

▶ EcoDesign in automotive industry

World Material Forum
Nancy, 2015 june 23th

Gilles Le Borgne
EVP Research & Développement
PSA Peugeot Citroën



PSA PEUGEOT CITROËN 

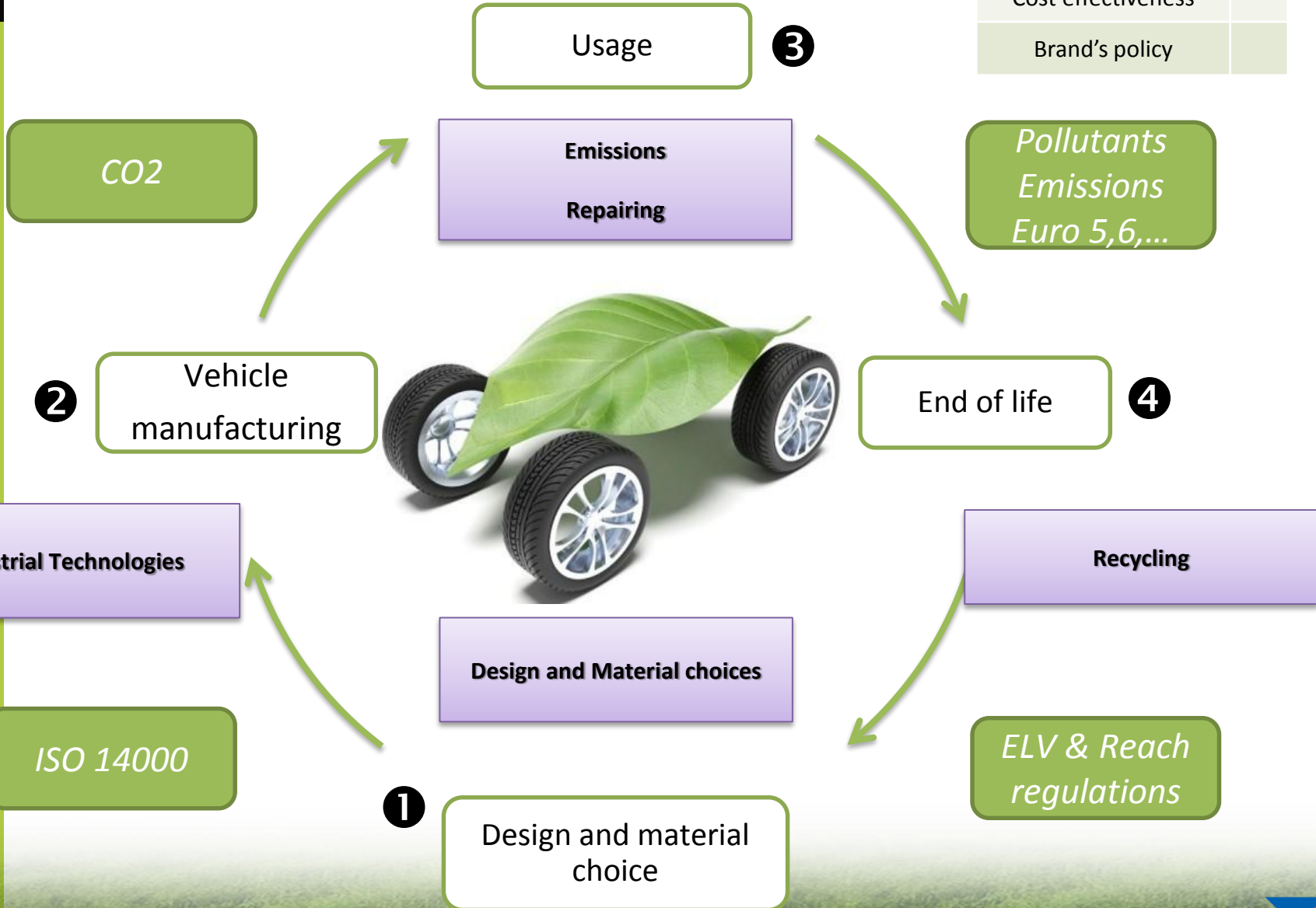


Automotive Ecodesign

Vehicle Life Cycle Analysis

To reduce environmental footprint for each step of car life cycle

KPI	
Compliance to norms and regulations	
Cost effectiveness	
Brand's policy	



Automotive Ecodesign - Vehicle Life Cycle Analysis

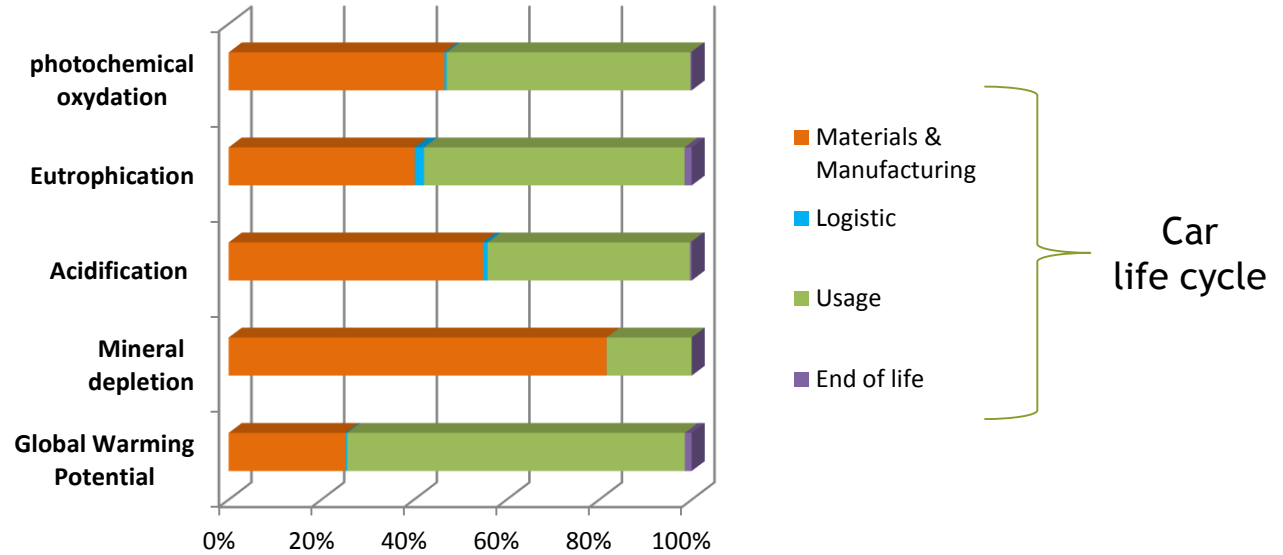


PSA PEUGEOT CITROËN

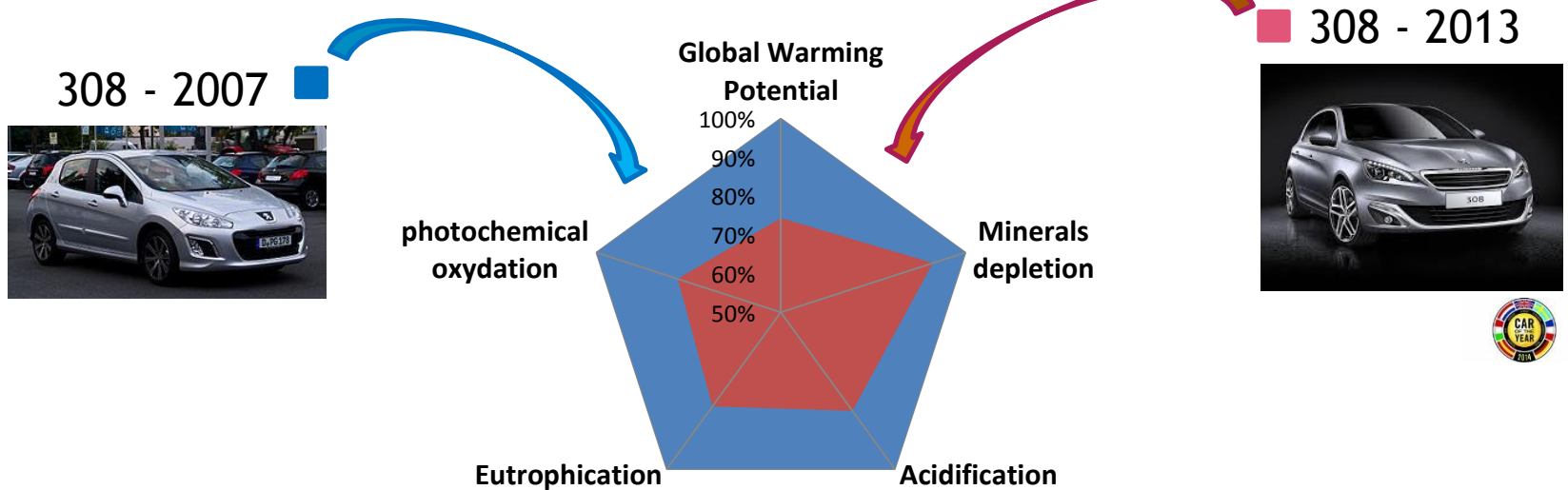


Global approach

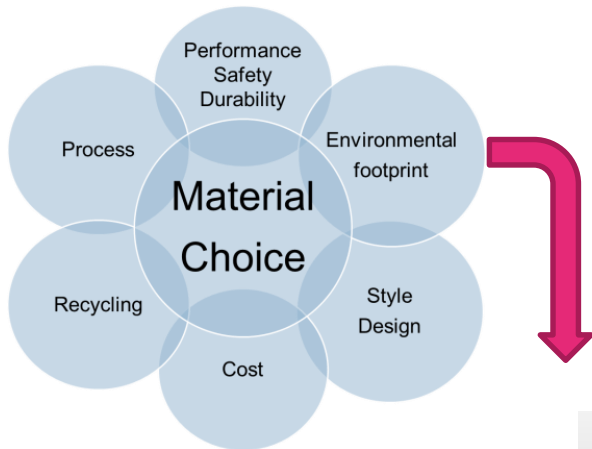
5 analyzed impacts



Improvement already done

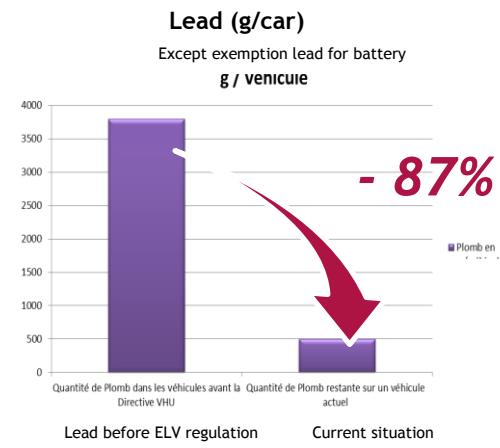


1. Design and material choice



Recyclable materials choices and number of materials families

Heavy metals ban (Pb, Hg, Cd, CrVI)
Non toxic materials (REACH)



Critical raw Materials



Lightweight materials

Natural fibers for lightweight

Depolution ability

Recycled materials **30%**

Renewable materials



Peugeot 208 rear bumper = 100% recycled polypropylene

2. Manufacturing

► Industrial Technologies (2014 to 2018)

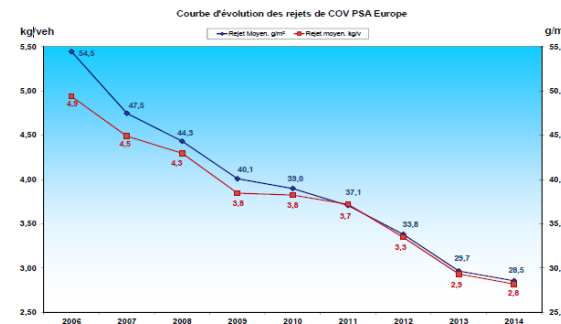


- VOC reduction
 - Target av. < 2,5kg/car
 - Best plant = 1,2 kg/car

KPI	
Compliance to norms and regulations	✓
Cost effectiveness	✓
Brand's policy	

- Energy efficiency
 - Target < 2 MWh/car
- Reduce water consumption
 - 3,6 to 3,3 m3/car
- Recycling material scraps
 - Loops with material suppliers
- Target « no hidden waste » in european plants to 2020

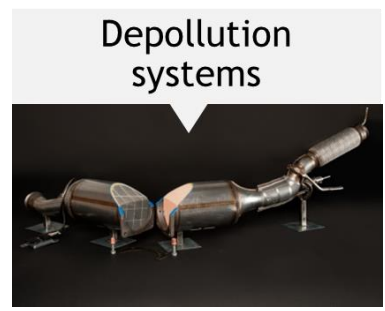
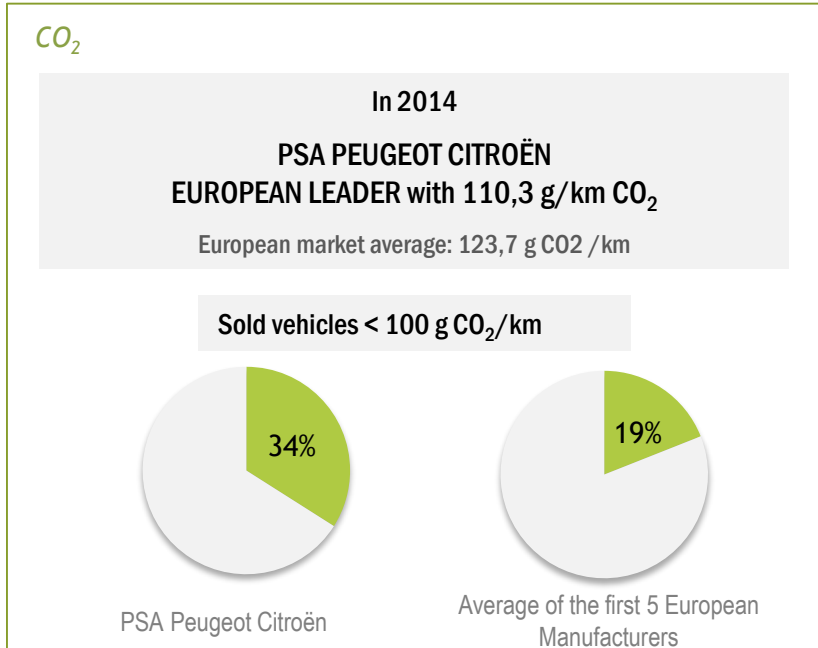
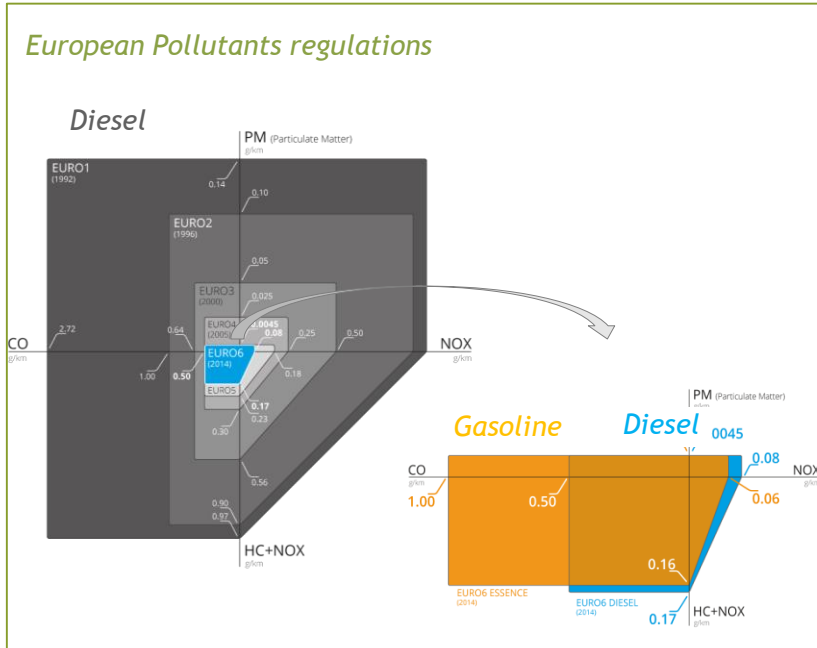
COV evolution - european PSA plants



3. Usage (most important impact)

► Powertrains: CO2 / €5, €6

KPI	
Compliance to norms and regulations	✓
Cost effectiveness	
Brand's policy	✓



4. End of life (Directive 2000/53)

KPI	
Compliance to norms and regulations	✓
Cost effectiveness	
Brand's policy	✓

Since 2008 for New Type vehicles (mass):



« Car is the most recyclable manufactured complex product in the world »

► Operational Treatment



In 2015 for operators in EC

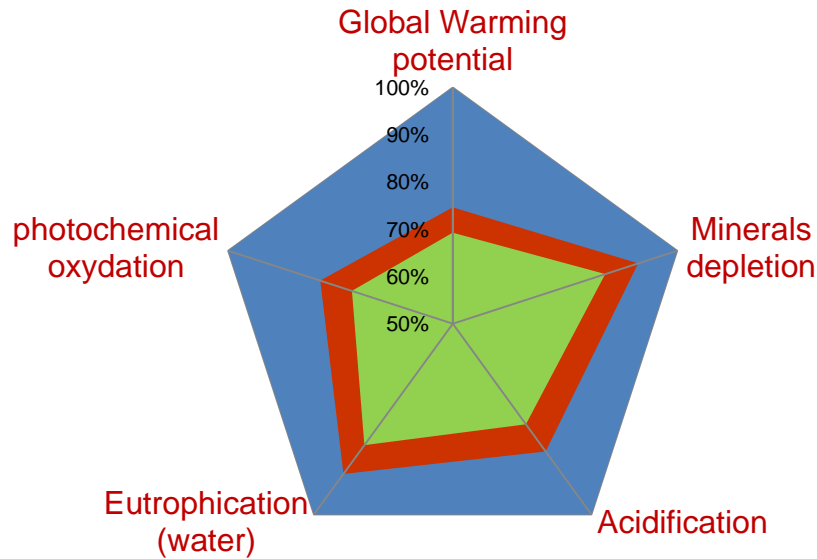
CONCLUSION : 2020 target

► estimation: future 308 €7 vs 308 €6/308 €4

308 - 2007 ■



308 - 2013 ■



■ Future 308



« There is no business to be done on a dead planet »
(David Brower)



Questions ?



PSA PEUGEOT CITROËN 

