

# Deriving an Action plan for sustainable European transport policies up to 2020

**Reinhard HAAS, Amela AJANOVIC**

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# 1. INTRODUCTION: TARGETS OF THE ACTION PLAN

- ULTIMATIVE OBJECTIVE: REDUCE CO<sub>2</sub>-EMISSIONS
- WHICH EFFECTS contribute to REDUCE CO<sub>2</sub>-EMISSIONS? (e.g. reduction of cars)
- WHICH POLICIES/ACTIONS (e.g. increase registration tax) do we consider to have an impact (also or not) on the above-mentioned EFFECTS?

## 2. METHOD OF APPROACH TO DERIVE THE ACTION PLAN

- Results from **econometric analyses**
- Lessons learned from **empirical case studies**
- Results/Lessons learned from **top-down analyses**
- Important:  
due to **short-term period to 2020** for many issues – e.g. H2, fuel cell vehicles – rather important to analyse the prospects in an in-depth discussion than to rely on results from “abstract” modelling only.

## → WHICH EFFECTS (COULD) CONTRIBUTE TO REDUCE CO<sub>2</sub>-EMISSIONS?

- Increase share of biofuels (and hydrogen)
- Substitute fossil-fuel-based cars by low-emission vehicles?
- Reduce vehicle km driven;
- Reduce over-all number of cars;
- Increase share of low-carbon cars?
- Improve efficiency (better fuel intensity) of cars
- ....

→ Complete list !

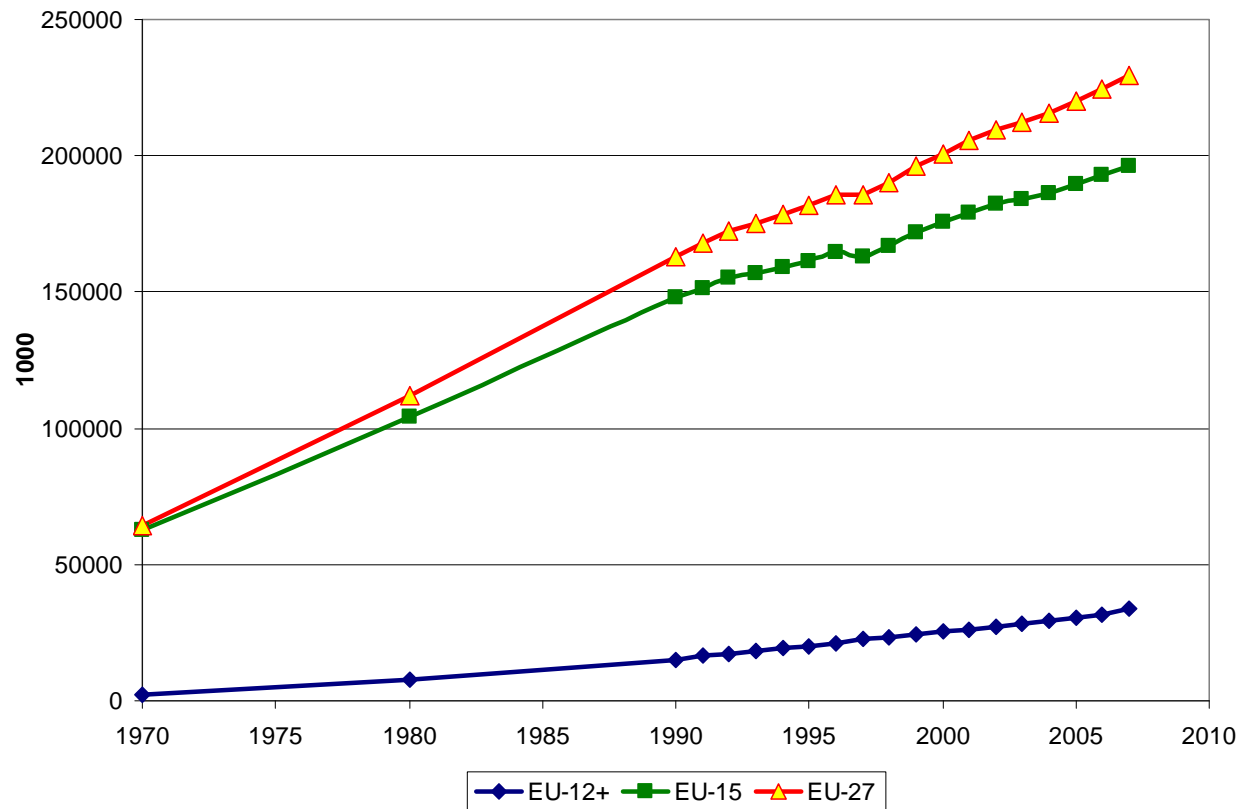
→ Derive list of priorities !

→ Assign proper actions/policies to bring about these desired effects!

→ HOW?

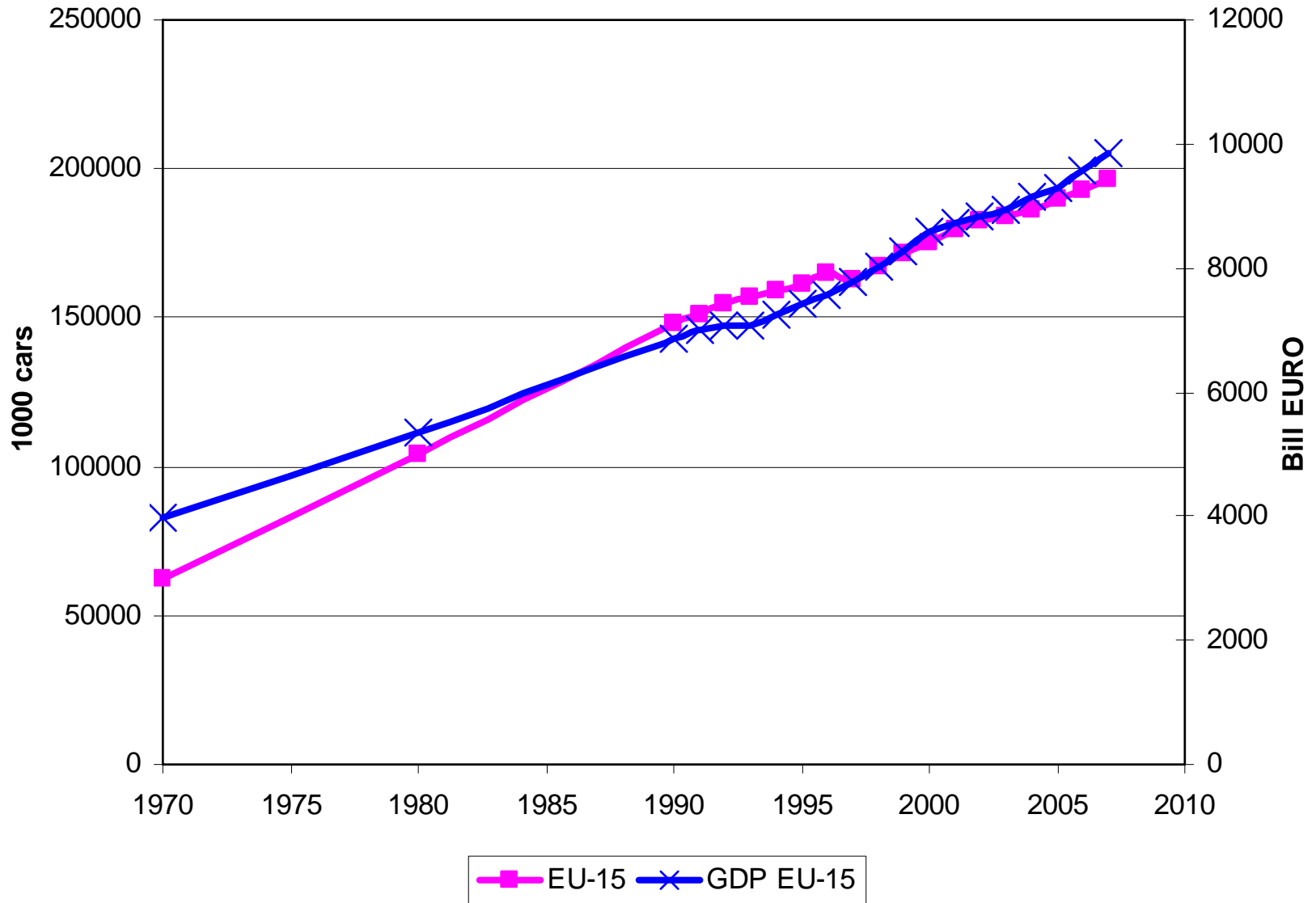
# 3. LESSONS FROM AGGREGATED CROSS-COUNTRY ANALYSES

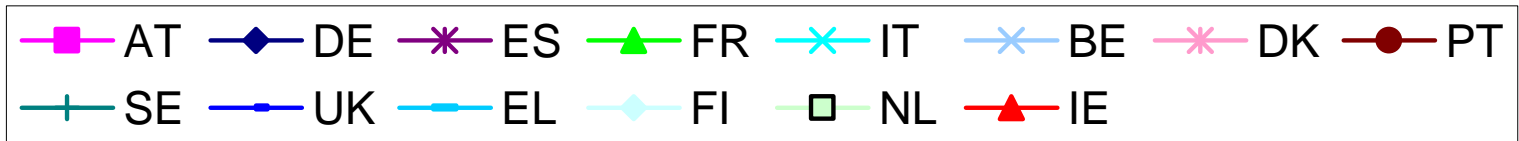
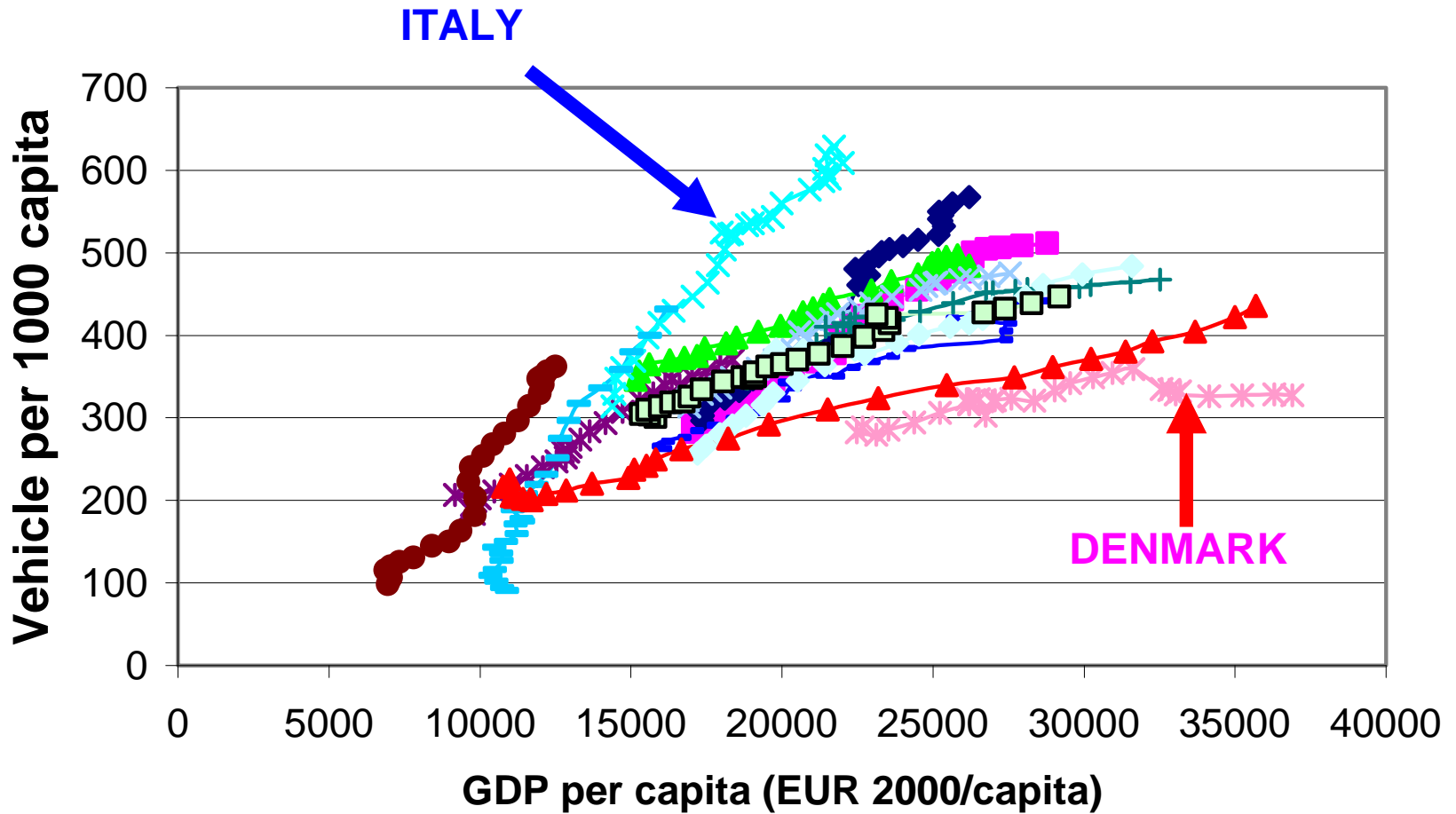
STOCK PASSENGER CARS EU-COUNTRIES



→ The GDP “problem”

# CAR STOCK VS GDP

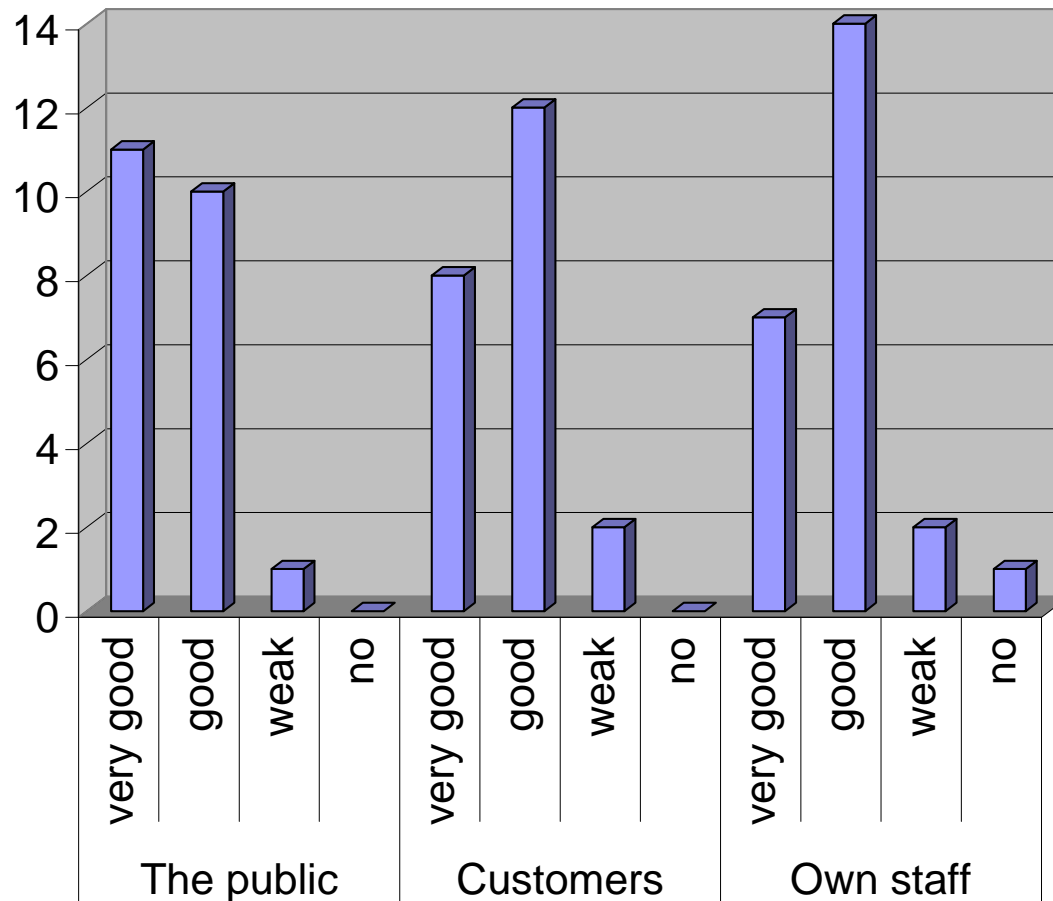




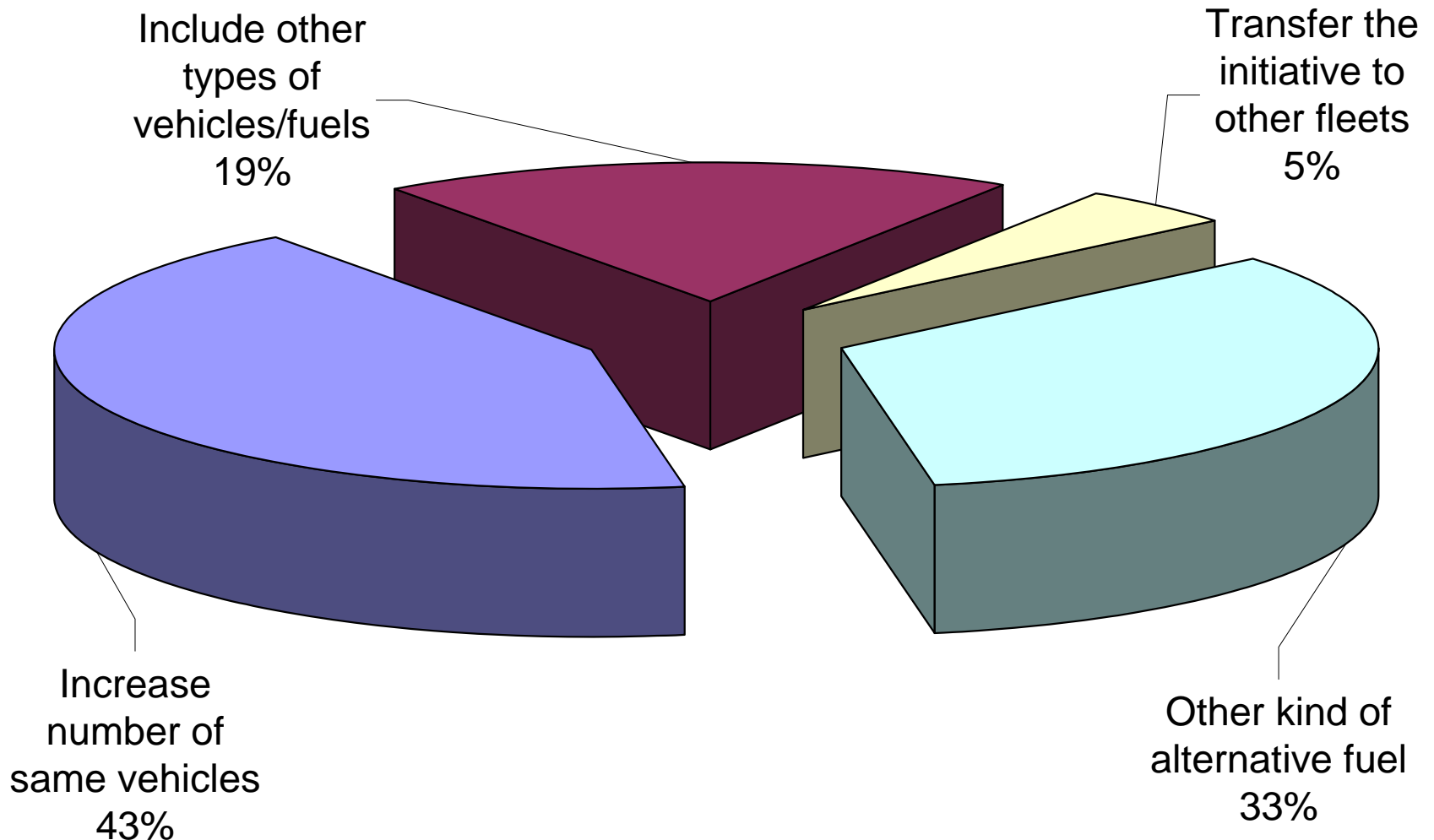


# 4. PERCEPTIONS FROM BOTTOM-UP ANALYSES

## How was the acceptance?



# Do you plan enlarge the initiative?



## 5. MAJOR RESULTS (1)

### \* What is evident?

- Standards for improving efficiency are effective
- No subsidies for any energy-consuming device (yet promotion of electricity from renewables in an efficient way and cautious support for building up infrastructure)
- CO<sub>2</sub>-based taxes (fuel and registration-focused) work (about -0.3 short-term price elasticity)
- High success and acceptance of case studies!

## 5. MAJOR RESULTS (2)

### \* What is under discussion?

- Biofuels 1st gen: emphasize research to improve ecological performance and to trigger new potentials;
- Biofuels 2nd gen: further pilot projects needed to come down the learning curve!
- Hydrogen & fuel cells: problem of high expectations and non-fulfilled promises
- Electric vehicles: How will technical maturity & economic performance develop in next years?

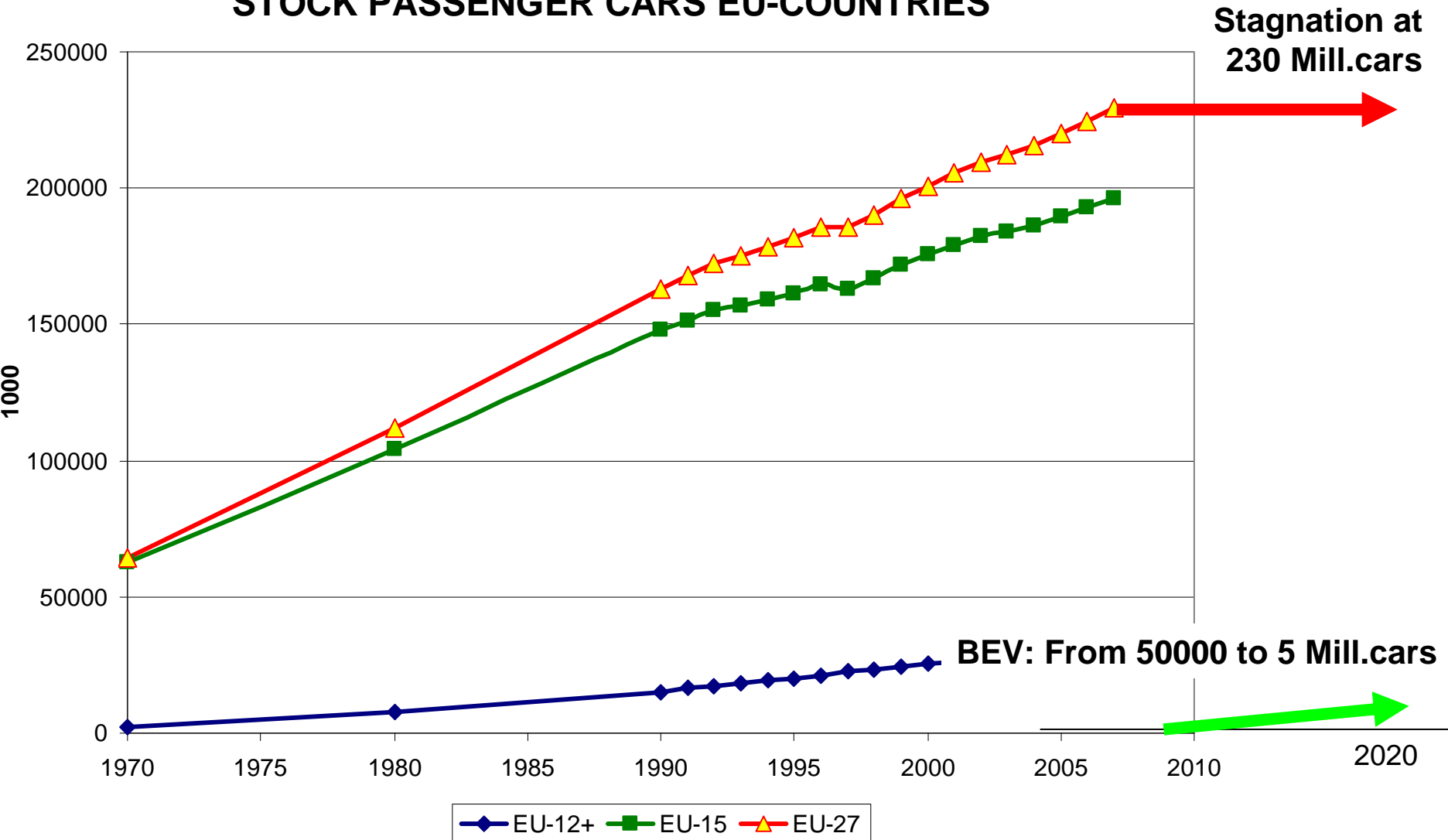
## 5. MAJOR RESULTS (2)

### \* What is missing?

- What makes smaller cars attractive?  
Preferences for Parking in cities ?
- Stick or carrot: What is the optimal combination especially for “soft” measures (Eco-driving!)?
- What encourages mode changes?
- High success and acceptance of case studies:  
→ But how transfer lessons-learned?

# \* Bottom-Up: What is possible up to 2020?

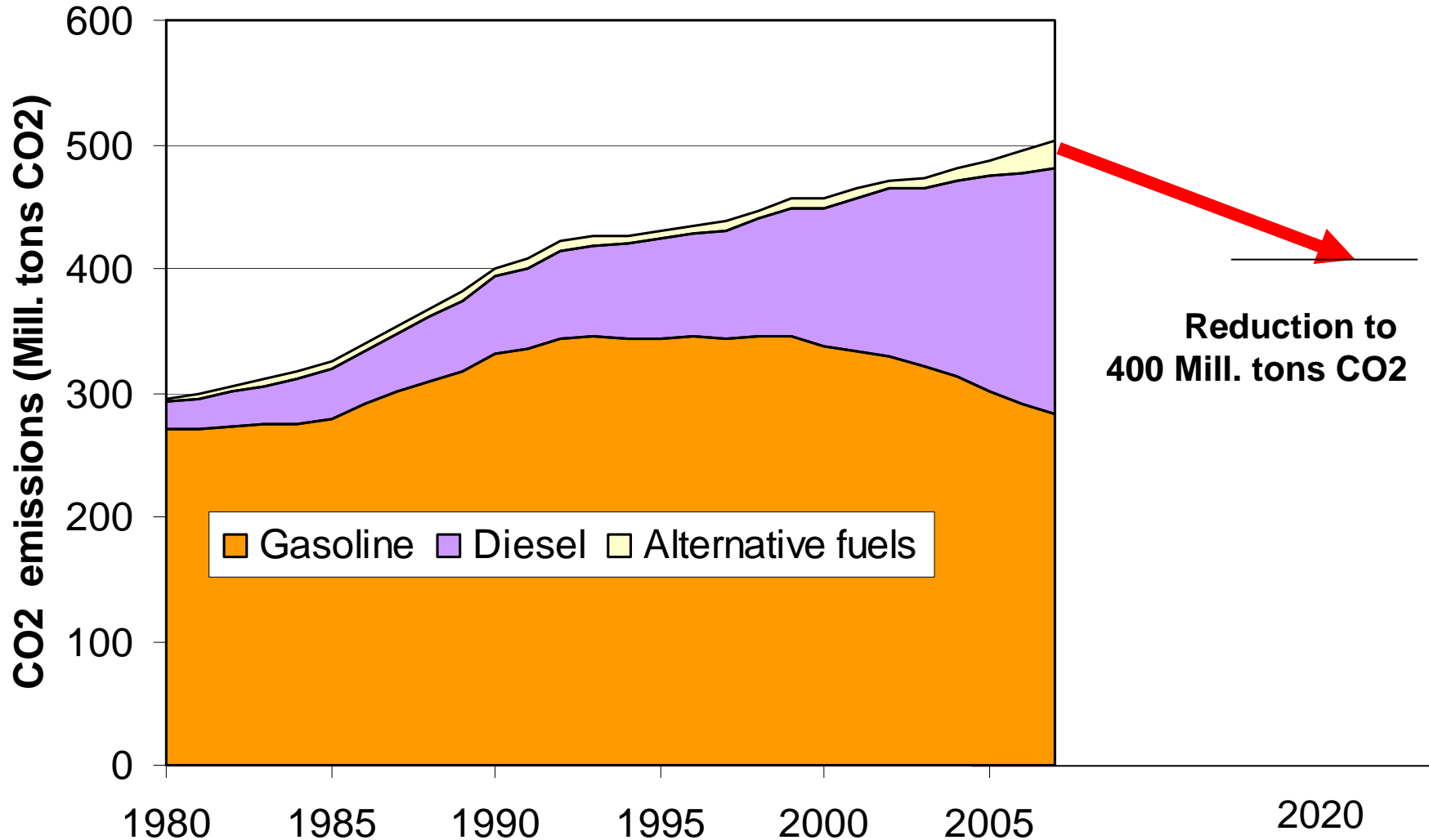
## STOCK PASSENGER CARS EU-COUNTRIES



# What is possible up to 2020?

- \* **Freezing over-all car stock at current level**
- \* **Improving efficiency of conventional cars by 20% (instead of 10%)**
- \* **Increasing biofuels from 350 PJ currently to 800 PJ**
- \* **Driving 10% less per conventional car**
- \* **Increase number of electric vehicles to 5 Mill.**

# \* CO2-emissions: What is possible to 2020?





## 6. (PRELIMINARY) CONCLUSIONS

- **There will not be a single “One size fits all” measure;**
- **We will finally have a quite broad portfolio in the Action Plan**
- **A major recommendation of the Action Plan will be to focus on fine-tuning, continuous adaptation and exchange lessons learned – between countries and regions**