

# AW Briefing

Discussion Debate Networking

## Decarbonising The Automotive Industry

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### **Linking Business Strategy and Governmental Policy**

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Westminster, London



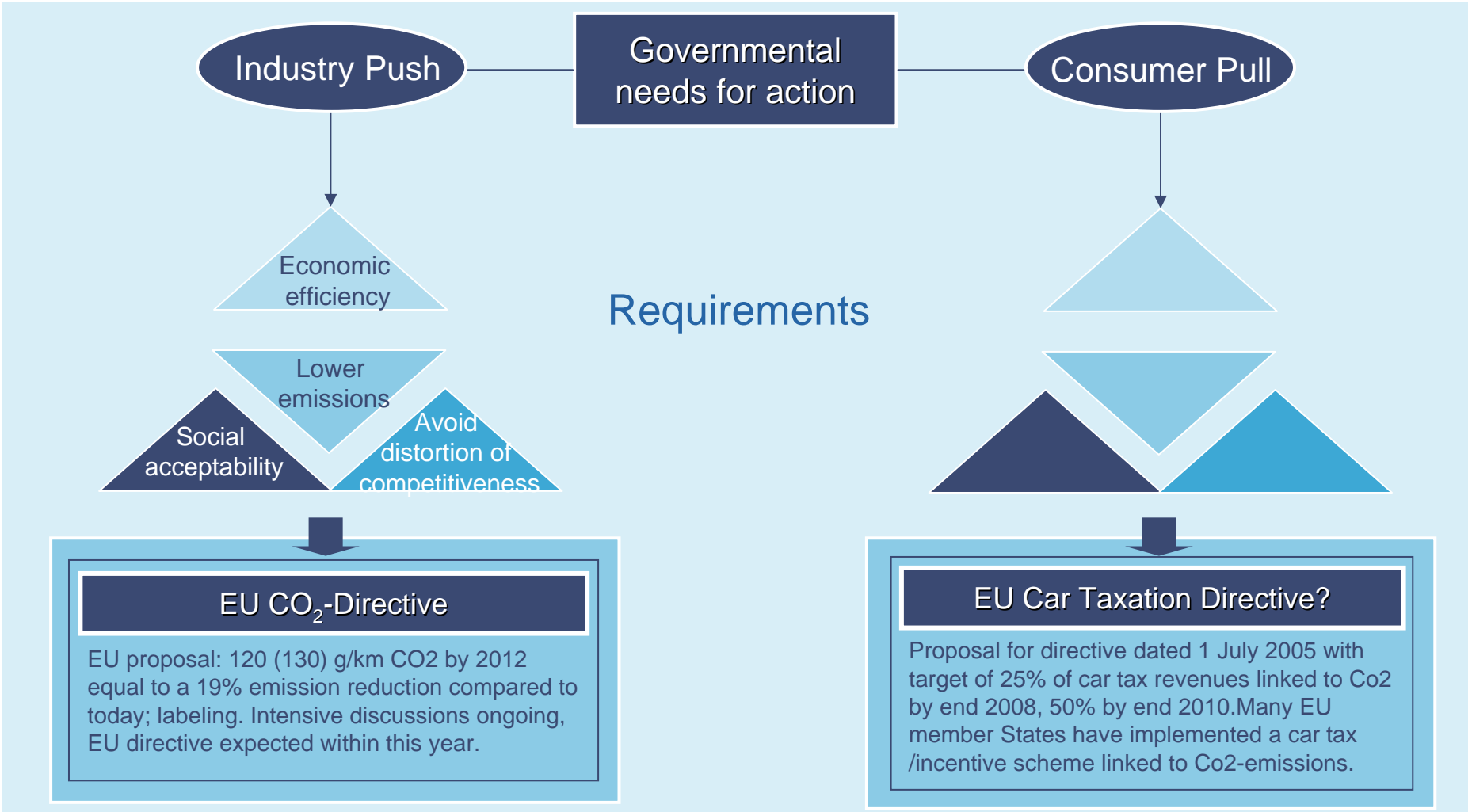
# Automotive World Briefing

**Decarbonising the Automotive Industry**

**Linking Business Strategy and Governmental Policy**

**Bart Vanham**

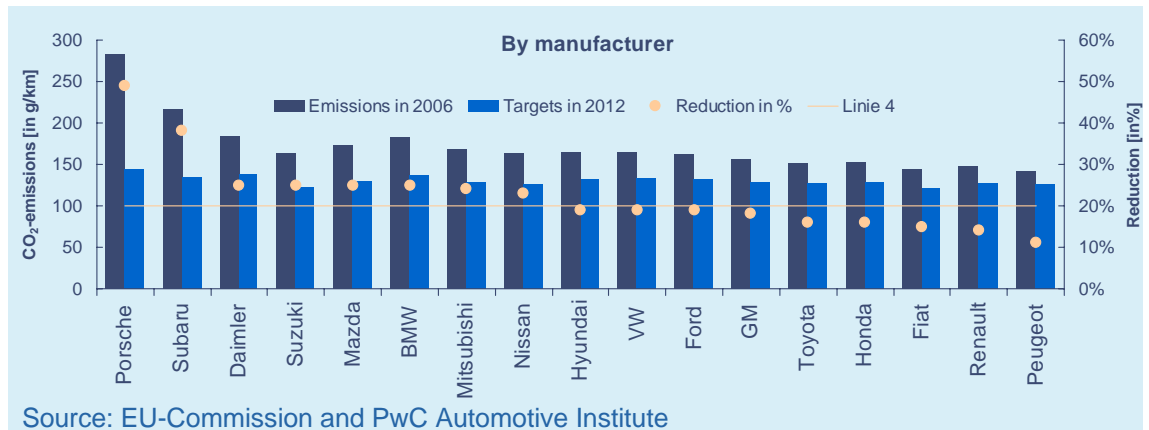
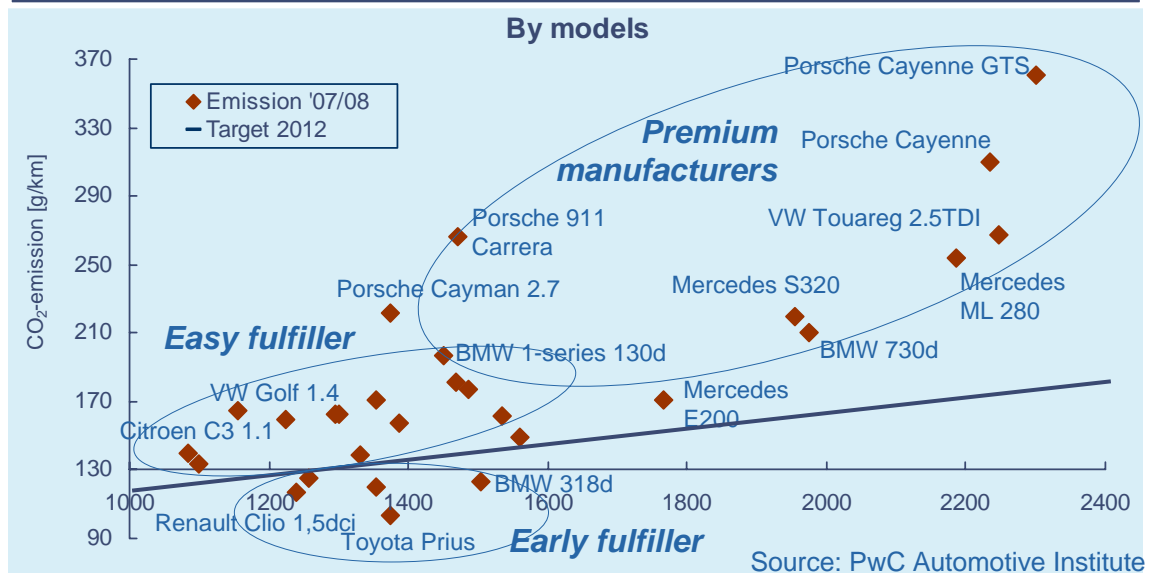
# Linking Business Strategy and Governmental Policy



Governmental industry push and consumer pull are essential for overall success. Implementation time critical for OEM planning and tackling of customer uncertainty.

# Current EU commission proposal for 2012 emission limits require OEMs to rethink their strategies

## Specific CO2-emissions targets (2012)



- EU commission proposal will require a reduction of CO2-emissions of 19% by 2012;
- The recent statement of the EU Parliament Industry Committee indicates that the final words have clearly not yet been spoken;
- Mass based formula particularly puts pressure on strong engines and premium manufacturers;
- First cars meeting 2012 limits are already on the market, but mostly lack customer demand due to price premium;
- Legislation require OEMs to fundamentally rethink their corporate strategy and marketing activities.

# Consumer behaviour has to change

**“We must influence the market, not simply supply it with vehicles that people don’t want to buy.”  
Daimler CEO Dieter Zetsche**



**Renault Electric**

- Low-selling vehicles
- 2002 electric Kangoo sold 151 units.



**Opel Corsa Eco**

- 115g/km car. Priced as standard Corsa 1.0L
- Low sales due to trans., tyres and performance



**Audi Duo**

- Plug-in parallel hybrid introduced 1997
- 60 units sold



**VW Golf CityStromer**

- Pure electric MK III Golf
- High cost and lower performance vs standard Golf saw <150 sold.



**VW Lupo 3L**

- High-tech weight and fuel saving technology
- Positive initial response, but ultimate market ltd.

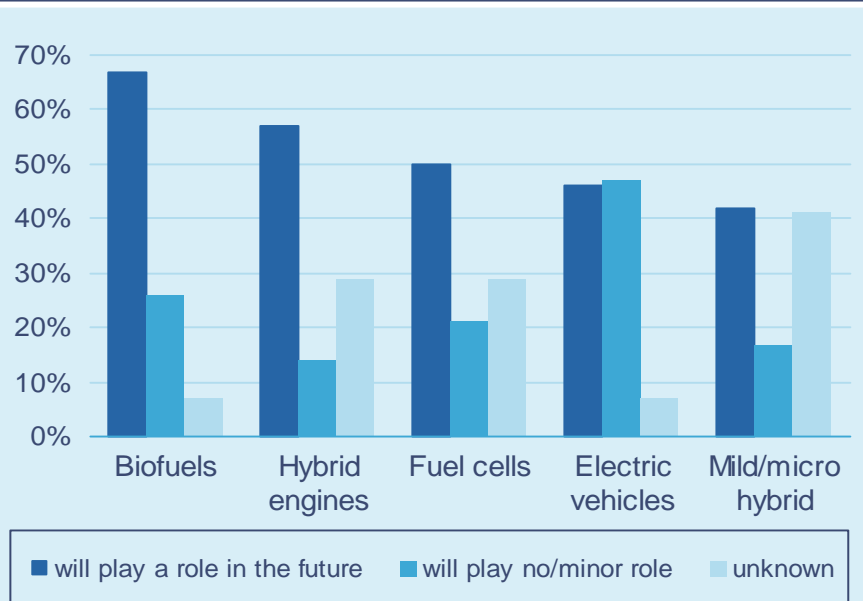


**Fiat Seicento Elettra**

- 1998 electric Seicento
- Same issues as the Golf saw only 294 made over a four year period.

# Gap between technological solutions and customer knowledge indicate need for communication for OEMs and governments

The use of new technologies to help the global climate is often not greeted with thorough understanding



Source: PwC Survey 2007

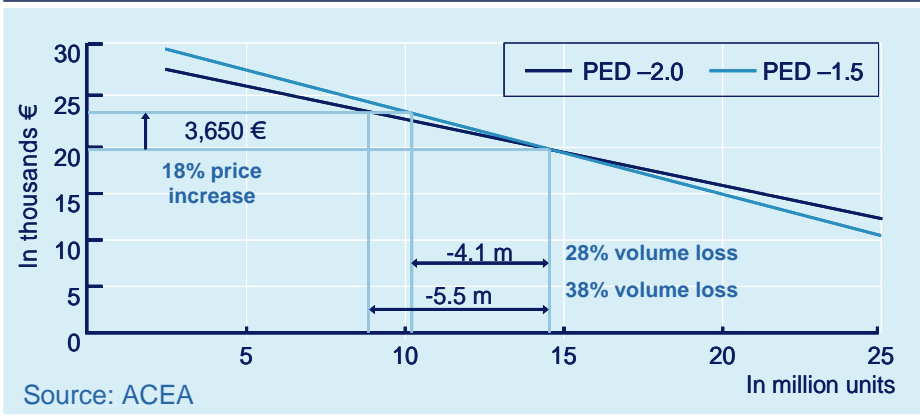
- Mild & Micro Hybrid technology, key elements for achieving 2012 (2015) emission limits, are still unknown by more than 40% of the customers;
- Uncertainty of customers regarding the right technology and future legislation are one factor for current buying resistance;

*The recent discussions around CO2 led to a strong customer uncertainty which we can observe in the show rooms. The Federal Environment Ministry therefore actively supports an initiative with the purpose of "labeling" the energy efficiency of vehicles - a small step towards recovering the lost consumer confidence. Dr. Lahl, Bundesumweltministerium.*

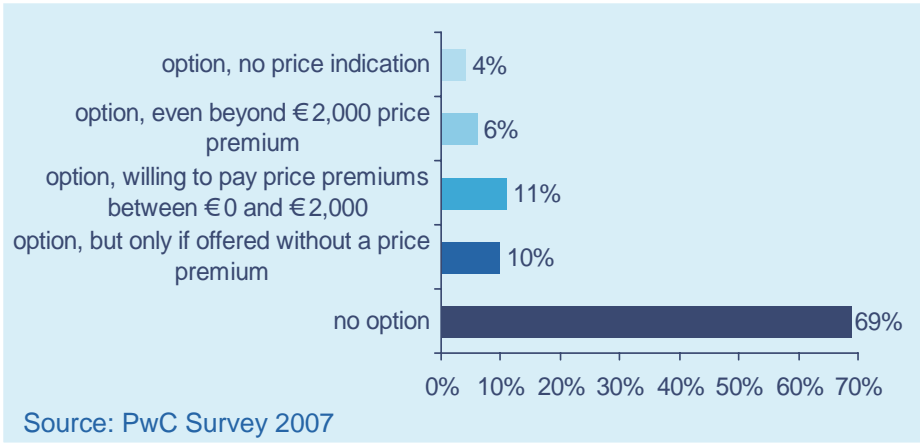
- Complexity and a lack of profound customer knowledge implies the risk of having suboptimal solutions succeeding in the market.

# Strong price sensitivity makes implementation of costly technology more difficult

## Price elasticity of demand for new cars



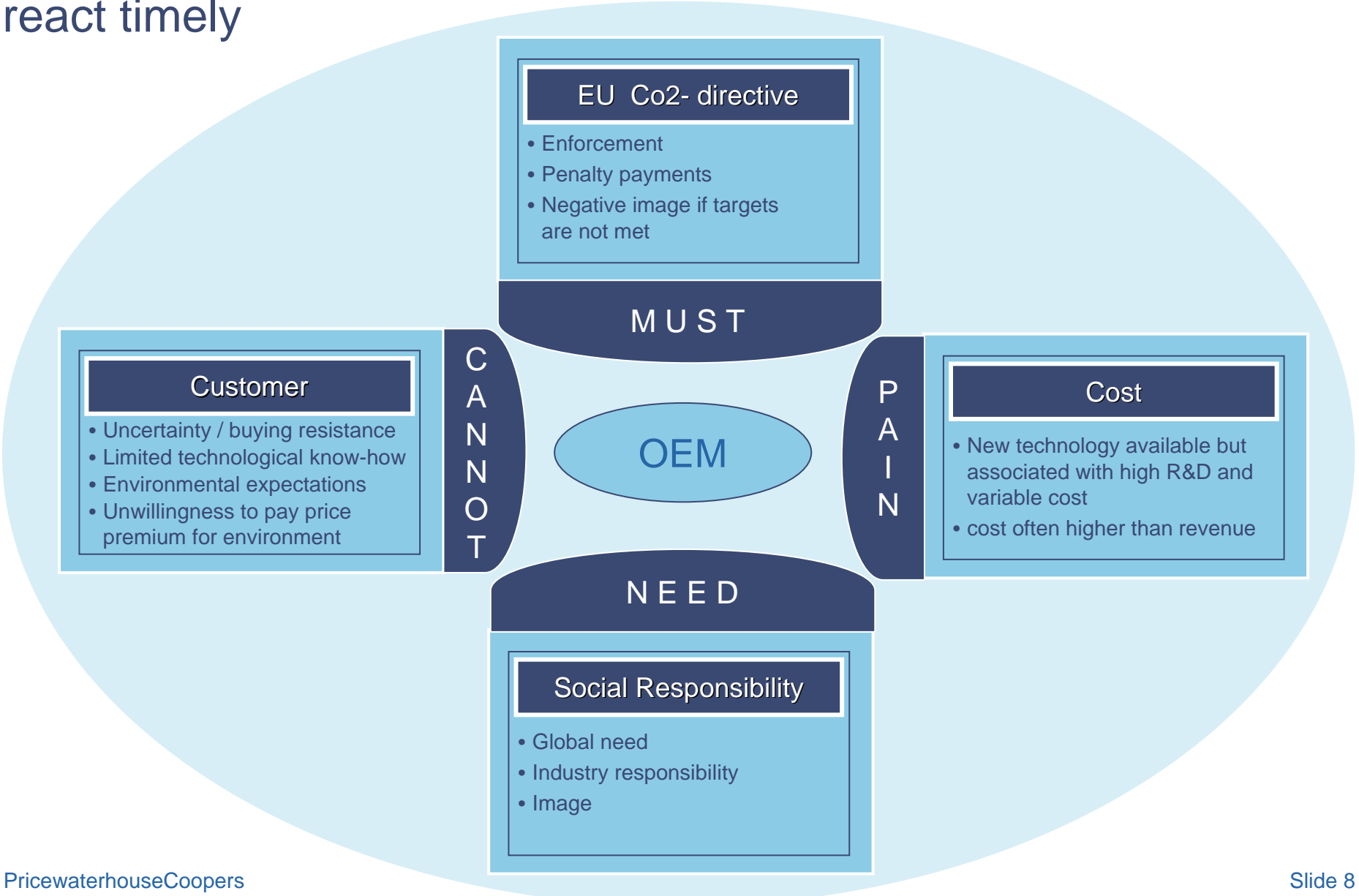
## Moderate willingness to purchase hybrid cars, price premiums considered critical



- 2012 (2015) emission targets will only be achievable with additional technology. Price increases might be difficult to enforce due to strong price elasticity (especially in small/compact class);
- Full Hybrid as well as other technology able to substantially lower CO2 emissions incur significant extra cost for OEMs;
- PwC survey indicates that only 6 percent of the customers are willing to pay a price premium of more than 2.000 € for a full hybrid vehicle;
- OEMs will have difficulties to enforce a price premium for “green” technology through marketing alone.

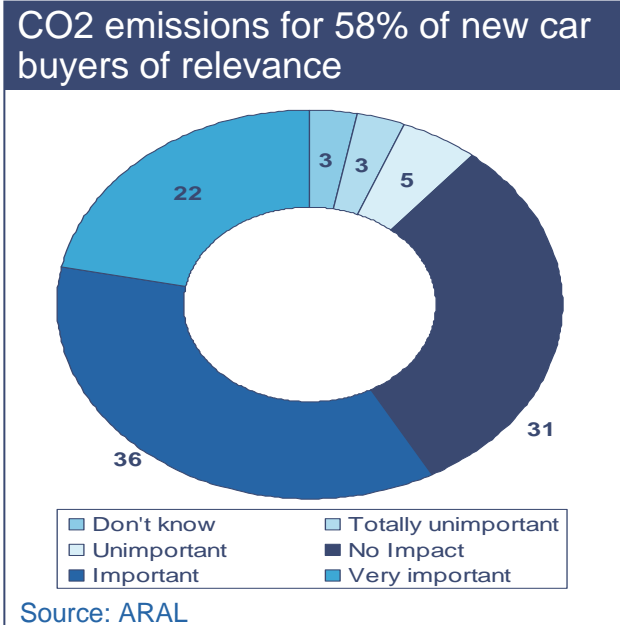
*The average customer pays only a price premium if he get a tangible and direct value in return.*  
 Dr. Schlick, VDA.

# Predicament of OEMs require both: OEMs and governments to react timely





# General shift in mindset facilitates marketing of “green” technology



- Toyotas Prius and the French OEMs Diesel Particulate Filter are good examples of successfully marketing environmental issues.

*The hype around hybrids results to a large extent from clever marketing. Dr. Klaus Dräger, BMW.*

- The strong and lasting discussions around global warming and the significant price increase of energy, led to an increased public awareness and a change of attitude. This has set the basis for a general shift in mindset towards environmental friendly vehicles.

*Customers do want cars with low CO2 emissions. Ten years ago the emotional focus was on power, cylinder and valves - this has changed dramatically. Prof. Seiffert, University of Braunschweig.*

*It would not surprise me if at one point in time driving a huge CO2 critical vehicle such as a SUVs will socially be as problematic as wearing a fur coat nowadays. Anonymous.*

# Role for OEMs to change consumer behaviour

## Marketing

### Emotions

- Combine green image with traditional values e.g. sport; innovative; comfort; quality; price;
- Focus on simple, high level and “tangible” messages rather than technical details.

### Rationale

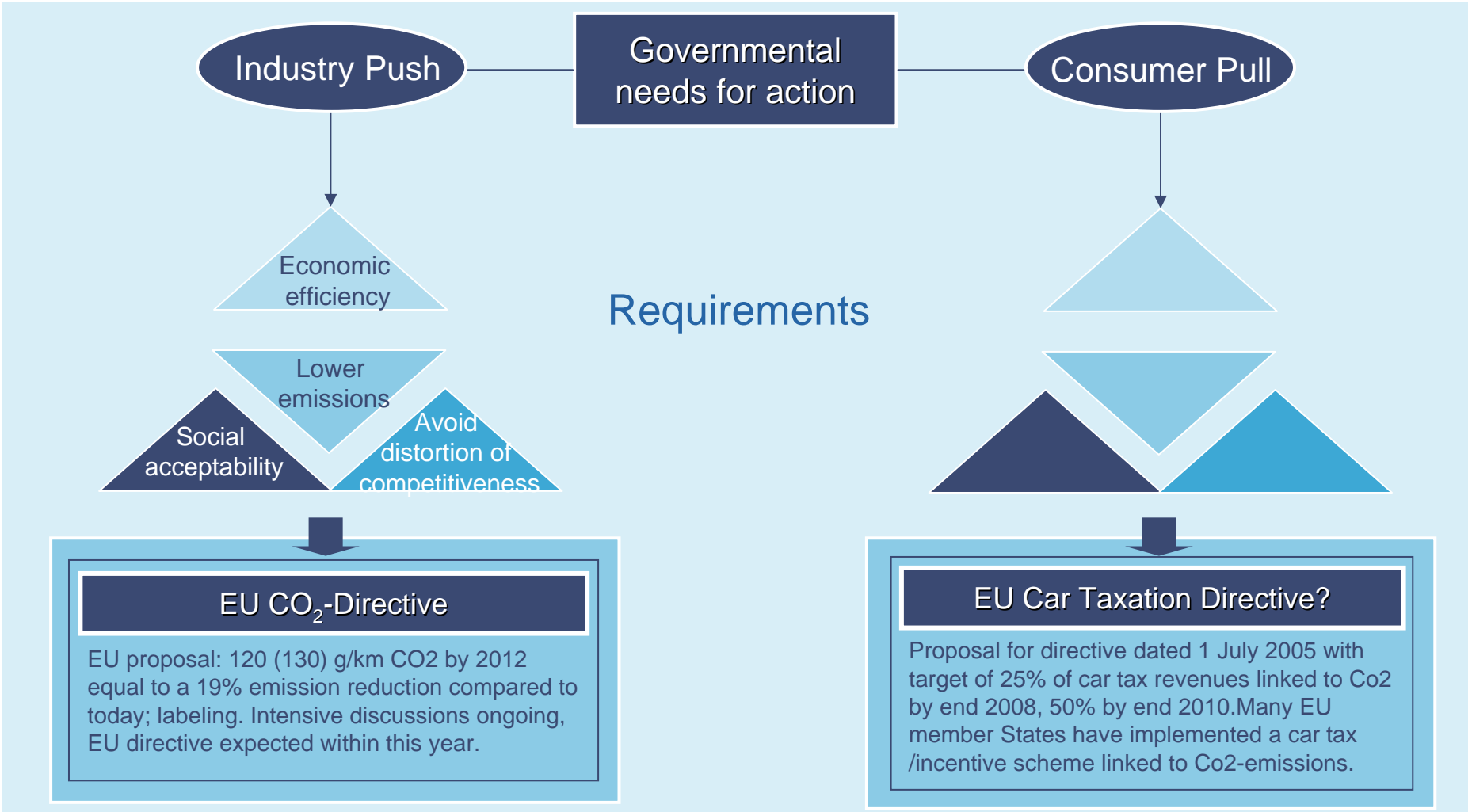
- Use labeling to provide information and highlight relative performance:
  - Provide CO2 emission figures of vehicle and emission target 2012 (2015),
  - “meets already 2012 emission targets”;
  - “lowest emissions in class”;
- Sell “green” price premiums through comparison with life time savings (e.g. price premium 2.000 €; life time savings 2.500 €) to limit price elasticity.

## Cost

- Close “not closable” gaps through partnering / alliances;
- Perform cost benefit analysis for each technology with long term perspective;
- Image factors should favor technology introduction over penalties at comparable cost;
- Further tightening of emission targets will make leading edge technology / access to technology crucial for long term success.

Do not try to detain an unavoidable development. Winners will understand the challenges as a chance rather than a threat.

# Role for governments



Governmental industry push and consumer pull are essential for overall success. Implementation time critical for OEM planning and tackling of customer uncertainty.

## European Car taxation: Proposal European Commission

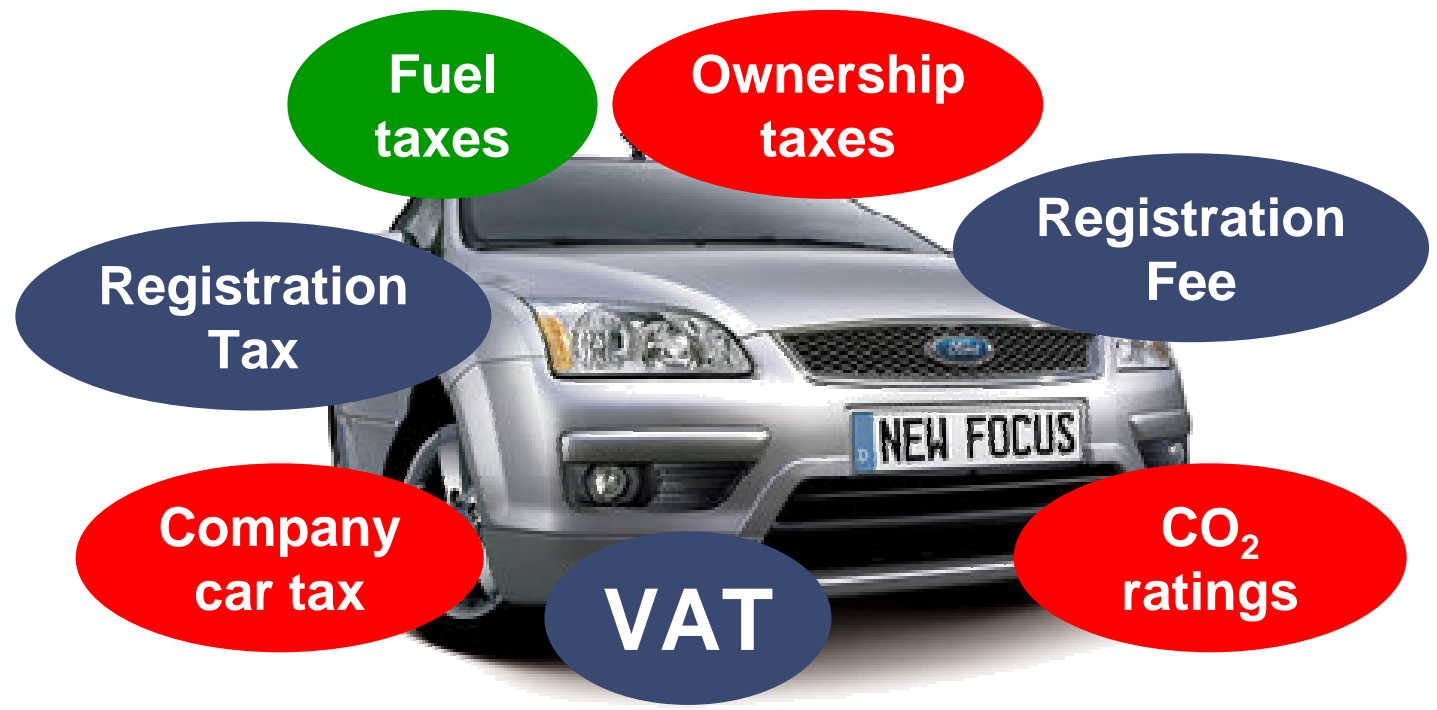
- Status of proposal today :
  - No agreement between MS
  - MS with high registration taxes oppose, e.g. Denmark
  - Some MS oppose against eroding national tax sovereignty
  - Some (new) MS find proposal anti-social
- European Parliament supports
  - Member States to use registration taxes and annual circulation taxes to tax (heavier) vehicles with above average emissions
  - Member States and the Commission to introduce economic incentives for retiring old cars
  - To use EU-wide definitions of Co2 emissions values
  - The use of Co2 based taxation of cars and alternative fuels to set the right incentives for consumers and Industry

*?One size fits all in a Europe at double speed with very different existing car parks and taxation schemes?*

# Taxation systems too disparate

Clear market signals need to be sent

“ACEA is in favour of replacing registration taxes with a system that increasingly reflects environmental priorities. Car taxation should be more directly based on the use... of a vehicle and on its environmental performance.” ACEA 2006



# Taxation systems too disparate

## A variety of measures

### Measures in respect of vehicle registration tax

→ IE, DK, BG, NL, DE, SL, AT, FR

### Measures in respect of road tax and road charges

→ CZ, SE, UK, LU, CH, IE

### Measures in respect of company cars

→ UK, BE, NL

### Measures in respect of discounts/refunds on the purchase of a new car

→ BE, DE, SE, IT, FR

# Changing Demand

## Increasing focus on CO<sub>2</sub> related taxation

**Sole responsibility cannot lie with the manufacturers – consumers need to change their spending patterns and incentives and penalties will be needed to help. The UK, France and Spain offer three examples of fiscal policies being introduced to steer the market.**

### French Registration Bonus/Malus (January 2008)

- Should benefit French manufacturers
- Overall market effect likely to be neutral to positive

CO <sub>2</sub> Emissions	Bonus/Malus (€)	Market share 2006
<=60	-5000	0%
<=100	-1000	0%
101-120	-700	18.1%
121-130	-200	12.8%
131-140	0	15.8%
141-160	0	28%
161-165	200	4%
166-200	750	14.5%
201-250	1600	5.4%
>250	2600	1.4%

### Spanish Registration Tax (January 2008)

- Could provide market boost as purchase tax previously 7%+
- However, wider economic picture likely to lead to market contraction

CO <sub>2</sub> Emissions	Tax based on Purchase Price
<121	0%
121-160	4.75%
161-200	9.75%
>200	14.75%

### UK Annual VED Tax (From March 2001)

- Gradual development since 2001 not yet having noticeable impact
- CO<sub>2</sub> based company car tax, intro 2002, has led to increased diesel penetration
- CO<sub>2</sub> reduction slow – 2006 = 167.2g/km

VED Band	CO <sub>2</sub> Emissions	VED Rate
A	<=100	0
B	101-120	€20
C	121-150	€127
D	151-165	€160
E	166-185	€193
F	186-225	€253
G	>225	€400(€533)

# Linking Business Strategy and Governmental Policy – Results today?

## *Still a long way to go*

- Governmental actions in West-Europe in general not sufficient to have significant change in private consumer behaviour. High fuel prices seem main driver
- Governmental actions, together with high fuel prices and OEM's green branding have sufficient effect on TCO to provoke (significant) change in Fleet consumer behaviour (green fleets)
- Need for uniform approach respecting characteristics of local fleets – best practices approach?
- Europe at double speed?



# Taxation systems too disparate

## Best practices

### Registration tax

- Generally decreases with the age of the car
- Is an incentive to keep using vehicles and a barrier for car rotation
- Linking it to CO<sup>2</sup> emissions, aiming at a budgetary neutrality, would be socially unacceptable
- Abolishing registration taxes would be the best option with budgetary neutrality as a challenge for some countries

### Annual Circulation Tax

- Annual circulation tax generally not linked to CO<sup>2</sup> emissions although HP, CC, weight do correlate with fuel consumption and CO<sup>2</sup> emissions
- No differentiation according to CO<sup>2</sup> emissions, no incentive
- Linking it to CO<sup>2</sup> emissions, aiming at a budgetary neutrality, would be socially unacceptable for the oldest Euro 0 and 1 cars
- Making it linked to CO<sup>2</sup> with temporary measures for the oldest cars should be feasible while paying attention to social acceptability. Combining it with an incentive to support the removal of old EURO 0 and 1 cars is recommended.

# Taxation systems too disparate

## Best practices (2)

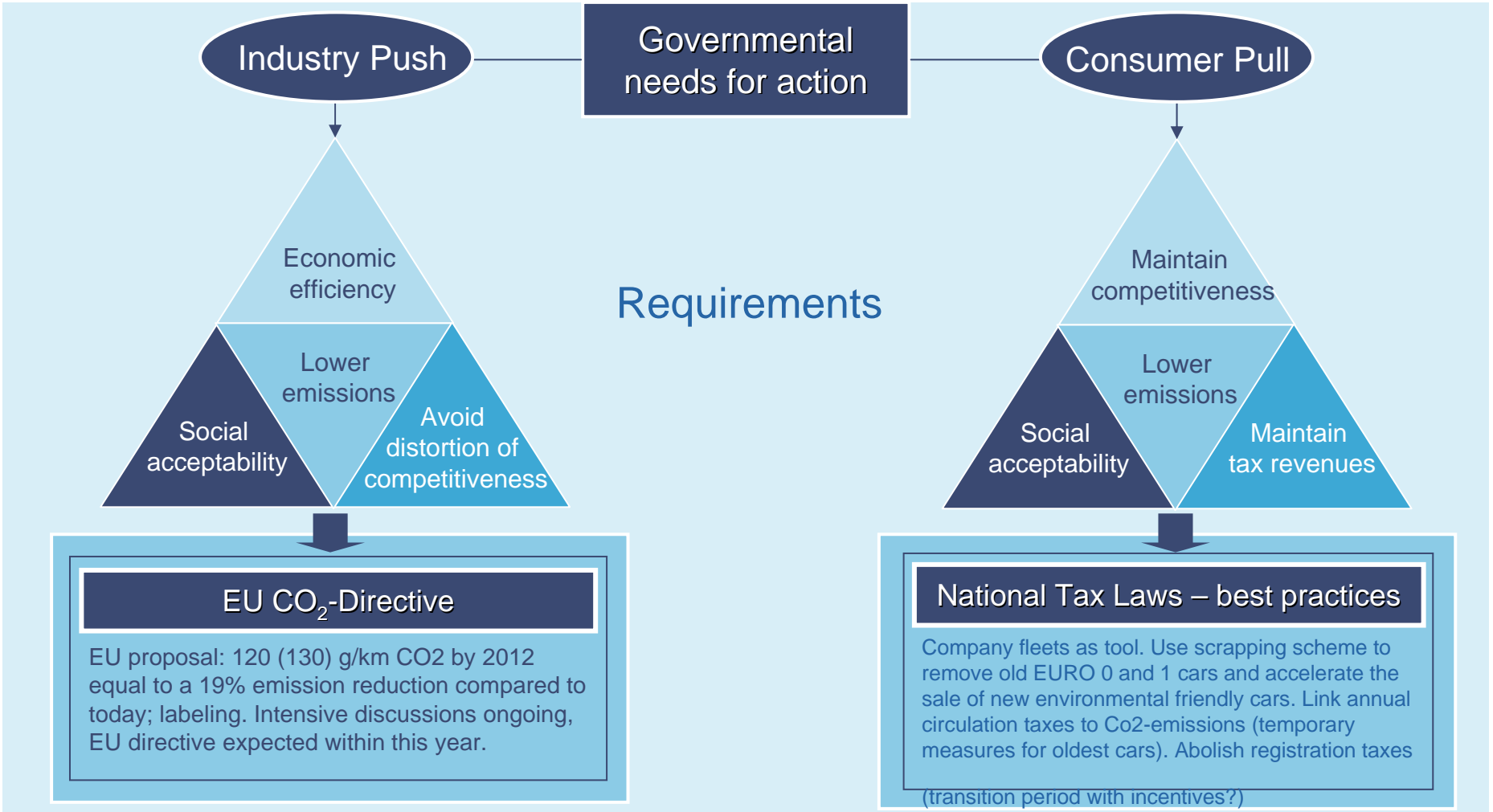
### Incentives

- A scrapping premium for Euro 0 and 1 cars should accelerate the removal of old cars and the sale of new environmental-friendly cars (+/- 8%), although the effect is only temporarily
- Incentive should be significant (+/- EUR 1000) with budgetary feasibility as a challenge (e.g. in Belgium, minimal estimated cost is EUR 7,7 mio, maximal EUR 75 mio)
- Other incentive schemes, rebates, bonus-malus coefficients, reduced registration taxes mostly stimulate the purchase of new (very) environmental cars. Attention should be paid to adverse economic effects and limited effects due to price elasticity

### Company cars

- Most Member States do not have a different system from the private car park tax scheme which is based on CO<sup>2</sup> emissions
- TCO of fleet will be influenced by CO<sup>2</sup>-related car taxes, incentive for employer
- Choice of model is often made by employee
- Incentive for employee based on CO<sup>2</sup>-related benefit in kind system with attention not to increase BIK and product neutrality
- Lease companies: residual value!

# Linking Business Strategy and Governmental Policy - Conclusion



Governmental industry push and consumer pull are essential for overall success. Timing of implementation of different measures is critical for OEM planning and impact on economy.

## Contacts



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# Backup