



# The Automotive Industry and CO2 The Road Ahead

Ivan Hodac

Secretary General ACEA

European Automobile Manufacturers Association

*Thank you for your kind introduction.*

# The Auto Industry and COP15

**Copenhagen Conference:**  
*Automakers are part of the solution.*

We are all part of the solution.



## **The automobile manufacturers and COP15:**

1. Ladies and Gentlemen, for the global automotive industry, being here – together, and in this setting - is a unique event. I am representing, today, not only the European passenger car and commercial vehicle manufacturers. I will also be speaking on behalf of the American and Japanese manufacturers. And we are here, in Copenhagen, at a very important moment. We need and want to be part of the policy discussion here at COP15, and beyond, throughout the globe. Auto makers are part of the solutions necessary to address climate change.

2. Lew Fulton from the IEA has just given us a compelling description of the challenges the world is facing. Indeed, the energy and transport sectors, in particular, are sectors where growing demand is a reality. And there is a link, to a certain extent, between energy consumption and motorisation and economic growth. It is often taken for granted, but in industrialised countries, commercial vehicles move about 70% of all freight -- bringing us things we rely on daily. Personal mobility is a powerful symbol of freedom and autonomy; and means access to culture, education, and health care.

# Why Mobility Matters



3. So, one side, there is rapid economic development and the resulting increasing demand for transportation, especially in the developing world. On the other side, there is the need to curb greenhouse gas emissions. The policies that are being developed and deployed must, in parallel, address other major issues, such as energy security, demographic change and rapid urbanization.

4. Concern for the future of mobility is valid and automotive manufacturers would welcome if COP15 paves the way for a global framework of sustainability in world markets. Business needs realistic goals and long-term legislative stability to support the investments required to address environmental challenges.

5. But Copenhagen must also succeed in another aspect: It should emphasize that ambitious results are only possible within a partnership of many contributors – countries and sectors. In addressing climate change, cooperation is essential for us all to succeed. The challenge of more sustainable mobility serves very well to explain why such a partnership is indispensable.

# Why Sustainable Mobility Matters



## **Towards more sustainable mobility:**

6. Automakers see the reality of how the world is changing, and we are moving fast to help find solutions. Mobility will continue to be important, both for commercial and personal use and for the ongoing economic and social development within world markets. So what solutions can the automotive industry bring? What can we do to advance sustainable mobility?

7. In its project report on sustainable mobility, the World Business Council for Sustainable Development proposed this definition: *“Sustainable Mobility is the ability to meet society’s need to move freely, gain access, communicate, trade and establish relationships without sacrificing other essential human or ecological values, today or in the future.”*

8. For automakers, sustainable mobility means fulfilling the industry’s fundamental role as a provider of transport in a way that maximizes energy efficiency while conserving the earth’s limited natural resources.

9. But what kind of cars and trucks will be needed in the future? Clean diesels? Alternative fuelled? Hybrids? Hydrogen -powered? Electric? And equally important: how will these vehicles and technologies be used and under what conditions?



### The automobile industry's contributions

10. The truth is: it is likely that *all* these technologies will be needed for some time to come – be it as a bridging technology or as a final solution. The conventional combustion engine will be continuously further improved -- and remain the dominant source of propulsion for several decades. Alternative fuels are part of the solution. Electrification will grow in importance, especially if a recharging infrastructure becomes available and electricity will be drawn from renewable sources. But like with any breakthrough technology, the first volumes will be limited and the technology will come with a cost premium. A positive policy framework, including fiscal incentives, is needed to stimulate, for example, the uptake of EVs.

11. It is not our *job to push* specific technologies – *customers* will decide. And even if people in every country agree on the need for sustainable mobility, they may not always agree on which automotive solution meets their needs best as they attempt to curb CO2 emissions. For example, diesel car sales today represent about half of the European new car market, while the diesel share is almost zero in the U.S. and Japan. Specific technologies can dominate in one region and be almost nonexistent in another.

12. But I am not here today to present you with a 'mini motor show'. Auto manufacturers have taken the environmental challenge very seriously, and the industry is moving fast to offer appealing, affordable solutions to support sustainable mobility. Evidence can be found easily and everywhere: on the streets, in the show rooms, or even on-line. Globally, the automotive industry invests \$80 billion, or about €55 billion, annually in research and development.

# Partnership is Essential



13. Yet, even with our industry's massive investments, it is clear that the interdependent challenges of matching economic growth with environmental improvements and improved social responsibility can only be fully realized through a more cooperative approach – we cannot do it on our own. Zero-emission mobility requires other partners. Ensuring the adoption of eco-friendly cars... building an infrastructure that gives consumers sufficient autonomy... providing clean and renewable energy sources... Vehicle makers are part of the solution; but there are also factors beyond industry's control.

## **Towards interdependent solutions – an Integrated Approach**

14. Governments, energy companies, associated industries and consumers must all play their part to deliver effective solutions. Governments need to provide legislation, incentives and tax policies that make buying and owning a clean vehicle attractive and affordable, and that help renew the vehicle fleet. Energy companies need to bring not only the cleanest fuels to market, but also to invest in renewable forms of energy to enable a complete zero-emission transportation cycle, from well to wheel. Infrastructure and Urban planners need to ensure that cities are designed (or redesigned) to ensure free-flowing traffic and convenient inter-modal transportation systems. Of course, smart road infrastructure planning must be built upon solid traffic flow data and analysis. Finally, the consumer needs to be informed about available mobility choices and incentives so that the most eco-friendly choice can be a good economic solution as well. Consumers must also learn to practice 'eco-driving', as a change in driving style can save up to 10% fuel – *we will learn more about 'eco-driving' later in this event.*



15. Many stakeholders are needed to provide a truly sustainable mobility solution. Technologies alone cannot address the issues sufficiently or cost-effectively. In every industry, in every country, sustainability requires an integrated approach, a partnership of all the players involved, both public and private.

16. With an element of relief we can say that, today, the automotive industry is no longer alone in promoting this pathway. Academics, such as the UK government advisor Nicholas Stern as well as strategic thinkers from research institute TNO and consultancy firm McKinsey, have analysed routes to reducing CO<sub>2</sub> emissions from transport. Their main findings are twofold. First, the abatement costs are much higher for transport than for other sectors of society, and especially for vehicle technology. Second, vehicle technology solutions will only be successful if complemented with other actions, involving adjustments of the infrastructure, policy incentives and active cooperation by the fuel & energy sector.

#### **Independent views**

17. Stern described his recommendations as follows: “Three elements of policy for mitigation are essential: a carbon price, technology policy, and the removal of barriers to behavioural change. Leaving out any one of these elements will significantly increase the costs of action.”

18. TNO, who have been advising the European Commission, were among the first to recognize that the effects of eco-driving can actually be measured and pointed at the negative cost – or cost savings - for society.

# There is no 'Silver Bullet'



19. McKinsey stated that “the capital intensity of abatement for passenger vehicles is more than nine times the capital intensity of abatement in the power sector and more than three times that in the buildings sector”. McKinsey pointed at a net economic benefit over vehicle life on average, but stressed that – because of the very high upfront investments -- ‘achieving meaningful reductions will be a mammoth challenge’. Indeed, first-owners would have to bear the brunt of the costs. Other main obstacles include “substantial barriers to changing consumer behaviour” as well as “the need for timely action”. McKinsey concluded that meaningful, cost-effective reductions in carbon emissions from passenger vehicles will entail an integrated approach involving vehicle makers, energy providers, consumers and policy makers.

20. Over the past years, policy makers in the European Union as well as in Japan have indeed started to incorporate an integrated approach in policy decisions; or at least to a certain degree. *We will receive valuable insight in the Japanese experience later in this event.*

21. In Europe, though, as well as in the US and in other parts of the world, much more must still be done to adopt the integrated approach as a truly foundational policy concept. A concept that yields immediate benefits, as it not only maximizes the impact of innovative, new technologies as well as lays out the design for sustainable infrastructure and urban mobility; but also improves the performance of the existing infrastructure and the vehicle fleet of today. With an integrated approach, better results are possible, here and now.



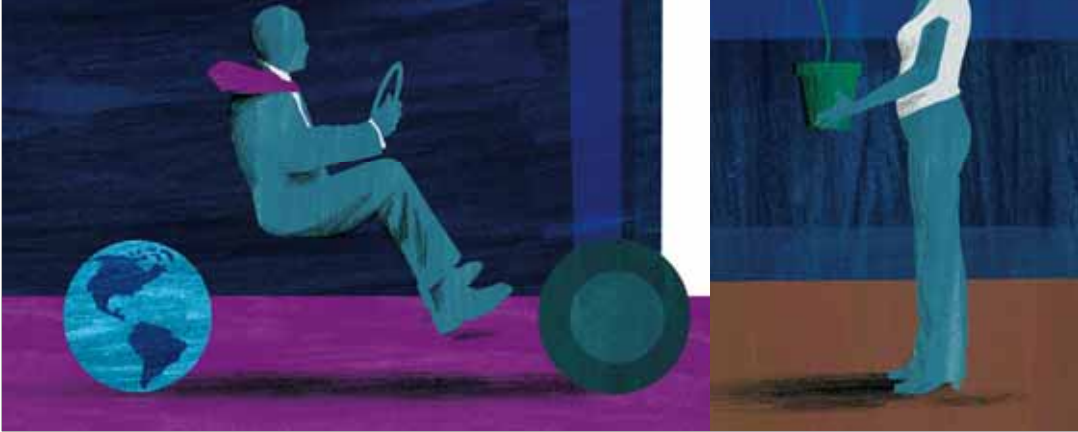
**Final remarks:**

22. As the climate change conference in Copenhagen unfolds, we are going through an important transition in the evolution of motorized society. This is a critical time for the auto industry. The wake of the current financial crisis and economic recession could reshape the global automotive industry. Economists agree that the worst may well be over, but it is still very difficult to see a real upturn on the horizon.

23. Whatever our outlook, we recognize that achieving a sustainable future will require cooperation with partners, both inside and outside our industry. Sustainability is about joining ideas, minds and efforts to create meaningful, long-term value. Cooperation is essential for us all to succeed.

24. Copenhagen is not a destination in this journey; the real work to achieve sustainable mobility is just beginning. On behalf of the world's automakers, I assure you that we have set ourselves to that task. And we look forward to working alongside those who share the same vision.

*Thank you for your attention*



*Thank you for your attention.*