GLOBAL REDUCTION IN CO2 EMISSION FROM CARS: A CONSUMER'S PERSPECTIVE

POLICY RECOMMENDATIONS FOR DECISION MAKERS

November 2015

FOREWORD

"*As part of the FIA mission to promote clean transport systems available to all, we are looking to encourage the development and adoption of sustainable technologies, and support behavioural changes for mobility users.*

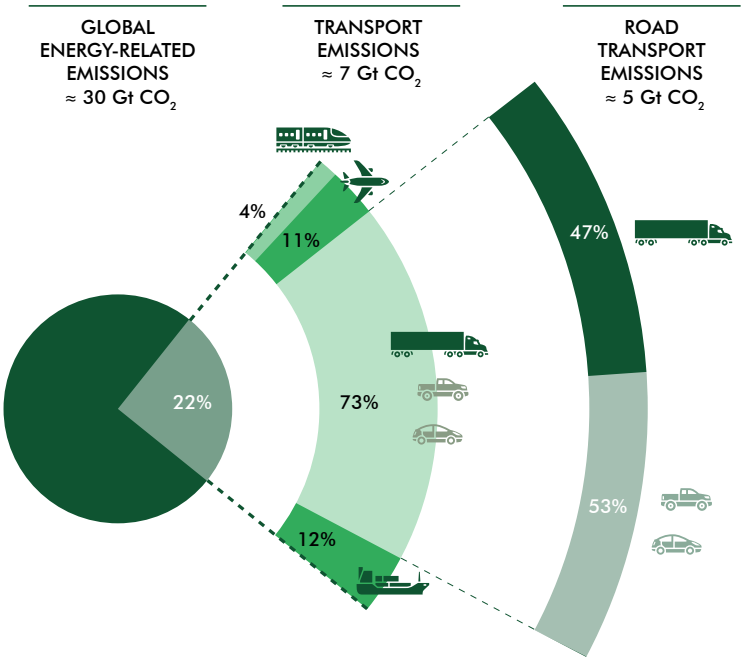
It is my hope that through promoting better understanding of these opportunities the FIA will contribute to the global CO2 debate, and help make our world a better place."

JEAN TODT
PRESIDENT OF THE FIA

TRANSPORT AND CLIMATE CHANGE

Transport is crucial for people's lives, providing access to jobs, services, education and leisure while creating the conditions for supporting economic growth. It is also essential for implementing the UN sustainable development goals (SDGs) to improve urban and rural access, advance safety and reduce air pollution.

Although transport is not the main contributor to greenhouse gas emissions, accounting for about 22% of total energy-related CO2 emission, it plays an important role due to the sharp increase in traffic and its near total dependence on fossil fuels.



Despite the growing importance of CO2 regulation within the transport sector, a uniform global approach to tackle the issue has not yet been developed. Thus, each country needs to find its own 'homegrown' mix of solutions to gain public understanding and acceptance.

In light of COP21 and with the intent to contribute to the global CO2 emissions reduction debate, the FIA and its global network of automobile clubs believe that governments should implement environmentally effective, economically efficient and politically feasible policies, with a strong component of equity.

In particular, three key directions need to be undertaken:

1. Encourage governments to set long term vision and adopt a consistent approach to CO2 abatement
2. Design the right structural policies
3. Consider the implementation of complementary policies

1. ENCOURAGE GOVERNMENTS TO SET LONG TERM VISION AND TO ADOPT A CONSISTENT APPROACH TO CO2 ABATEMENT.

Countries need long term commitment to create a stable framework where the industry can promote innovation, resulting in clear benefits to the consumers with reduced purchasing prices on the markets: programs and incentives should be structured so that investments are targeted to achieve GHG reductions, while continuing to meet mobility and accessibility objectives for passenger travel.

FIA KEY RECOMMENDATIONS:

- To promote consistent policies: CO2 abatement from transport should not be valued more highly than equivalent abatement from electricity generation, agriculture, or industry. Policy instruments should address fuel producers, car manufacturers, as well as consumers, and policy objectives should be clearly communicated to gain public support.
- Substantial improvements are already possible by scaling up use of existing vehicle technology.
- Policies for efficient and low CO2 transport need to be ambitious, while at the same time technically achievable and affordable for consumers.

2. DESIGN THE RIGHT STRUCTURAL POLICIES

Policy makers have several policy instruments to achieve reduction in CO2 emissions, such as fuel tax, market-based measures, fuel economy standard, fiscal incentives, e.g. feebates.

Fuel tax and fiscal policies are traditional measures that allow internalization of transport externalities, including CO2 emission. The FIA believes that governments should ensure that broader taxation on motoring is consistent with climate change objectives: petrol, diesel or other fuels or propulsion systems should be taxed according to their environmental performance and revenues should be reinvested.

- Governments should design fuel taxation policies ensuring that there is transparency for consumers, maximise the potential for behavioural change and create a mechanism that ensures that revenue is invested in emission-reducing improvements to the transport network: in particular, the component of fuel taxation with CO2 abatement objectives, should be earmarked in that perspective.
- Fiscal policy should be technology-neutral and results-oriented and should be designed in a way that results in affordable vehicles to the consumer at large.

Introducing **carbon pricing** risks to increase the price of goods and services and so it can have a negative effect on demand. But carbon pricing also creates an incentive to invest, which is beneficial for the economy and, in a long run, can drive behaviour changes of all market players, including consumers.

Countries looking at this approach should ensure that new regulation will not increase the level of taxation for consumers: demand for fuel among motorists is relatively inelastic, so any increase in fuel price leads to only a small decrease in consumption. Such carbon price mechanisms create a new value, which can be used to reduce the tax burden and/or allocated to sustainable mobility strategies.

Fuel efficiency standards are mandated in key vehicle markets to foster climate change mitigation and reduce oil dependency: these standards incentivise car manufacturers to improve product efficiency.

- Countries with a growing pace of motorization should consider setting fuel economy standard to keep long term emissions under control. Before setting the specific target, robust cost-benefit analysis should be developed upfront, ensuring affordability for consumers and large up-take in the market. A multi-stakeholder consultation process should be promoted to agree on the most appropriate path.
- In the long run, with increased market shares of alternative vehicles, energy efficiency standards should be set, providing a neutral measure across all vehicle technology and different fuelled vehicles.

Fiscal incentives are also a useful instrument to reduce CO2 emissions and fuel consumption, especially when paired with national CO2 regulation. These kinds of incentives can come in the form of registration fees, tax for ownership and fuel taxes, and could encourage consumers to purchase cleaner vehicles.

The FIA takes a critical view of direct subsidies which favour specific type of technologies, considering that the uncertainty on when a given technology can hold its own without subsidies.

Recently governments used a new set of fiscal policies: the **feebate programs**. These impose fees on inefficient vehicles and offer rebates for efficient vehicles, in line with the fuel consumption. A feebate system encourages consumers to make fuel efficient decision and rewards them immediately.

- Countries that have not adopted fuel economy or greenhouse gas emission standards may find feebates a good alternative. Standards require a great deal of knowledge about vehicles, technology, lead time requirements, market demographics, and future developments in order to set them properly. This knowledge is much less critical for establishing an effective feebate program, which can be put in place while expertise and information are being developed.
- A feebate program is a "transfer", not a "tax". Those who choose to buy higher CO2 emitting vehicles pay fees, which are used to give rebates to those who buy lower emitting vehicles. The key challenge for governments is to design fair systems that don't punish road users who need to rely on their cars or who have been encouraged or incentivised to choose specific technology.

“MORE THAN 2 BILLION LIGHT DUTY VEHICLES ARE EXPECTED TO BE ON THE ROADS IN 2050, AN INCREASE FROM THE APPROXIMATELY 900 MILLION TODAY.”

- INTERNATIONAL ENERGY AGENCY, 2015

3. CONSIDER THE IMPLEMENTATION OF COMPLIMENTARY POLICIES

The regulatory approach to reduce emissions should be complemented by a specific mix of **complimentary public policies**. According to the peculiar conditions of the countries, the state of developments of different technologies, the composition of the fleet, the availability of infrastructure for collective transport, governments should consider:

- **Land use policies**: these can lead to behaviour changes and reduce the demand of mobility.
- **Encourage no-cost measures**: improve driver behaviour, by encouraging eco-driving skills, favouring eco-driving training and coaching, aiming at improving normal driving situations.
- **Promoting ITS-based solutions**: these can significantly reduce CO2 emissions of mobility.
- **Improve consumer awareness**: promote measures to inform and educate people to choose the most efficient products on the market such as CO2 labelling schemes with information on the difference in fuel cost of the best performing vehicles.
- **Encourage collaborative mobility-based solutions**: promote open-data policy and coordinate the deployment of new mobility servives and solutions (car-sharing, ride-sharing and taxi hailing, etc.).

CONCLUSION

The FIA recognises that continuing business as usual is not sustainable and will generate costs for future generation which we need to prevent from happening.

Embracing a low carbon future is challenging and it will not come without costs. Each country must find its own home-grown mix of solutions and implement it in a consistent way. Consumers can contribute and play a crucial role in defining consumption patterns and policy should be designed to gain public support, ensuring a high level standard of mobility.

Public policy, technological progress and market success are mutually reinforcing, when consumers are encouraged to embrace low carbon technology.

A more detailed version of the paper is available on www.fia.com