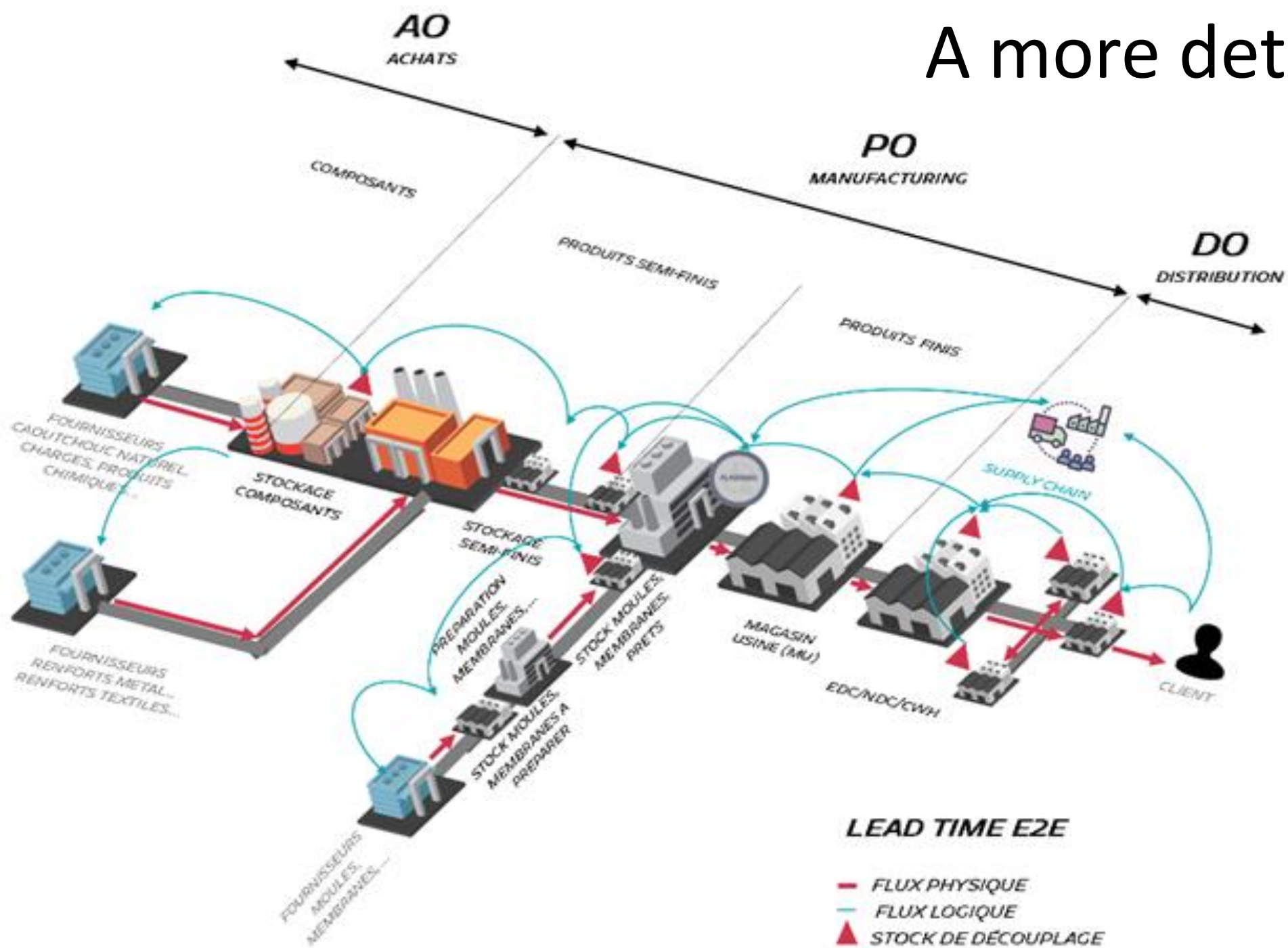
+



From the rubber tree to the customer delivery



A more detailed view:



THE MICHELIN SUPPLY CHAIN AT A GLANCE



180 Millions
Tires sold



5,7 B€
inventory value

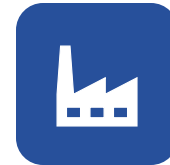


2,3 Billiards €
logistic cost



DOWNSTREAM catalog 10 000
Upstream references 15 000

Raw materials + components + finish products



65 industrial sites
Upstream + Downstream



130 logistic
warehouses
(3,9 millions m2)

Upstream + Downstream



570
Transportation partners



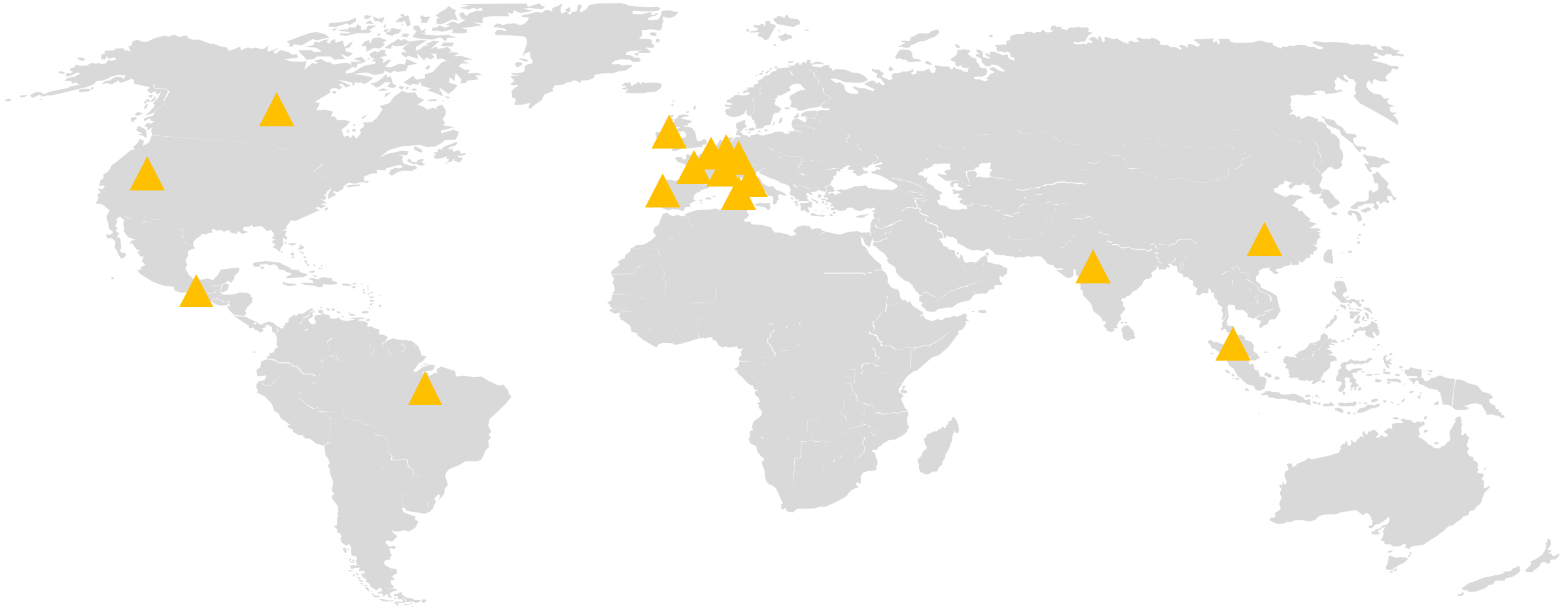
1 Millions T
of CO² emitted (Scope 3)



6000
comited employees
(w/o subcontractors)

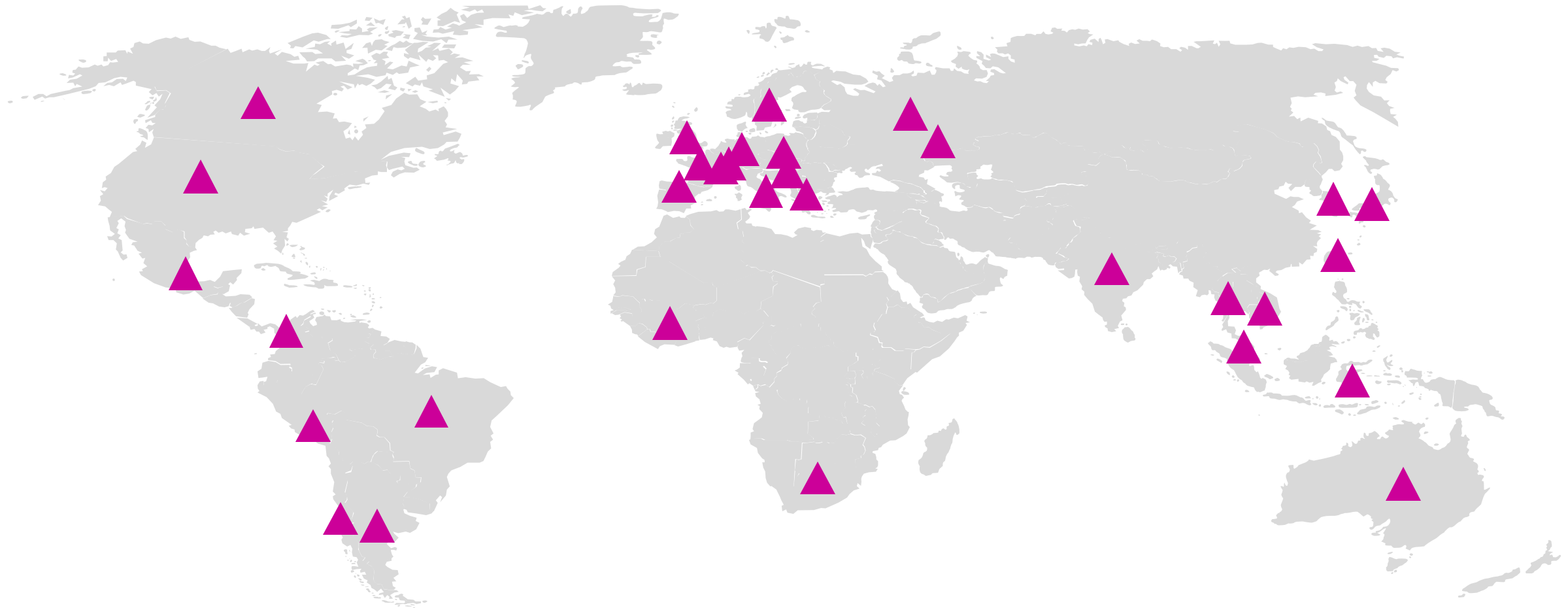


65 production sites in 17 countries



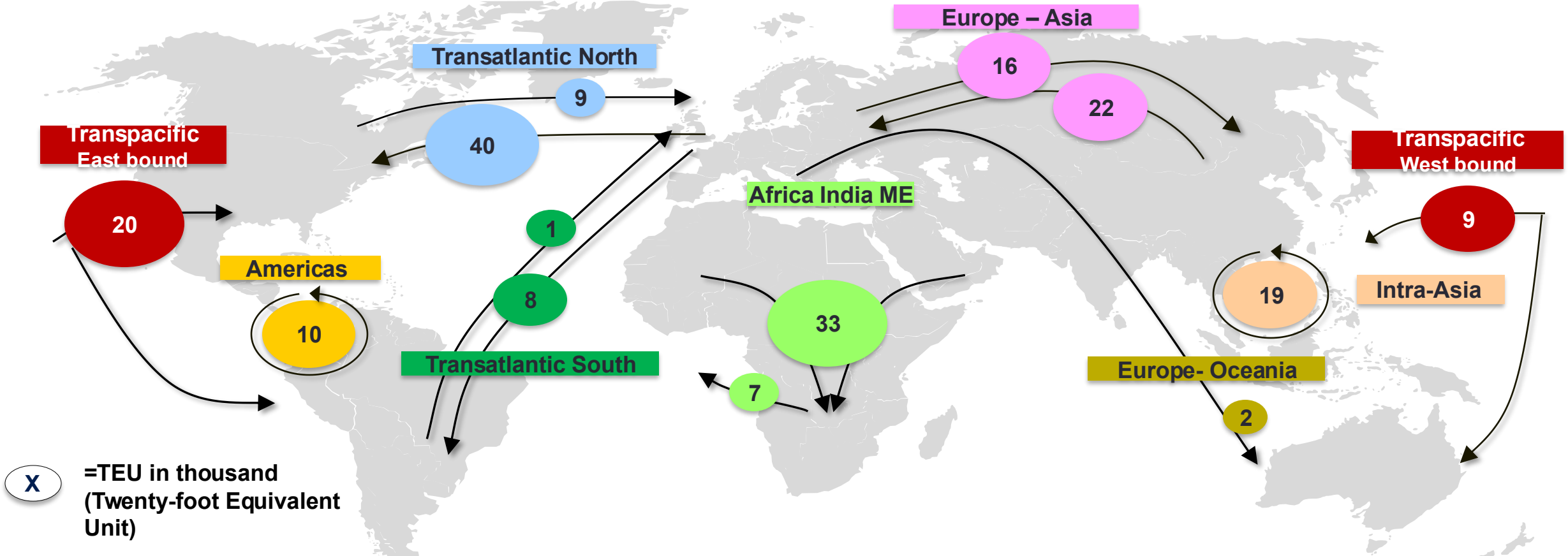


67 distribution centers in 33 countries





intercontinental flows



X =TEU in thousand
(Twenty-foot Equivalent Unit)

20% of sales of Group have an Inter-continental sourcing

1 TIRE OUT OF 4 IS CROSSING OCEANS



■ Produits Finis

■ Produits Semi-Finis

■ Matières Premières



#1 an end to end SUPPLY CHAIN

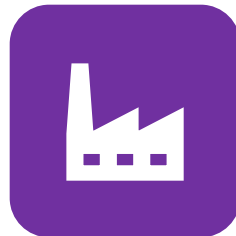
The Supply Chain covers the Supply Chain Planning and Order to Cash processes, which includes, in terms of major families of activities:



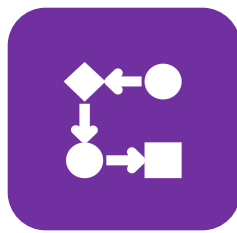
Forecasting
customer demand



Supply of raw
materials and semi-
finished products



Production
and **distribution**
planning



Transport
management
between factories
and warehouses



Management of
Logistics activities
in the warehouses



Order Capture,
delivery, invoicing,
collection and handling of
complaints



Supply Chain is also:
The associated resources, logistics capacities and stocks are under the responsibility of the Supply Chain, the industrial capacities under the responsibility of Industry, the Order to Cash processes under the responsibility of Business & Services

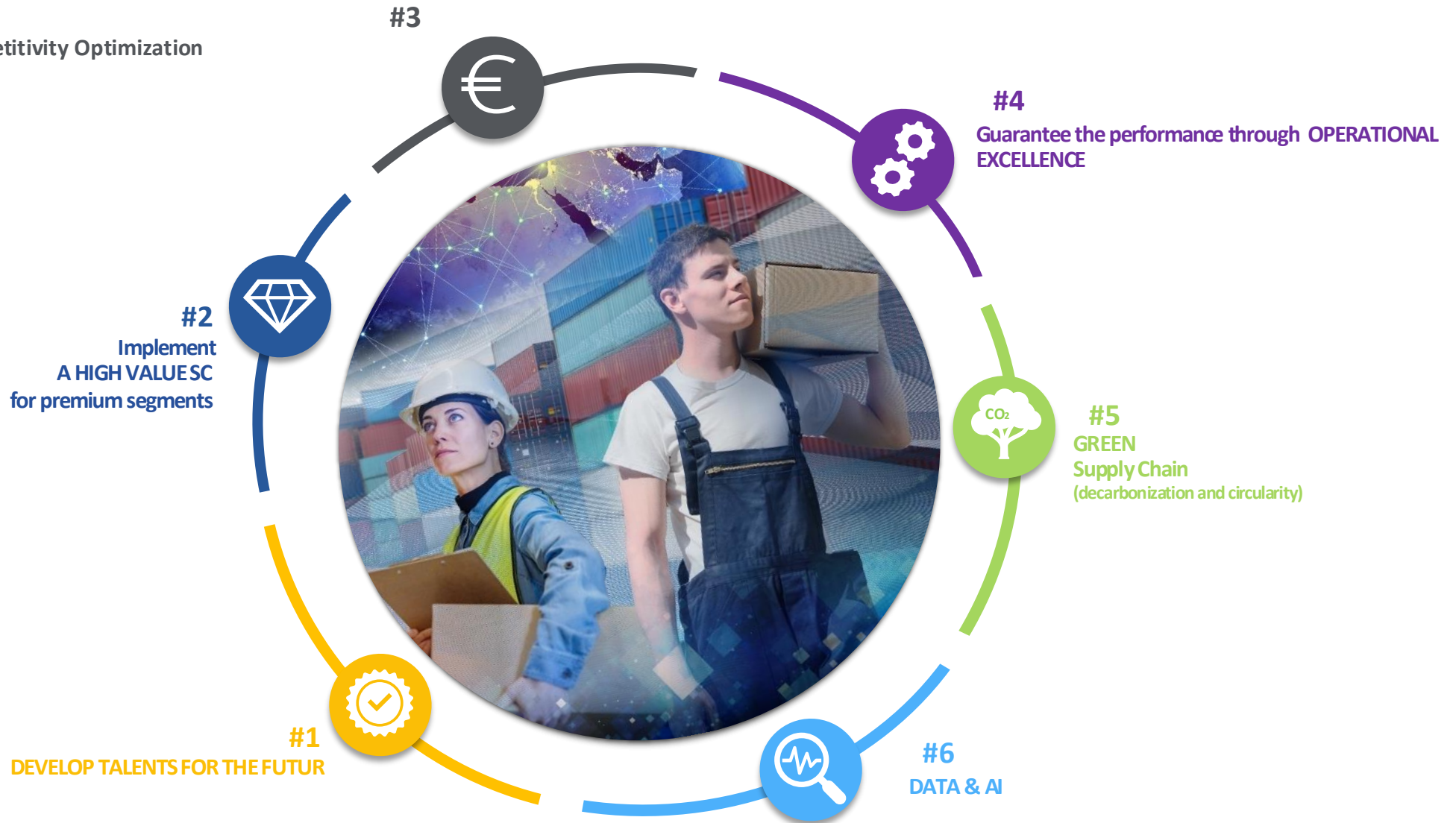
STRATEGIC SUPPLY CHAIN TRANSFORMATIONS



DOSC "MUST WIN BATTLES" (2026 -2028)



Competitvity Optimization



WHAT ABOUT LONG TERM PROSPECTIVE ?

FROM GLOBALIZED SUPPLY CHAIN TO REGENERATIVE TERRITORIAL VALUE CHAIN

Key dimensions, current inflexions and SC impacts

Dimension	Current inflexions	Supply Chain mutation
Geopolitics	Fragmentation, friend-shoring	Relocalization, deglobalization
Ecology	Decarbonization, circularity	Short chains, reverse logistics
Technology	AI, digital twins, data-driven logistics	Smart control, data sovereignty
Territory	Local governance, local ecosystems	Return of "place": anchored logistics
Organization	Alignment Strategy → cooperation → institution	Need for hybrid models

Supply chains are no longer just systems of optimization : they are becoming **political, territorial, ecological and geostrategic systems.**

4 prospective scenarios

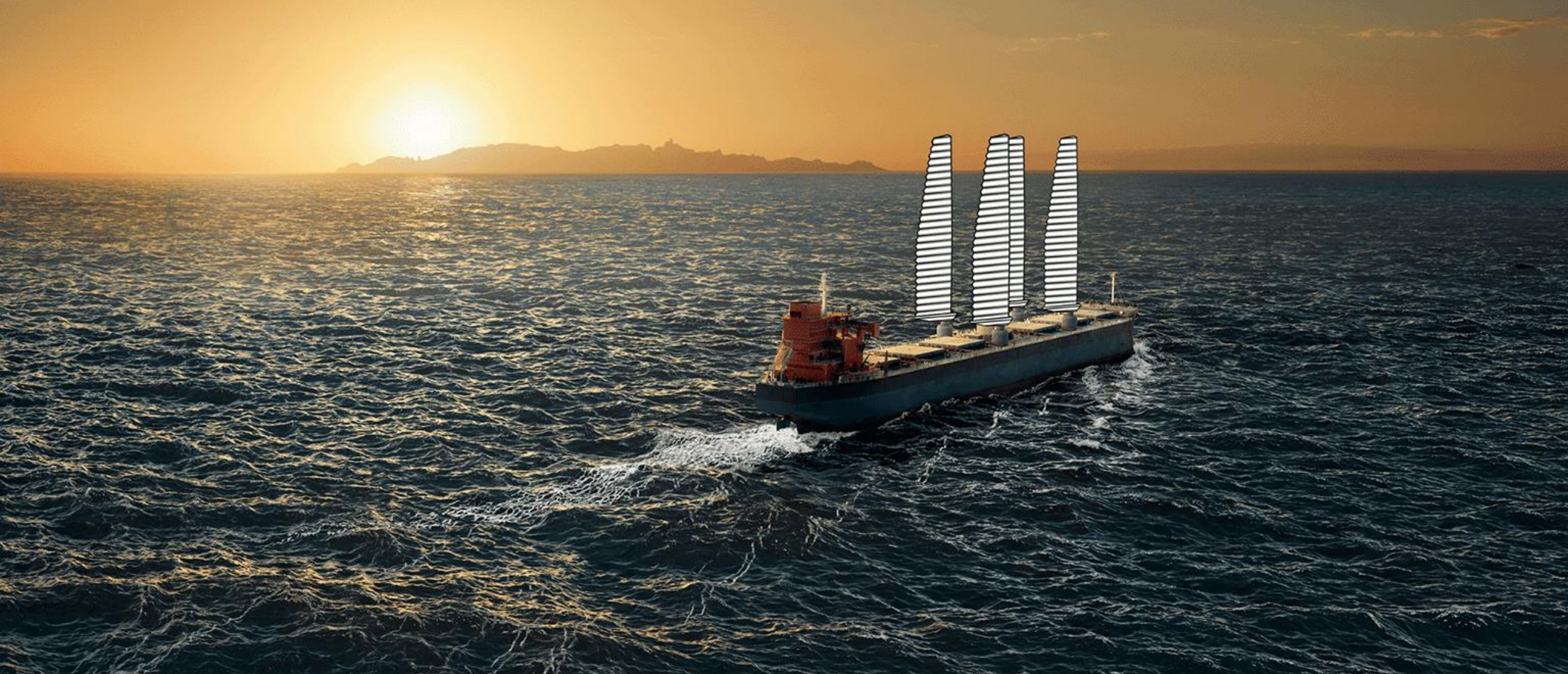
	Low coordination	High coordination
Globalized SC	CHAOS	HYBRID TERRITORIAL NETWORKS
Localized SC	PUNITIVE RELOCALIZATION	REGENERATIVE RENAISSANCE

What's the future of supply chain ?

- **No simplistic return to local** : instead a selective and intelligent reinvention of supply chains
- **New SC & logistics function: orchestrating** local / global / circular / digital
- **Multi-level alliances** : compagnies, territories, plateformes, authorities & states
- **Shared vision capability** : to move beyond short-termism.

Q & A

TRANSFORMATION #2: LOGISTIC DECARBONIZATION



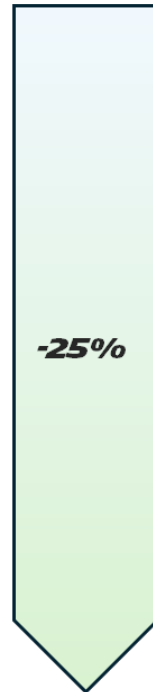
Dream or reality ?



AN AMBITIOUS LOGISTIC DECARBONIZATION PLAN



2019
1,38MT CO2



2023
1,03MT CO2

→ **2030 / 2050**

INTERNAL TARGET

LOGISTICS
Scope 3

Transport less, better
and differently

2030

-28%*
CO₂ emissions
vs 2019

2050

-90%
NET ZERO
EMISSIONS

** Short-term target is continuously revised according to the progress realized (new target to be defined through Mid Term plan 2025-2029)*

EXTERNAL COMMITMENT

LOGISTICS
Scope 3

Transport less, better
and differently

2030

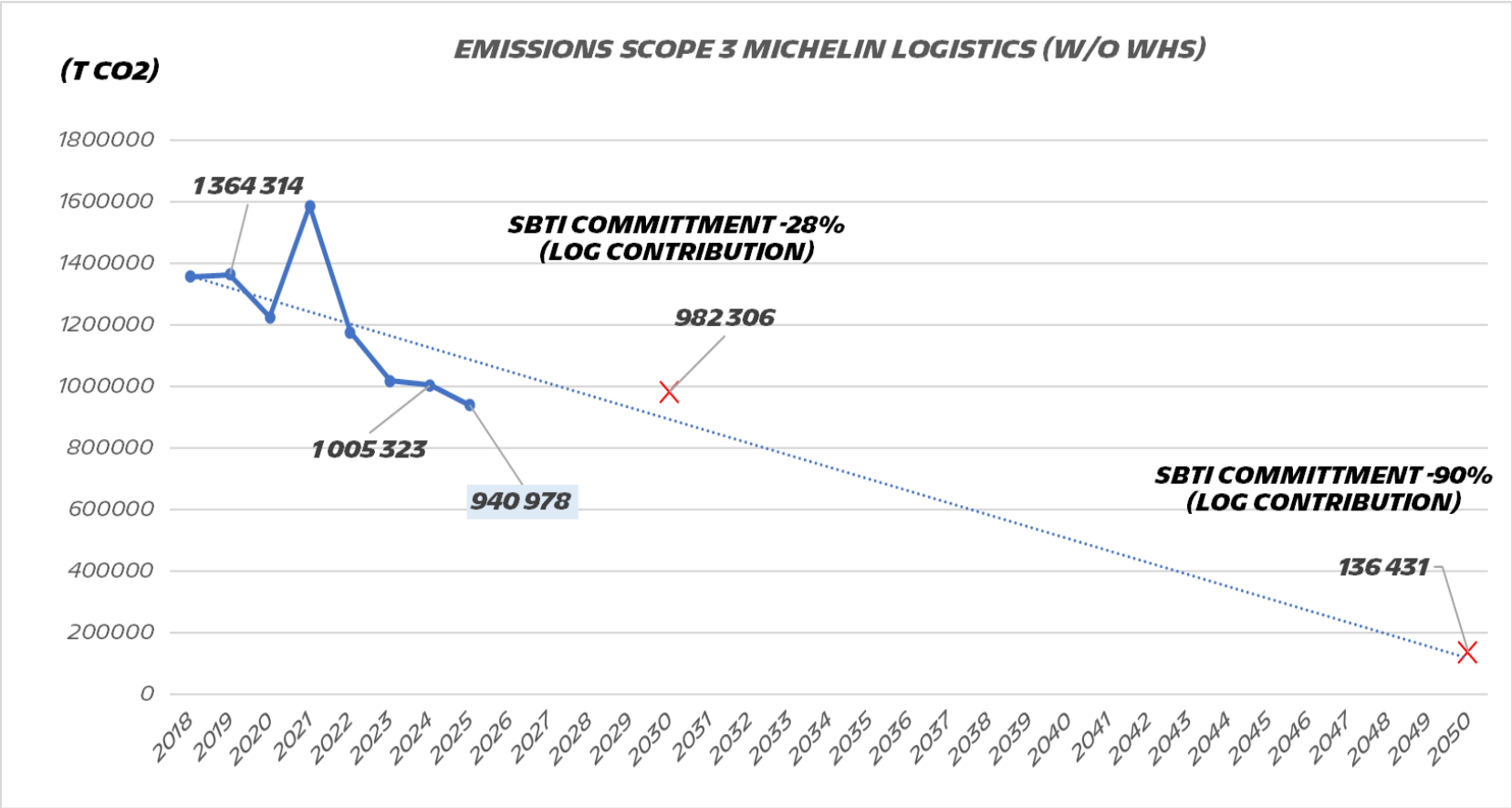
-27,5%**
CO₂ emissions
vs 2019

2050

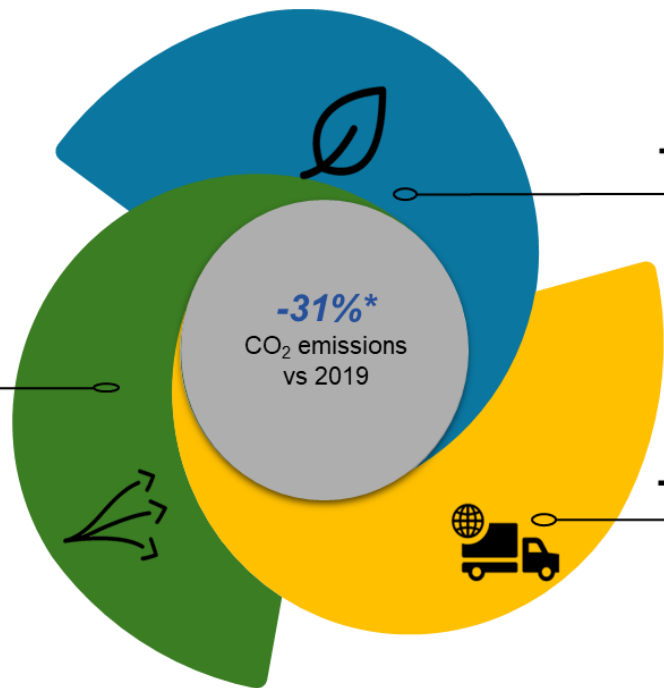
-90%
NET ZERO
EMISSIONS

**** SBTi validation in July 2024**

WE ARE ON TRACK, but main efforts are ahead



“TRANSPORT LESS, TRANSPORT BETTER, TRANSPORT DIFFERENTLY”



Transport LESS

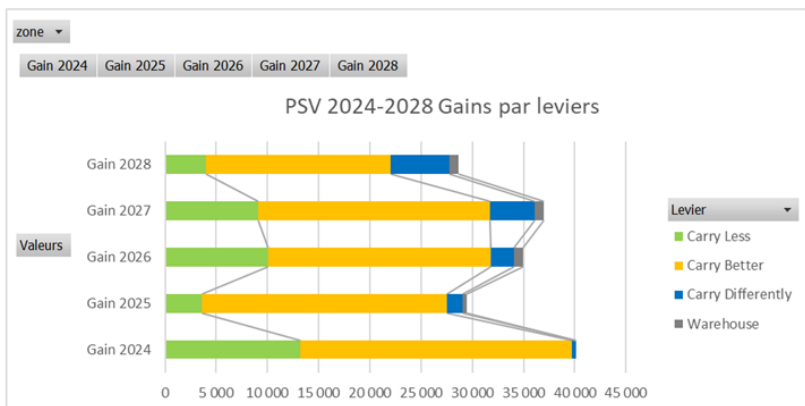
- Improving effectiveness
- t transported / t sold
- **Putting** CSR at the heart of supply chain decisions

Transport DIFFERENTLY

- **Collaborating** to external organizations
- **Innovating** through environmentally and socially friendly technologies

Transport BETTER

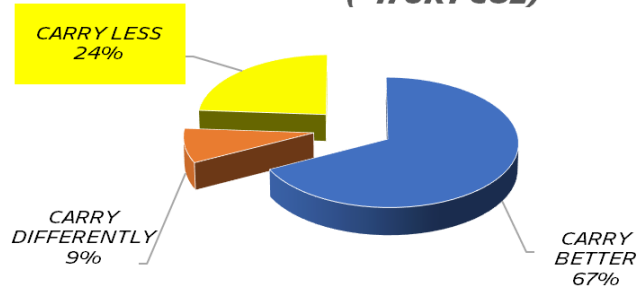
- Improving efficiency
- tCO2 / t transported
- **Collaborating** with our logistics partners
- **Optimizing** our logistics
- **Promoting** the development of Multi Modal



zone ▾

Somme de Gain TTL

PSV 2024-2028 CO2 SAVINGS (~170KT CO2)



TRANSPORT LESS

DELIVER THE CUSTOMER DIRECTLY FROM THE FACTORY



REDUCE TRANSPORTATION BY INCREASING OUR LOCAL TO LOCAL FOOTPRINT

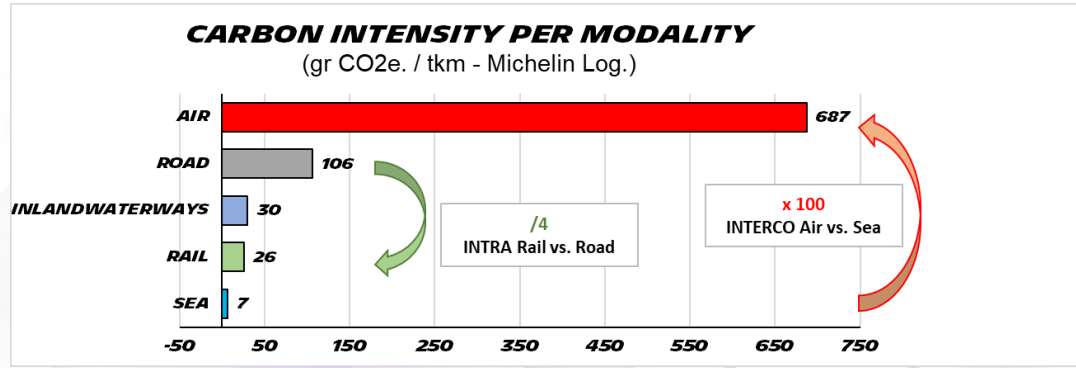
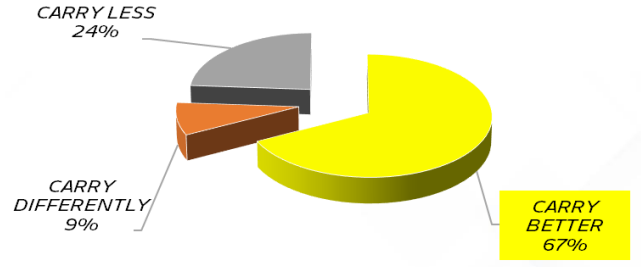
AVOID TRANSPORTATION OF SEMI-FINISH PRODUCTS THANKS TO INTEGRATED FACTORIES

TRANSPORT BETTER

zone ▾

Somme de Gain TTL

PSV 2024-2028 CO2 SAVINGS (~170KT CO2)



OPTIMIZATION OF EXISTING MEANS OF TRANSPORT (FILLING RATE, REDUCE FREQUENCY OF DELIVERY, ALTERNATIVE FUEL, DUAL TRAILER, FLEET RENEWAL, ...)

DEPLOYMENT OF INNOVATIVE AND MULTIMODAL SOLUTIONS

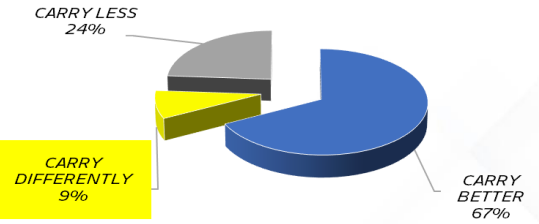
WORK ON PROJECTS EVEN IF THERE IS A NON FAVORABLE BALANCE STOCK / COSTS TO THE PROFIT OF CO2
EXAMPLE : LA COMBAUDE -> LE HAVRE, -1,1 KT CO2/YEAR, +2DAYS LEADTIME)



TRANSPORT DIFFERENTLY

Transport DIFFERENTLY

zone ▾
Somme de Gain TTL
PSV 2024-2028 CO2 SAVINGS (~170KT CO2)



EXPERIMENTING

new mobility solutions to decarbonize maritime transport

INNOVATING

to inspire future mobility solutions

PARTNERING

with public and private sector to prepare market conditions for decarbonized solutions



ON THE PATH TO REACH FULL CIRCULARITY OF PRODUCTS

with 40% renewable and recycled raw materials by 2030, 100% by 2050

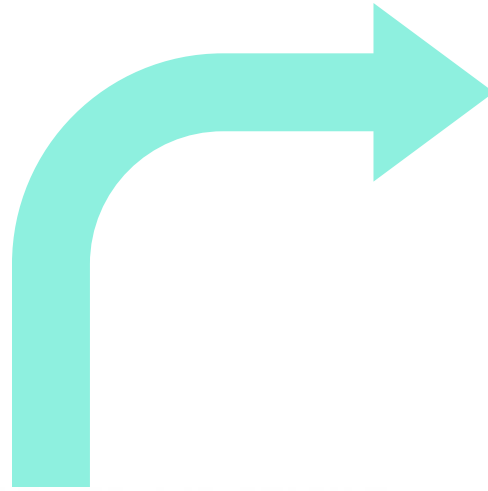
28% in 2023



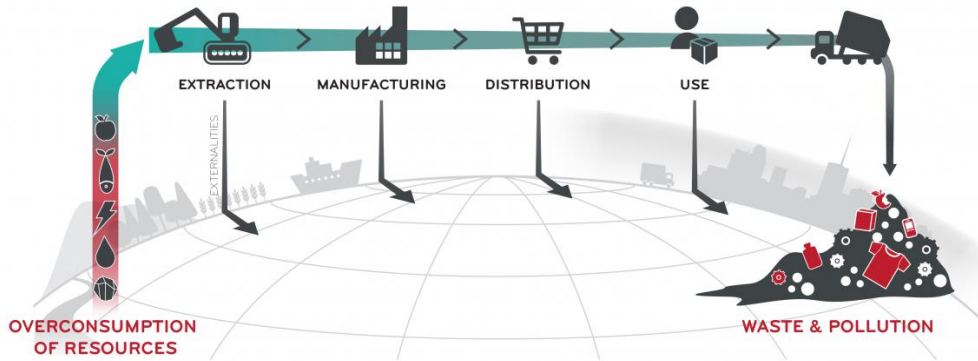
* European project funded by the EU's Horizon 2020 research and innovation programme under grant agreement Nr. 869625

**with the support of ADEME (French Environment & Energy Management Agency)

From linear to circular economy.



LINEAR ECONOMY

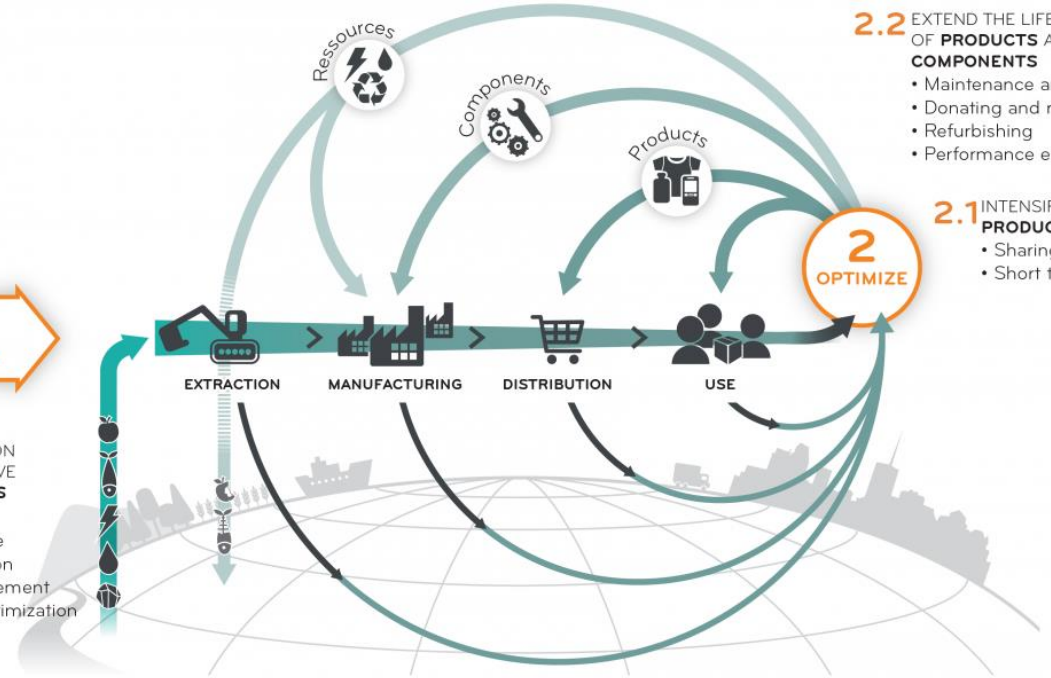


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CIRCULAR ECONOMY

1 RETHINK

- REDUCE RESOURCE CONSUMPTION AND PRESERVE ECOSYSTEMS
- Ecodesign
 - Responsible consumption and procurement
 - Process optimization



- ### 2.3 GIVE RESOURCES A NEW LIFE
- Industrial ecology
 - Recycling and composting
 - Energy recovery

- ### 2.2 EXTEND THE LIFE OF PRODUCTS AND COMPONENTS
- Maintenance and repair
 - Donating and reselling
 - Refurbishing
 - Performance economy

- ### 2.1 INTENSIFY PRODUCT USE
- Sharing economy
 - Short term renting

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The impact of circular economy on supply chain is massive. It will require **mutualization** between many actors and the revival of a territorial approach.

CIRCULAR ECONOMY

On upstream supply chain:

- Adapt to hybrid (raw materials and recycled materials) sourcing.

On logistic transportation:

- Organize Return logistics (**mutualization is a must**)

On logistic warehousing:

- Organize local repair workshop
- Plan repair flows

2.3 GIVE RESOURCES A NEW LIFE

- Industrial ecology
- Recycling and composting
- Energy recovery

2.2 EXTEND THE LIFE OF PRODUCTS AND COMPONENTS

- Maintenance and repair
- Donating and reselling
- Refurbishing
- Performance economy

2.1 INTENSIFY PRODUCT USE

- Sharing economy
- Short term renting



1 RETHINK

REDUCE RESOURCE CONSUMPTION AND PRESERVE ECOSYSTEMS

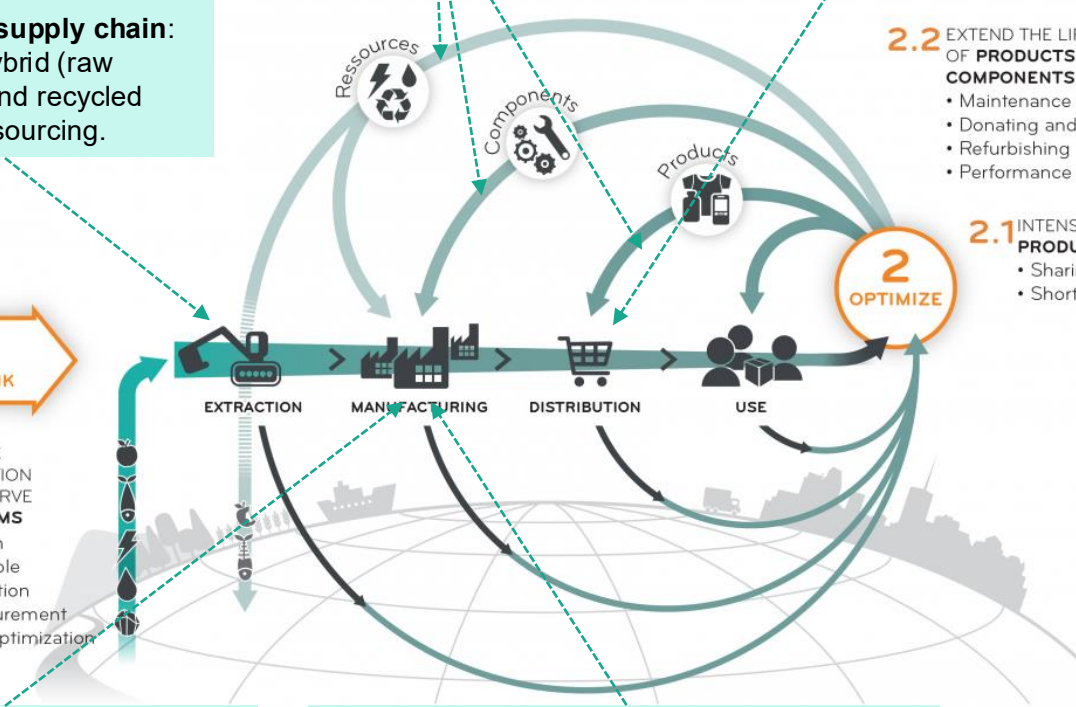
- Ecodesign
- Responsible consumption and procurement
- Process optimization

On industrial footprint design :

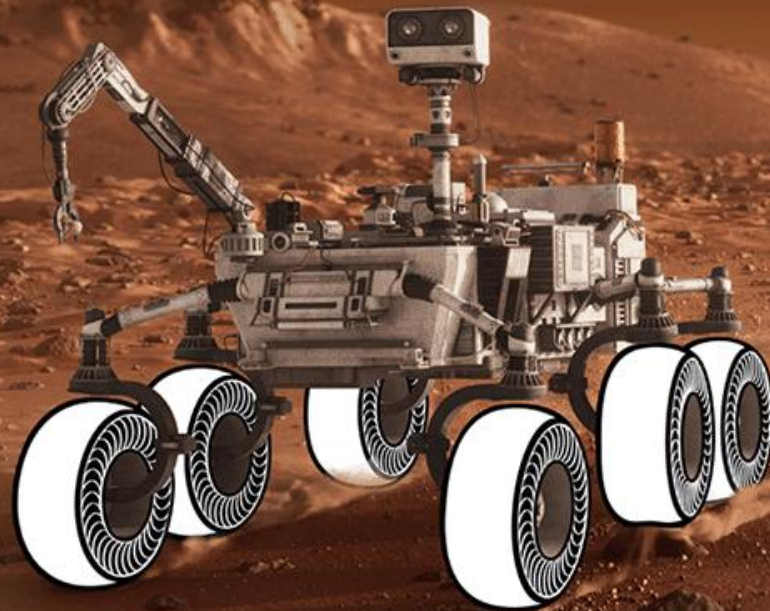
- Localize close to potential mutualization with other industries for energy, logistic routes, ... (**Territorial approach**).

On manufacturing process and production planning:

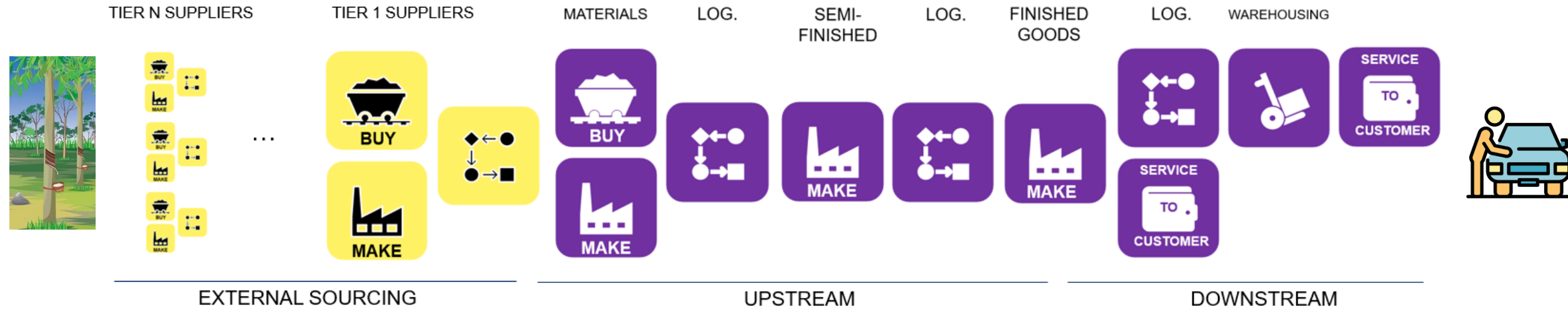
- Adapt manufacturing process to component re-entry
- Plan component arrivals into production planning



ZOOM ON supply chain resiliency and risk management



ACKNOWLEDGING A MORE RESILIENT SUPPLY CHAIN REQUESTS HIGHER OPERATING COSTS AND HIGHER INVENTORY INVESTMENT, WE TARGET THE « SWEET SPOT » BETWEEN COST EFFECTIVENESS AND RESILIENCE



	Sourcing	Relation External supplier	Flows	Footprint	Inventory	Rupture risk mgt
COST EFFECTIVE	Unique supplier for each product type	Transactional	Low labor costs regions => High margin sales regions	Few giga-factories	High in-transit. Few / No buffer.	Crisis Management
RESILIENT	Multi-sourcing at each step	Partnership, Visibility of Tier N suppliers	Local-to-local	Numerous « smaller » sites	Low in-transit. Buffer on critical products	Preventive

PREVENT WHAT CAN BE ANTICIPATED AT REASONABLE COSTS

*WELCOME UNCERTAINTY AND ACKNOWLEDGE YOU CAN'T PREVENT EVERYTHING
BE EXCELLENT IN CRISIS MANAGEMENT*

INCLUDE GEOPOLITIC RISKS IN STRATEGIC PLANIFICATION :

- **Map upstream** Tier 1, ..., Tier N **suppliers**, identify and tackle vulnerabilities
- Reduce intercontinental flows by **developping local-to-local**
- **Duplicate sourcings** per « cluster » in a fragmented world
- **Reinforce cybersecurity** on all potential "entrance" points
- Deploy a worldwide « customs focused » **regulatory watch network**
- **Partner with authorities** to enable local sourcing : re-industrialize specific sectors and support circularity

INCLUDE CLIMATE CHANGE IMPACT IN STRATEGIC PLANIFICATION :

- **Assess current** footprint **vulnerability vs climate events** today, in 2030 and 2050
- Consider vulnerability vs climate events by 2050 as **destructive criteria for new site projects**
- **Deploy climate events adaptation measures** on relevant sites
- **Partner with stakeholders to adapt key logistic infrastructures** to climate change (strategic ports, channels, railways)

PREVENT WHAT CAN BE ANTICIPATED AT REASONABLE COSTS

WELCOME UNCERTAINTY AND ACKNOWLEDGE YOU CAN'T PREVENT EVERYTHING

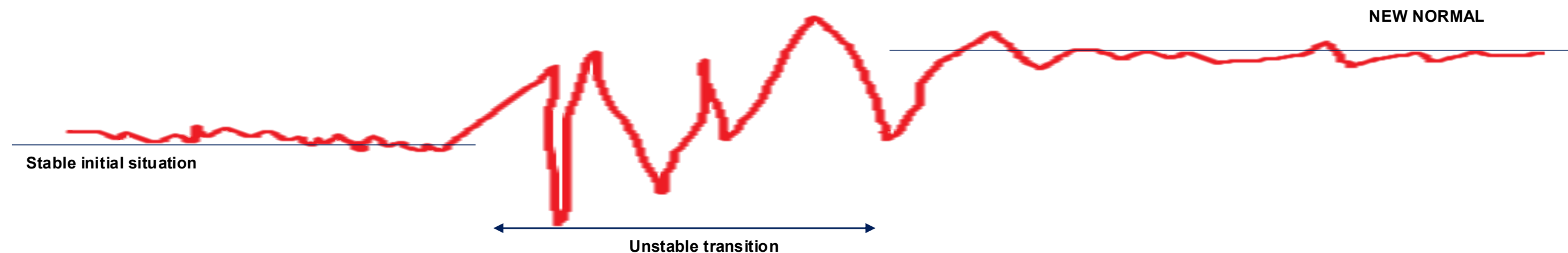
BE EXCELLENT IN CRISIS MANAGEMENT

DEVELOP WEAK SIGNAL DETECTION TO REACT AS SOON AS POSSIBLE :

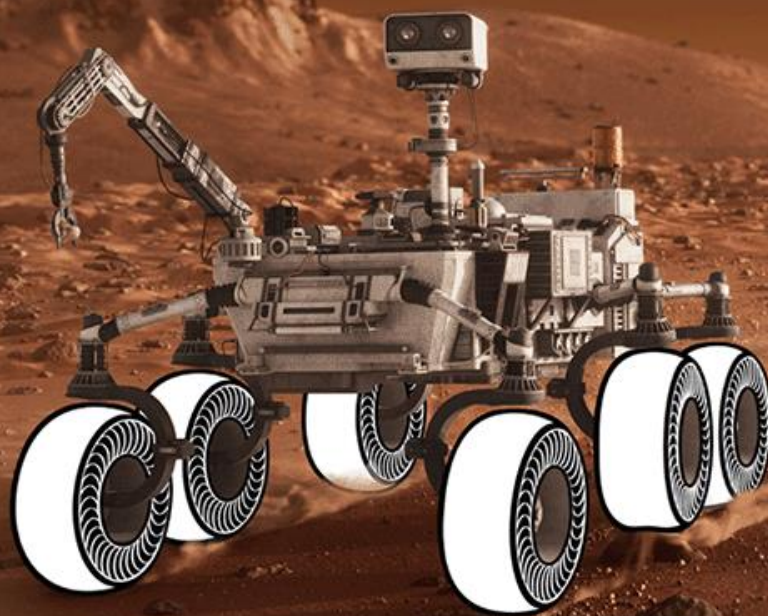
- « **end-to-end orchestration control tower** » teams are key to detect asap disruption signals
- **Real-time data visualization tools** ensure high efficiency of control towers

DEVELOP CRISIS MANAGEMENT EFFICIENCY TO MOVE AS SOON AS POSSIBLE TO NEW STABLE SITUATION:

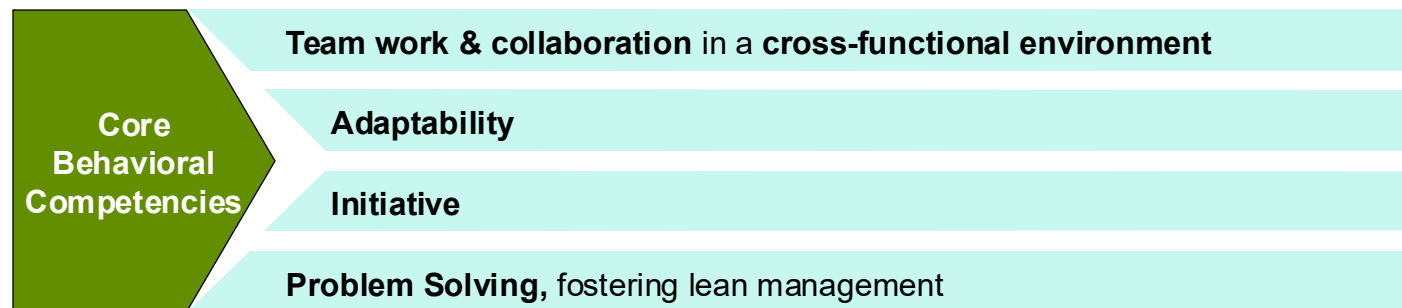
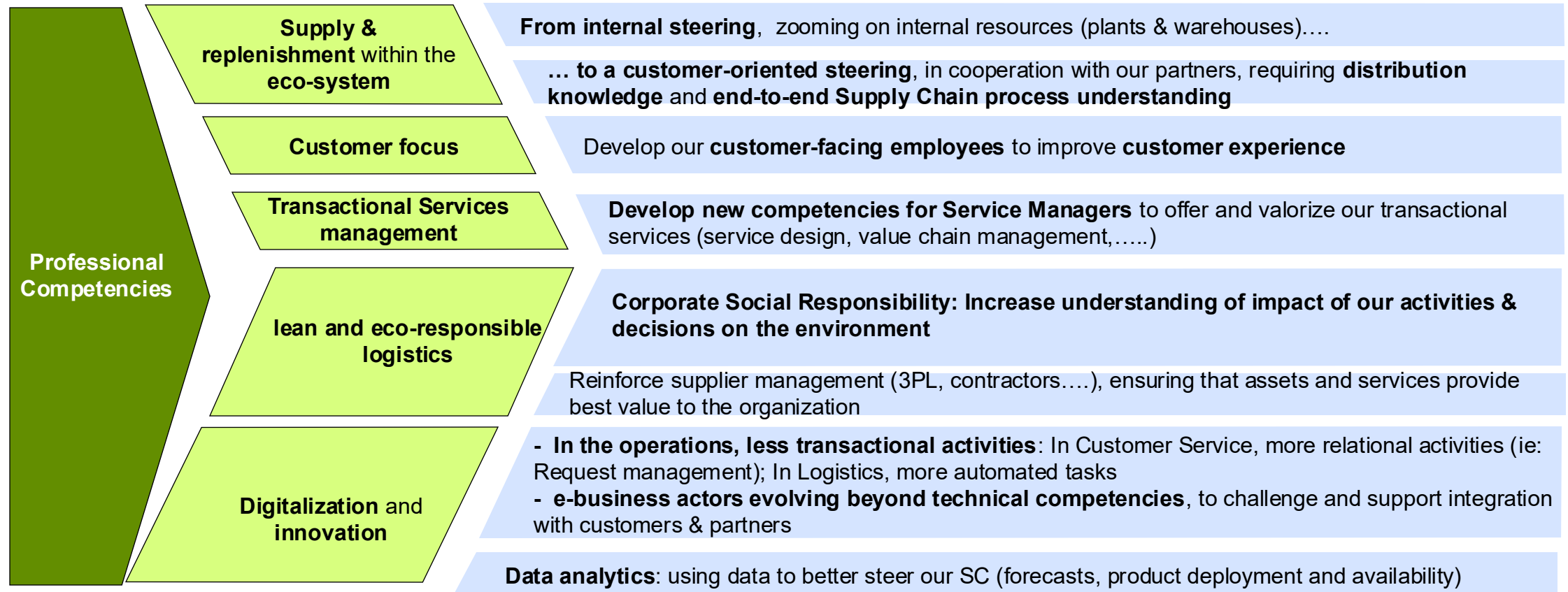
- Prepare and **train teams on worst case** scenarios for robust contingency plans
- **Develop people crisis management skills** and mindset :
 - « *You never have all information to make the perfect decision* »
 - « *In uncertain situations, you trade time for certitude* »



TRANSFORMATION #1 : PEOPLE / COMPETENCIES



What future trend for the supply chain competencies ?



DEFINITION OF MWB #1 – DEVELOP TALENTS FOR THE FUTURE

OBJECTIVE

- *Our Dream... In 2050, everybody has equal chances to have a job they love.*
- *The Supply Chain is considered as a great place to work, with focus on digital! We attract, retain and develop the talents that will ensure the success of the business ambition of today and tomorrow.*

WORKSTREAMS

- **WS1: Jobs attractivity** – Implement levers to be more attractive internally (Webcast, Work environment, feminization, promotion through social media...) and/or externally (Career path included).
- **WS2: Right competencies of today and tomorrow...** Implement a ‘WW College Métier’ to support the transformation of the Supply Chain Métier and feed the SWP process accordingly (Interface between DCP & business entities on the process « Develop competencies »).
 - ✓ **2a:** Identify and manage **Critical jobs**, based on structural or cyclical risks (qualitative or quantitative).
 - ✓ **2b: Standard Development Plan & Job Qualification** (Focus on priority jobs and key/Core competencies).
 - ✓ **2c: Development** through a culture of lifelong learning (L3M-Review of the training catalog) with a focus on **Progress competencies** (Lean, Problem solving...) and **Data competencies**.
- **WS3: Prepare for post-OPE continuity in terms of skills** - Ensure the level necessary for the deployment of solutions (post-program), on key resources and competencies.

TEAM AND GOVERNANCE

- **Sponsor:** Henri de la Gravière
 - **Leader:** Dominique Tressol
 - **Entity co-leader:** Yoann Crepet
- Contacts main partners:**
PDP, RDP, GDP
COE, LB, Region, OPE/OPEN
DCEM
Supply Chain LCM network (incl. DOMF, DORD)
- Governance:**
WW Supply Chain Collège Métier

INTERDEPENDENCIES

- MWB#4 - Operational Excellence
- DOSC/COE (Core/Region)
- DOSC/STR/BPL
- DOCBS, OPE & OPEN
- LB, Region
- DOMF/MP/SCI
- DCP/Talent Campus, SP Region
- DCEM, DCPT, DOTI

CONDITIONS OF SUCCESS

- Available resource and collaboration with main partners (Development Partners, Business Process Leader & Group Process Owner, COE managers & LPE, Region experts...).
- Coverage of SC LCM network.



AMBITIONS

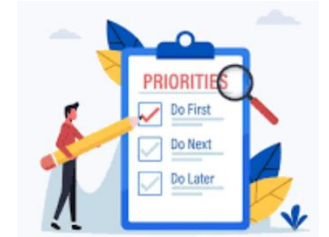
Main KPI

- MFT Engagement: 86%
(2023: 84%, +1 pt)

Supporting KPIs

- Gender Balance: *Being drafted*
- Time to staff: *In progress*
- Number of ‘G10’ positions in logistics: *Reduce the number of ‘G10’ positions*
(2023: Ensure WW measurement)
- MFT Career & Development: 83%
(2023: 77%, +1 pt)
- Succession plan on Critical jobs: 100%
- Core Competency assessment: 80%

Collective People Priorities



a Supply Chain Foundations – Continuing to Strengthen Our Métier

- Pursue and deepen the work already engaged to consolidate the fundamentals of our Supply Chain métier, ensuring clear standards, shared methods,... (PTD, qualification, maturity grids, standards, ...)

b Digital/AI Confidence – Building an AI-Enabled Workforce

- Empower all Supply Chain teams to embrace data and AI with confidence, transforming technology into everyday value and smarter decisions.

c End-to-End Thinking – Strengthening Mastery & Business Acumen

- Develop professionals who understand the full flow of the Supply Chain, and how every decision drives customer value, cost efficiency, and competitiveness.

d Human Leadership – Leading Change and Inspiring Through Storytelling

- Grow leaders who engage people, give meaning to transformation through storytelling, and foster collective ownership of performance and learning.



THANK YOU

