

# *Advances in energy-efficient transport technologies*

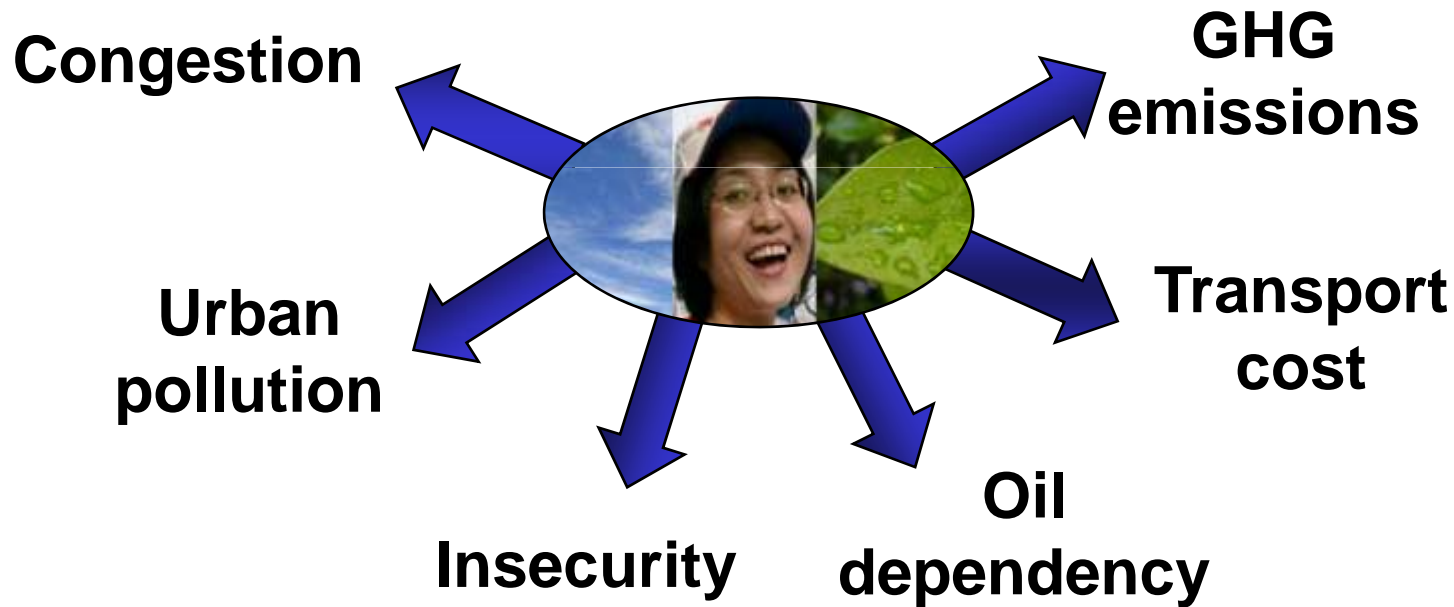


- **1/ Road transport must play a leadership role to help reach the global objective of 50% less CO2 by 2050. Procrastination would be dramatic for society at large and for the automotive industry.**
- **2/ Reducing energy consumption of cars by 50% is feasible with existing state-of-the-art technologies. Let's go for such an objective by 2020!**
- **3/ Electric vehicles can be made technically and economically viable, particularly in a rapidly urbanizing environment. It is time for road transport to stop depending solely on oil.**
- **4/ Governments must “have the guts” to provoke the necessary disruptions.**

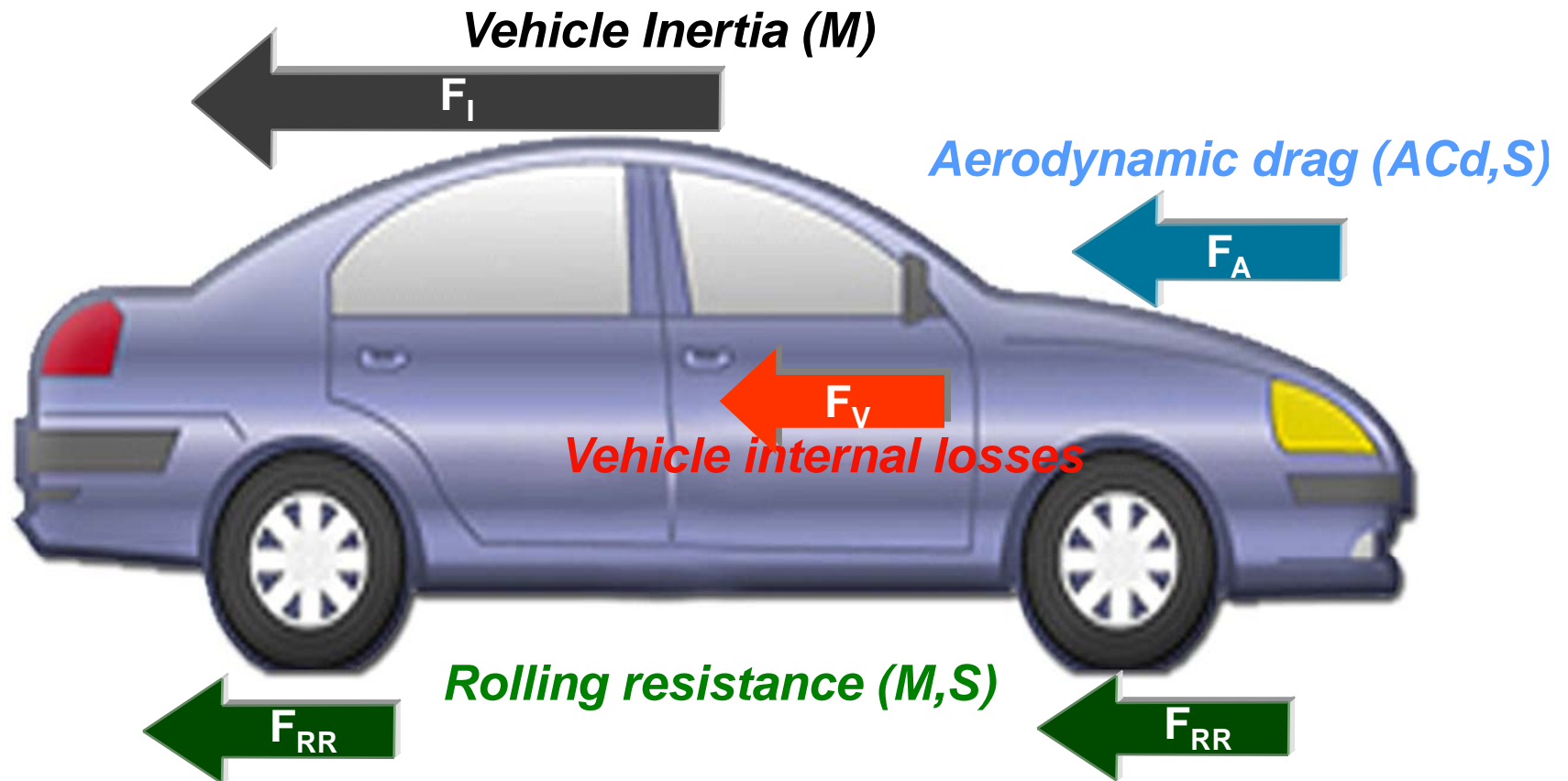
# ***Let's be clear about it:***

***Road mobility as we know it is NOT sustainable and the solutions contemplated so far are not commensurate with the criticality of what is at stake.***

***5 issues need to be addressed simultaneously:***



# Why so much energy consumption?



- 1- to overcome (often excessive) resistances
- 2- because engine efficiency is not terribly good (<30%) ... and even pretty bad in urban conditions!

# ***Good news ! We are not in a dead end***



***The last edition of Challenge Bibendum has confirmed it: reduce vehicle energy consumption by 50% is achievable. Reduce CO<sub>2</sub> emissions by more than 50% is also achievable.***

# Food for thought



- 71g CO<sub>2</sub>/km on the Shanghai roads



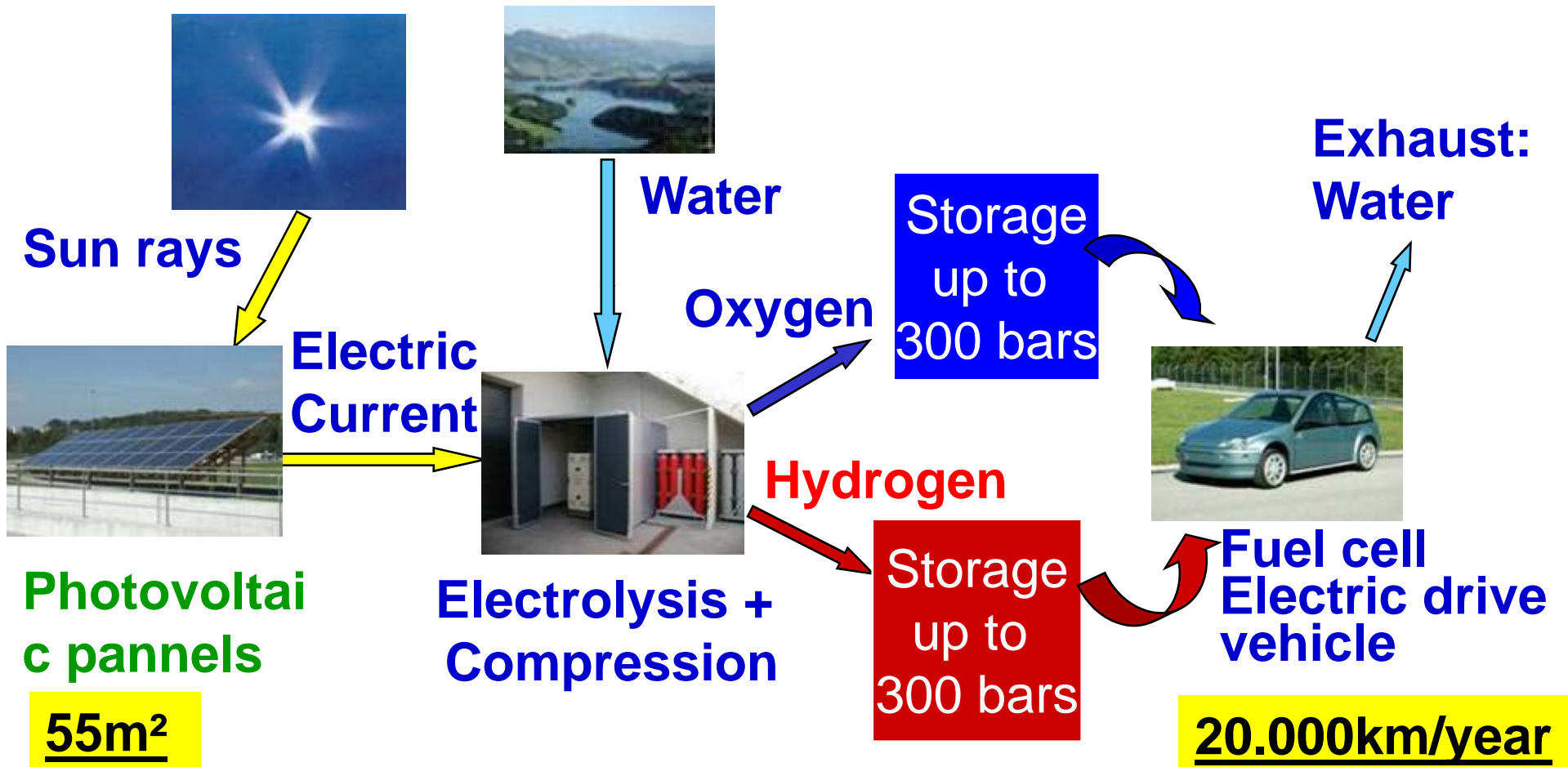
- Less than 30g CO<sub>2</sub>/km in the last Monte Carlo rally

# ***Food for thought***

- ~6g CO<sub>2</sub>/km in Sweden
- ~12g CO<sub>2</sub>/km in France
- ~72g CO<sub>2</sub>/km in Germany
- ~120g CO<sub>2</sub>/km in Greece



# Food for thought



***Let us rally together  
towards sustainable  
mobility!***