

# ***Supply Chain and Logistics - Why does it matter for competitiveness?***

## **The Michelin example**



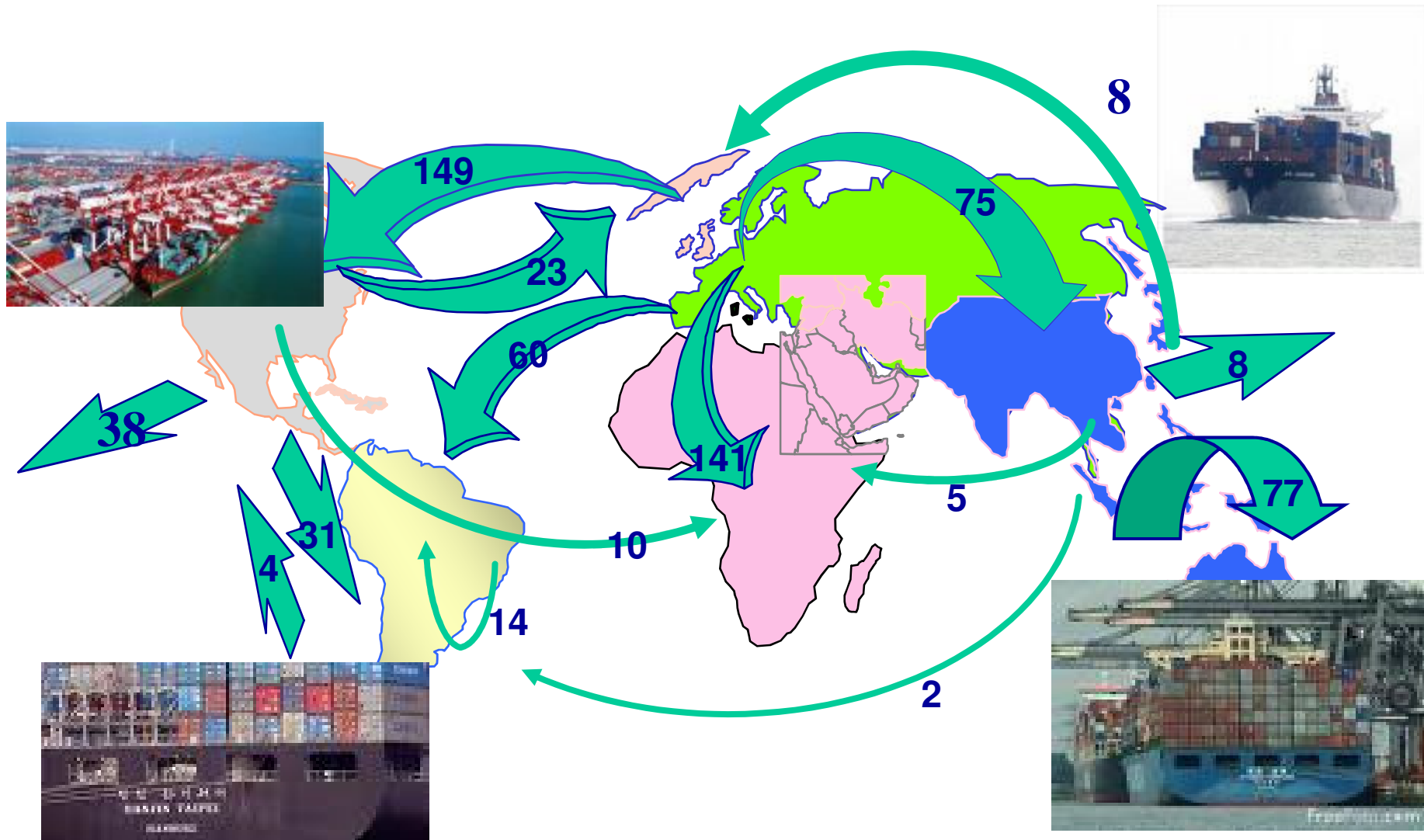
## ***Why does it matter for EU competitiveness?***

- €1,7 bn global logistic costs = 8% of annual turnover
- €4,4 bn inventory = 20% of annual turnover
- In Europe: 10 000 professionals involved every day (including sub-contractors)

**In a context where we still export 20% of tyres produced in the EU**



# Intercontinental Flows



Oversee flows (finished products), in kTons

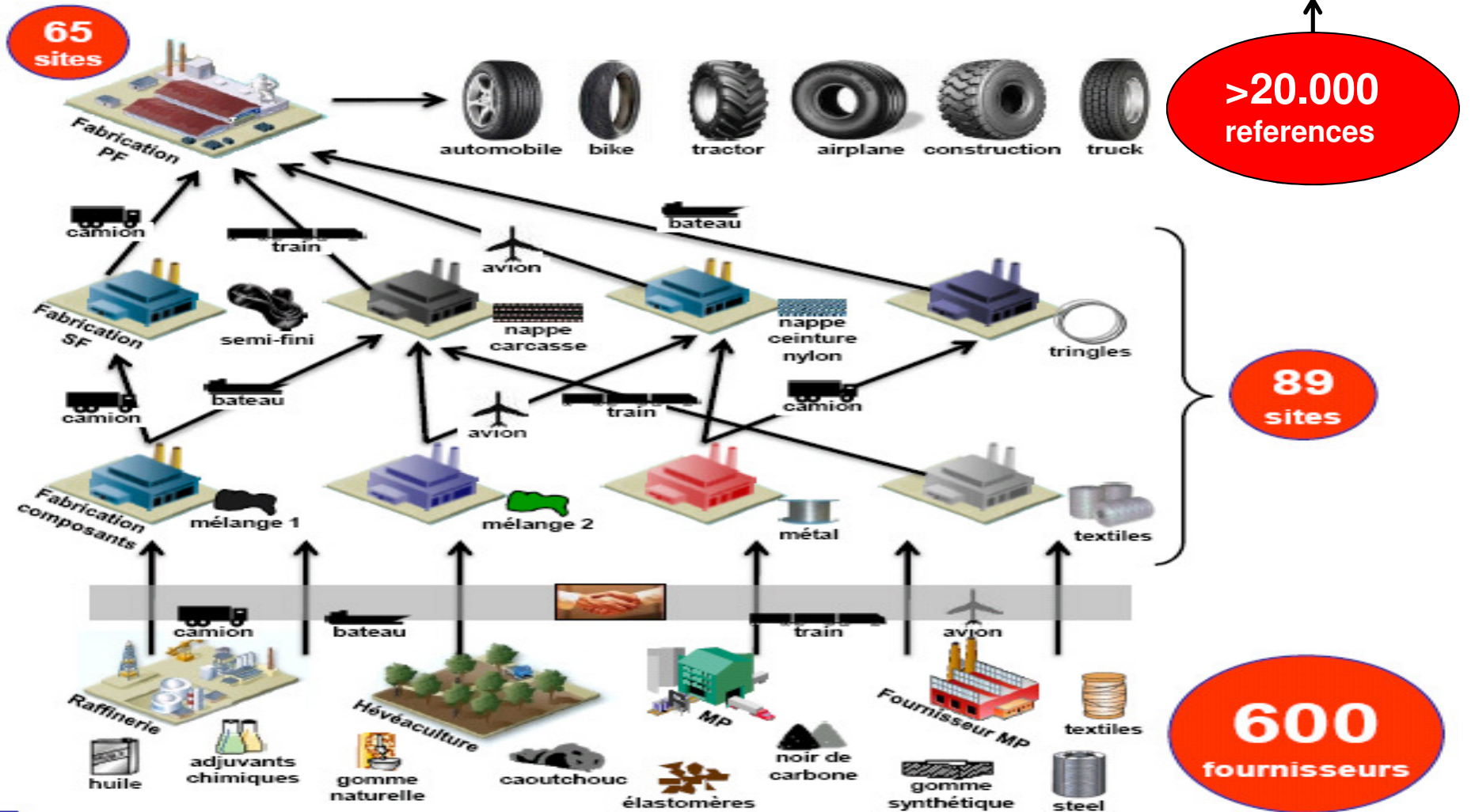
# facts ...



- 35 millions tires in stock  
*1/2 Earth circumference !*
- 4 000 000 m2 warehouses  
*800 soccer fields*
- 170.000 TeU –20''containers  
*Lille - Paris*
- About 60 – 70 container ships at a time
- 800.000 trucks / year
- Over 100.000 drops / day
- Over 1.100 SC professionals
- Over 3000 Logistics professionals  
+ subcontractors (20 to 30.000)

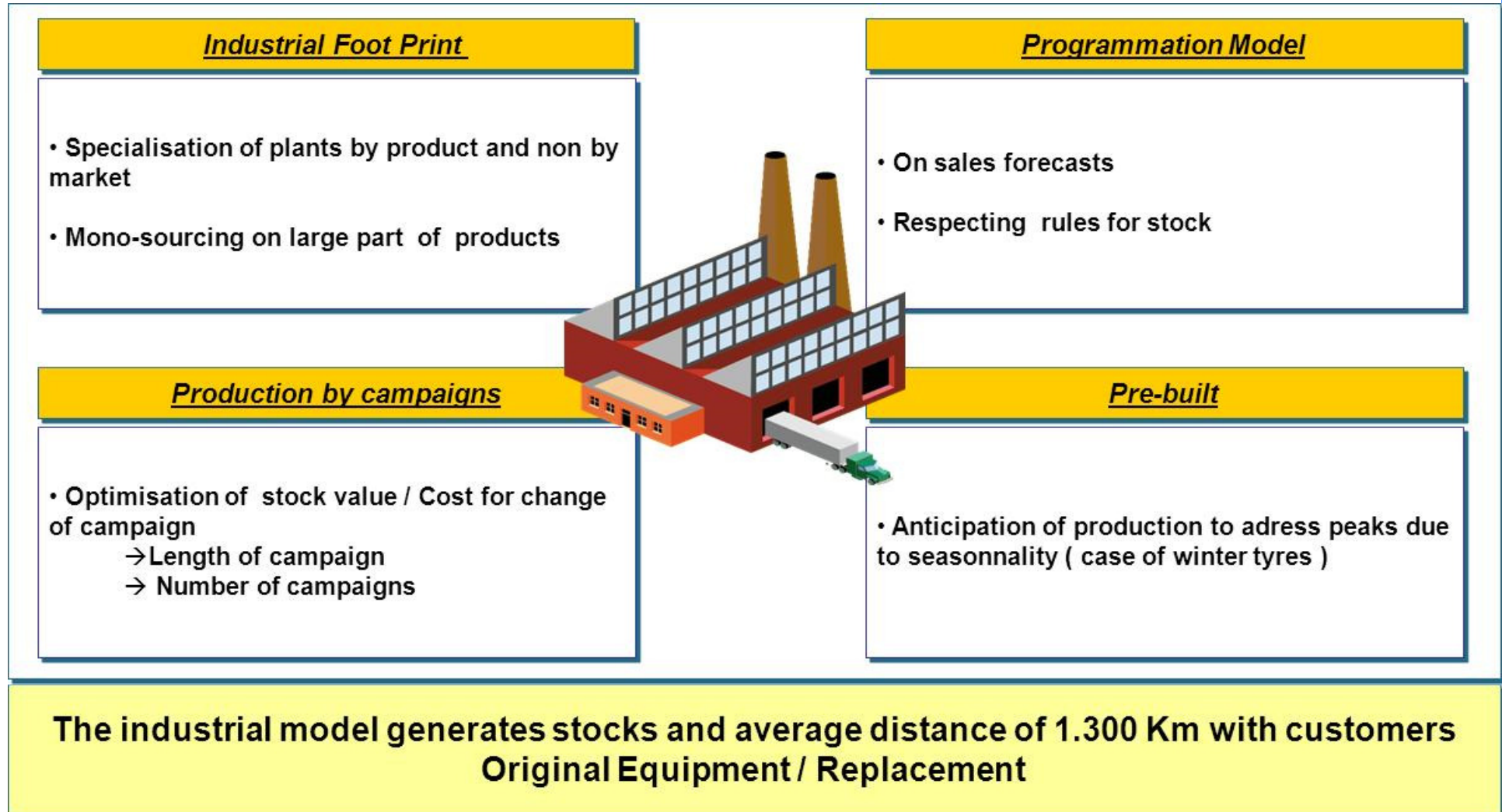
# ***Supply chain and logistics - What is it concretely for Michelin?***

## 2 Industrial Supply Chains – upstream and downstream





# Industrial Model in Europe

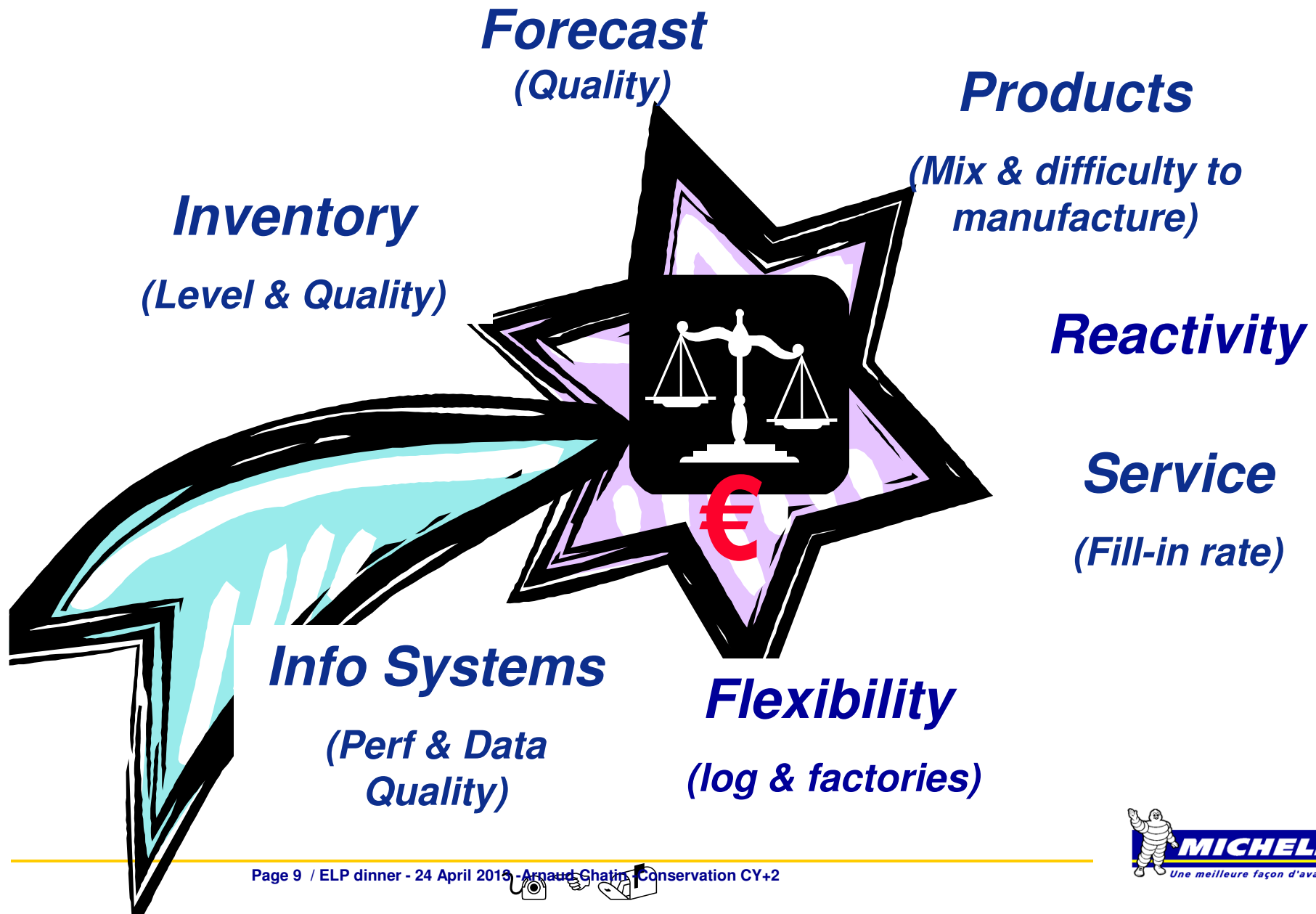


## *Example of constraints for Michelin Logistics*

- **Semi-finished products :**  
must be used within 7 days after their production → Road
- **Transport of tyres : volume is the essence !**
  - 1.400 PC tyres in a truck, 2,5 FTE and 3 hours to load the truck
  - Pallet of 40 PC tyres, compacted with plastic film, but requires specific clark, not available every where....



# Key performance drivers



# ***Thoughts about multi-modal transport***

## Example : combined transport rail road ES-PL

### - Delivery time

ES->DE: 0,5 + 4 days

DE->PL: 4 days

PL : 2 + 0,5 days

⇒ 9 days at best (4 days by road)

⇒ No guaranteed delivery date

### - 3 x crossing borders

Non harmonised Infrastructures  
(tracks width, gauge)

National operating rules  
(signals, electric traction)

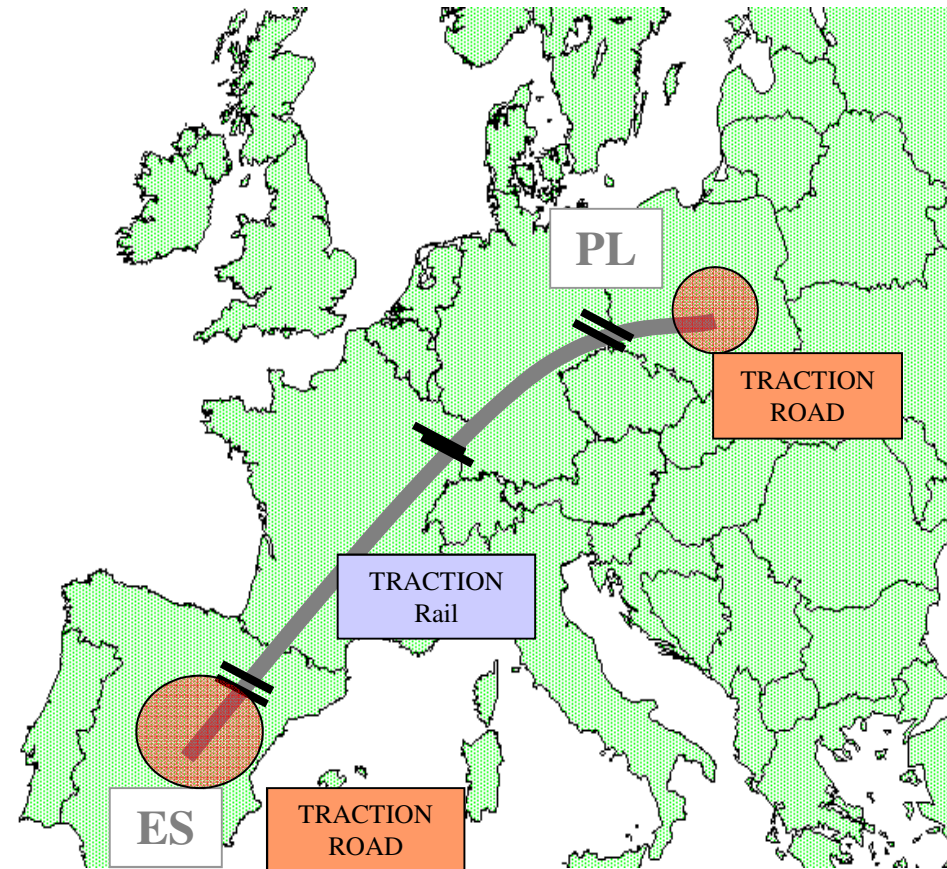
### - Transportation contracts

Pre and Post : CMR

Main Traction : CIM

-> administrative constraints

### - Transport costs higher than road



## *In a nutshell ... some potential*

### - The economical interest varies according to offers and flows :

- price gaps not always in favor of multi-modal... (limit > 600 km)
- ...but also in some cases benefits up to 30% on cost/ton...
- ...but with impacts on lead time (example : France-Russia + 4 days)

### - Potential for transport of tyres :

- Current share of multi-modal : 6%
- ...possibility to double this share within next 2/3 years

### - Imports of Raw Materials:

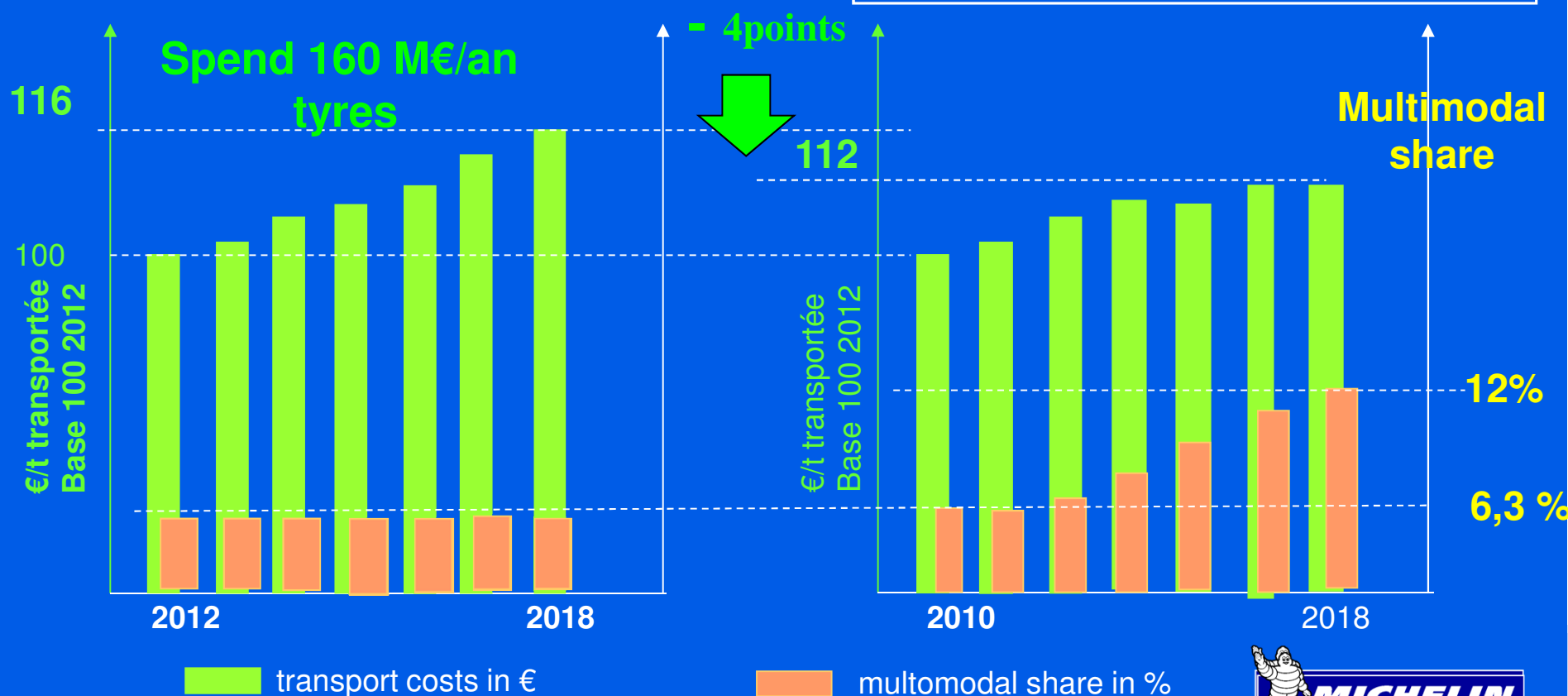
- Current share of multi-modal : 17 %
- Systematic study of any new multimodal offer with containers from harbours to our plants
- Integrate carbon footprint performance in purchasing transport ( awareness and culture of supply chain managers )

# intermodal transport should help monitoring our costs :

Evolution of transport costs over 6 years  
+16% (excluding GO)

**Hypothesis : current multimodal share multiplied by 2**

With gap - 30% de l'€/ T between alternative modes and road mode



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# *what can policy makers do?*

- Ensure that design of regulations takes into account flexibility as key success factor in logistics solutions
- Speed-up custom procedures  
(e.g. through FTA or international cooperation, such as mutual recognition of trusted traders between EU and USA in 2012 )
- .....



# *Thank you for your attention !*

