
CARS 2020: Action Plan for a competitive and sustainable automotive industry in Europe
# TABLE OF CONTENTS

1. A KEY SECTOR AT A CROSSROADS ................................................................. 3

2. CARS 21: A JOINT STRATEGIC VISION FOR THE INDUSTRY IN 2020 .... 4

3. A CHALLENGING ECONOMIC SITUATION .................................................... 6

4. AN ACTION PLAN TO BOOST COMPETITIVENESS ...................................... 7

4.1. Investing in advanced technologies and financing innovation .................. 7

   Research, development and innovation .......................................................... 7

   Access to finance .............................................................................................. 9

   Lowering CO2 emissions ................................................................................. 9

   Pollutant and noise emissions ....................................................................... 11

   Road safety .................................................................................................... 12

   Alternative fuels and infrastructure ............................................................... 13

4.2. Improving market conditions ................................................................. 14

   A stronger internal market ......................................................................... 15

   Smart regulation .......................................................................................... 16

4.3. Enhancing competitiveness on global markets ........................................ 17

   Trade policy ................................................................................................. 17

   International harmonisation ....................................................................... 18

4.4. Anticipating adaptation and managing restructuring ............................ 19

   Human capital and skills .......................................................................... 19

   Dealing with industrial adjustment ............................................................. 20

5. MONITORING AND GOVERNANCE ........................................................... 21

CARS 2020: Action Plan for a competitive and sustainable automotive industry in Europe

In the past months, the European automotive industry has been facing an increasingly difficult period, with the EU market for new cars declining for the fifth consecutive year. This situation creates a strong pressure on some companies to restructure their operations, and several manufacturers have recently announced closures of assembly plants with consequent job losses. At the same time, however, the European industry continues to face the medium and long-term challenge to remain a leader in providing future mobility solutions in an extremely competitive global environment. Therefore, the Commission considers there is an urgent need to come forward with an Action Plan to support the automotive industry in facing these challenges.

1. A KEY SECTOR AT A CROSSROADS

The automotive industry\(^1\) is of strategic importance to the European economy and its products and services impact the life of European citizens on a daily basis. The sector represents around 12 million direct and indirect jobs and delivers a sizeable positive contribution to the EU trade balance (growing over the last few years and reaching € 90 billion in 2011). The industry records the biggest private spending on research and innovation (€ 28 billion in 2009) and is an essential driver for technological innovation. It is an important multiplier of growth, due to strong economic linkages with many industrial sectors. These links are present both upstream, such as with the steel, chemical and textile industries, as well as downstream, with ICT, repair and mobility services. It produces most of the vehicles used by citizens for their personal mobility and for the transport of goods. Therefore, the automotive industry will be a key actor in the new industrial revolution that aims inter alia at the gradual substitution of hydrocarbons as the main source of energy and a more efficient and sustainable use of our resources.

The automotive sector is today at a historic turning point: the coming decade is expected to lead to important changes in several areas that are likely to profoundly reshape the industry and its markets worldwide. First of all, production and trade patterns are shifting. While the European market is considered mature, several third markets are growing fast, changing the trade flows and the automotive value chain. The intense competitive pressure is growing further and EU companies are increasingly being challenged in their home market, while developing opportunities in third markets. Secondly, the climate agenda becomes more urgent and even more is expected from technological progress. To meet long-term greenhouse gas emissions targets as well as air quality objectives, the internal combustion engine will be further improved, being accompanied by the development and progressive

---

\(^1\) The term automotive industry is meant to cover the entire supply chain, covering vehicle manufacturers, suppliers, distribution and after-market services. Products include passenger cars, light- and heavy-duty commercial vehicles and powered two-wheelers, three-wheelers and quadricycles.
implementation of breakthrough technologies, such as electrified propulsion. Sizeable efforts will also need to be made with the further development and distribution of sustainable fuels which can be alternatives to traditional diesel and gasoline. At the same time, road safety remains an important concern.

The automotive sector is one of the priority action lines where investment in new technologies and innovation should be facilitated, as is set-out in the Commission Communication which recently updated the EU Industrial Policy\(^2\). Giving further impetus to the EU 2020 objectives of smart, sustainable and inclusive growth, the Communication calls for a stronger European industry for growth and economic recovery. The important role of this industrial sector in creating growth and jobs, also in related services, has been clearly recognised. We must therefore take a proactive approach.

This Communication presents an Action Plan for the automotive industry, highlighting the Commission's commitment to support the sector's competitiveness and sustainability. It is the first concrete example of the application of our updated vision for industrial policy in a sectoral setting, i.e. the automotive industry. It defines concrete policy actions, based on an analysis of the sector carried out by the CARS 21 High Level Group, which was re-launched in 2010. This Action Plan is articulated around the following four pillars:

- **Investing in advanced technologies and financing innovation** through a range of regulatory initiatives and support to research and innovation
- **Improving market conditions** through a stronger internal market and the consistent implementation of smart regulation
- **Enhancing competitiveness on global markets** through an effective trade policy and the international harmonisation of vehicle regulations
- **Anticipating adaptation** by investing in human capital and skills and softening the social impacts of restructuring

With this strategy, the Commission intends to support the active role the automotive sector will play in seeking to reverse the declining share of industry in Europe from its current level of around 16\% of GDP to as much as 20\% by 2020. The reinforcement of this industry's competitiveness in the EU, the support in seizing growth opportunities in global markets, as well as the promotion of clean, safe and efficient vehicles, embedded in an integrated policy approach will be instrumental to that effect.

### 2. CARS 21: A JOINT STRATEGIC VISION FOR THE INDUSTRY IN 2020

At the end of 2010, the Commission decided to re-launch the CARS 21 High Level Group, which was originally set-up in 2005, as a follow-up of the Commission Communication "European strategy on clean and energy-efficient vehicles\(^3\)", adopted on 28 April 2010. The objective of the Group was to make policy recommendations to support the competitiveness and sustainable growth of the European automotive industry.

\(^2\) COM (2012) 582 final, adopted on 10 October 2012
\(^3\) COM(2010)186 final, 28.04.2010
The Group included seven Commissioners, nine Member State representatives, and a broad and balanced group of stakeholders (including industry representatives and NGOs), and adopted its Final Report\(^4\) on 6 June 2012. This Report presents the Group’s consensual view on the strategic vision for the automotive sector in 2020 and sets out specific recommendations on a number of relevant policy areas.

The analysis provided in the Report clearly shows that the *status quo* for the European automotive industry cannot be maintained: current production capacities will have to be adapted, new production methods devised, further sources of raw materials secured and used more efficiently, and new clusters and business models developed. Just as importantly, new skills profiles are required and possible changes in employment needs will have to be tackled. In this context, it is particularly important to ensure a smooth and balanced economic and social transition via the anticipation of skills and training needs, as well as managing restructuring in a well prepared way, which will foster business adaptation and employment transition.

Against this background, the Group has defined a *common view on key characteristics of a strong and competitive automotive industry and progress towards sustainable mobility for EU society in 2020* as follows:

| – An automotive sector which remains of strategic importance and a cornerstone for the EU industry and economy, providing quality employment to millions of workers in the EU; |
| – A sector which is central to many other economic activities while delivering affordable and desirable products, meeting consumer demands, based on a competitive market for automotive products and services, including the aftermarket; |
| – A strong manufacturing base in the EU for road vehicles and components, manufacturing a sizeable part of the vehicles and parts sold on the EU market; |
| – A strong industrial network with a flexible and integrated supply and distribution chain; |
| – A sector exporting a larger portfolio of high-quality and high-technology vehicles to third markets; |
| – Global markets which offer a genuine level playing field to all players in the sector, with fair chances for all technologies, |
| – An automotive industry that is leading in technology, in coordinated action with the fuel supplier industry, producing vehicles which are attractive to EU consumers, clean in terms of regulated pollutants, more fuel-efficient, safe, quiet and connected; |
| – A portfolio of propulsion technologies, dominated by advanced combustion engine technology, though increasingly electrified. In addition, the deployment of vehicles with alternative powertrain concepts (such as electric\(^5\) and fuel cell vehicles) is becoming significant; |
| – Appropriate refilling and recharging infrastructure for alternative fuel vehicles being built, in line with their market potential; |
| – A workforce in both manufacturing, R&D and servicing that is trained and prepared to work with a multitude of technologies. |

---


\(^5\) including battery electric, plugin hybrid and extended range electric vehicles
An integrated policy approach needs to be systematically put into practice. This approach therefore must include the following elements:

- private sector and public policy actions at EU, Member State and regional level that complement each other;
- measures addressing vehicles to be effectively combined where appropriate with others focusing on infrastructure and the user;
- cost-effective regulatory and alternative policy measures which are effectively implemented and enforced, in order to reach long-term societal objectives and drive innovation;
- all policy areas having an impact on the automotive sector to be closely coordinated among the relevant authorities in charge, including trade, industrial, environmental, energy, information and communication technologies, road safety and public health, transport and competition policy, innovation and internal market, so as to ensure the cost effective achievement of the policy objectives.

The Commission fully recognises these challenges and the need of an ambitious industrial policy strategy for the automotive sector. The Commission will orient its policies to this objective and calls on other Institutions, public authorities and stakeholders to follow the same approach, within their respective area of responsibility.

3. A CHALLENGING ECONOMIC SITUATION

The CARS 21 Final Report provides a thorough analysis of the current economic situation of the EU automotive industry. In the first half of 2012, the situation deteriorated and this trend is likely to continue until the end of the year. Sales in EU markets have been declining (6.8% decline for the first half of 2012 for passenger cars and 10.8% decline for commercial vehicles) - compared to the already low levels of 2011. The current forecasts indicate a 7.9% year-on-year decline in the EU market for passenger cars with sales amounting to 12.1 million units. The EU market for commercial vehicles is expected to decline by 8% this year, following a previous period of recovery in 2010 and 2011, but remains at historically low levels. For powered two-wheelers, new registrations are suffering from the debt crisis and amounted in 2011 to 1.6 million units, which is 40% below the level of 2007.

Vehicle production has been in a slightly better shape (assembly of 16 million units of light duty vehicles, i.e. 1m units more than the 2009 levels) boosted by exports as demonstrated by a positive trade balance of €45 billion in the first five months of 2012 (mostly due to exports to the US and emerging markets). There are however important downside risks to the production levels linked to a slowdown in the emerging economies. Several manufacturers have reported financial losses on the EU market mostly due to declining sales combined with the long-standing structural issue of overcapacity. Some manufacturers have announced significant restructuring actions which will have repercussions

---

6 Precise data on overcapacity are subject to discussion, as it depends among others on the number of shifts used in a given factory. Analysts agree that some overcapacity is actually needed for business flexibility, but that excess capacity is problematic.
on their supply chain as well as on employment and recovery prospects in several European regions.

The responsibility for dealing with the issue of restructuring lies mainly with the industry, but, at the same time, industry is claiming that more coordination and support at European level is desirable.

This Action Plan, based on the CARS 21 recommendations, sets long-term goals of keeping the manufacturing base in Europe, ensuring competitiveness and sustainability and constituting a complete industrial policy roadmap for the automotive industry in 2020.

4. AN ACTION PLAN TO BOOST COMPETITIVENESS

The Commission is planning the following key actions across different EU policy areas:

4.1. Investing in advanced technologies and financing innovation

In the automotive industry, as in other sectors, a range of new, clean and safe technologies are being developed, which are expected to make significant inroads into the market in the coming years. Starting from a leadership position in today's technology, it is essential that Europe stays at the forefront by developing tomorrow's solutions, delivering sustainable mobility. This should be fostered by well-targeted and coordinated public support for research and innovation, which is fit for the needs of industry and society, aiming at developing longer term technologies. A holistic policy approach, complementing regulatory initiatives at the EU, national and local levels accompanied by infrastructure and demand measures, needs to be taken to trigger investments in the coming years.

Research, development and innovation

Investment in Research, Development and Innovation (RDI) ensures competitiveness. Moreover, European financing for RDI under the 7th Framework Research Programme (FP7) and the loans and loan guarantees of the European Investment Bank (EIB) aimed at stimulating the development of clean transport technologies were identified in the CARS 21 Report as key instruments for crisis recovery in 2008-2009, and for tackling the current competitive pressure in terms of technology leadership. Importantly, European funds provide a substantial leverage to the EU automotive industry, which needs to finance simultaneously the RDI on several powertrain technologies (continuous improvement of combustion engines as well as development of electric, fuel cells and hybrid powertrains) - in line with the 2020 perspective of a diverse portfolio of fuels necessary to meet the climate change objectives. Road safety development is another field where there is still large scope for evidence-based enhancement of vehicle safety. The European Green Cars Initiative (EGCI) Public-Private Partnership (2009-2013) has been very positively evaluated by the CARS 21 Final Report as well as the lending activity of the EIB, especially under the European Clean Transport Facility. There is a strong consensus that both instruments should continue to be used.

The Commission has:

– proposed Horizon 2020⁷ as a framework for research and innovation funding for 2014-2020 with a total budget of € 80 billion – a significant increase in comparison

to FP7 – including a commitment to achieve a resource-efficient and environmentally friendly European transport system. Pending the final decisions which will be taken in the context of the next Multi Annual Financial Framework, it is considered that automotive research and innovation funding should take into account its economic and social importance.

proposed the COSME (Competitiveness of Enterprises and SMEs) Programme\(^8\), with a budget of € 2.5 billion for the period 2014-2020.

proposed that both programmes should support EU financial instruments that will potentially enable SMEs and larger firms in the automotive sector to benefit from improved access to debt and equity finance. Through COSME, automotive SMEs should also be able to benefit from actions to improve access to markets and through Horizon 2020, to measures to improve their attractiveness to investors.

adopted its Communication on Research and Innovation for Europe's future mobility\(^9\), proposing the development of a European Transport Technology Strategy. The strategy foresees in 2013-2014 the definition with stakeholders of technology roadmaps focusing on the deployment of technologies and innovation in ten critical areas of transport including clean, efficient, safe, quiet and smart road vehicles. This will help to optimise the contribution of research and innovation to the ambitious objectives of the White Paper on Transport\(^10\) and support the implementation of Horizon 2020.

started the implementation of the Strategic Energy Technology Plan (SET Plan)\(^11\) which addresses the research and innovation agenda of several fields of strategic importance to the transport sector in particular smart electricity grids, alternative fuels such as bio-energy and hydrogen and fuel cells as well as energy storage. In this respect, appropriate linkages will be ensured with the transport technology strategy.

While Horizon 2020 will provide the general framework for transport research and innovation, it is of key importance to spell out in more detail the priorities and operation of financing for research and innovation development in the automotive industry. Based also on the Report of the CARS 21 Group, the Commission is convinced that financing should cover activities closer to the market such as public procurement, standardisation and demonstration activities. The form of PPPs should be favoured as the leanest and fastest tool and synergies should be sought with national funding.

In addition, potential synergies between the sector and EIT\(^12\) should be further explored, in particular within the context of the planned future KICs\(^13\) in the areas of added-value manufacturing and urban mobility.

The Commission will:

---

\(^8\) COM (2011) 834 final, 30.11.2011
\(^9\) COM (2012) 501
\(^10\) COM (2011) 144 final
\(^11\) http://setis.ec.europa.eu/
\(^12\) European Institute of Innovation and Technology
\(^13\) Knowledge and Innovation Communities
work together with industry to develop a proposal on the European Green Vehicles Initiative (as a follow-up to EGCI PPP) under Horizon 2020, including a platform to develop clean and energy-efficient vehicle technologies, as announced in the 2010 Industrial Policy Communication. The initiative will leverage private funding to help address the key challenges proposed for Horizon 2020.

Access to finance

Alongside the European research programme, EIB financing (loans and loan guarantees) played a key role among the recovery measures for the automotive sector during the 2008-2009 crisis. By supporting major investments related to clean technologies, the EIB helps to ensure the competitiveness of the industry in the years to come. At the time of the previous crisis, the EIB increased its lending volume to the automotive industry from an average of €2 billion/year to almost €14 billion for the period 2009-2010. The current loan volumes declined in 2011 reflecting, among others, better access to finance from the commercial banks at that time. As companies are completing their research and innovation projects currently financed by the EIB and new projects appear necessary in order to reach the 2020 fuel-efficiency targets, the EIB is well equipped in order to meet this new demand. The recent €10 billion capital increase of the EIB agreed by the European Council could also be expected to translate into more opportunities for the automotive sector (for innovation and resource efficiency in particular).

The Commission will:

– continue working with the EIB in order to ensure that financing for automotive research and innovation projects is available especially in order to meet the 2020 fuel-efficiency targets while maintaining necessary appraisal procedures to ensure the viability of investments in the long term.

– support the EIB in its efforts to facilitate access for SMEs and mid-caps. Though the administrative burden is considered to be low, the Commission will further investigate which tools could improve accessibility to the financing for SMEs, especially if SMEs experience difficulty accessing credit from commercial banks, once again. Provision of trade finance or of a global credit line for suppliers in one country and possibly other options could be explored.

– explore with the EIB the possibility of financing projects linked to electromobility, including the support through dedicated technical assistance as with the existing ELENA facility.

Lowering CO₂ emissions

Promoting new, less energy intensive technologies on board vehicles delivering lower CO₂ emissions, deployed in a cost-effective way, will support the creation of added value and jobs in the automotive industry as well as reduce the EU’s energy dependency by curbing oil imports.

---

14 COM(2010) 614

15 ELENA (European Local ENergy Assistance) technical assistance facility for projects on sustainable energy in towns and regions.
The 2007 EU strategy embraced a comprehensive approach to reducing CO₂ emissions from light-duty vehicles. This included both demand and supply measures with actions on engine technology being complemented by other measures, targeting alternative fuels, driver behaviour and other technological improvements. Also for future policy, as proposed by the Commission in its recent White Paper on Transport Policy, defining the most appropriate measures to reduce road transport CO₂ emissions in a holistic way, based on a careful assessment of costs and benefits, addressing as appropriate vehicle efficiency, the use of vehicles and infrastructure, is crucial.

Fuel consumption and emissions can also be substantially reduced through large scale deployment of more aerodynamic vehicles. The Commission is currently preparing to review Directive 96/53/EC on maximum weights and dimensions of road vehicles which will, inter alia, allow fuel savings of up to 10% through retrofitting existing trucks and redesigning future ones for the purpose of improving aerodynamics.

For light-duty vehicles, the respective CO₂ Regulations have defined 2020 targets at 95 g CO₂/km for cars and 147 g CO₂/km for vans. The Commission has as a result of the review of these Regulations proposed modalities for reaching, by 2020, these targets in a cost-effective manner.

To enable the automotive industry to carry out long-term investments and innovation it is also desirable to provide indications on the likely form and level of ambition of CO₂ reduction targets beyond 2020 in a timely manner, taking into account the Union's long term climate change goals.

The Commission:

– recently adopted proposals to implement the 2020 CO₂ targets for cars and vans. In terms of modalities, the proposals foresee a continuation of the eco-innovation provisions, supercredits for low-CO₂ emitting vehicles and an exemption for the smallest manufacturers.

– will start a broad consultation on CO₂ regulatory policy for cars and vans beyond 2020 setting out a number of aspects on which views will be sought, and then the responses to which will feed into the determination of the form and level of ambition of future policy in the context of the envisaged review. The Commission will take into account issues, such as cost-effectiveness, the expected development of CO₂ reduction technologies and other relevant factors.

– will embed the above policy measures in a wider and integrated policy on CO₂ reductions from road transport, through the implementation of the White Paper on Transport Policy, covering vehicle technology, infrastructure, driver behaviour and other measures.

– will propose a review of Directive 96/53/EC at the beginning of 2013 to allow for a more aerodynamic design of trucks.

\[16\] COM (2007) 19 final
\[17\] COM/2012/393 and COM/2012/394
\[18\] COM(2012)393 final
Pollutant and noise emissions

In recent years, it has become clear that the current procedures used for measuring pollutants, CO₂ emissions and fuel consumption of light-duty vehicles (cars and vans) are not sufficiently representative of real-world driving. A revision of the driving cycles and the test procedure is therefore envisaged and currently being prepared at a global level, based on data collected on real-world driving behaviour. Improving the test-cycle and establishing clear testing conditions resulting in comparable and representative values is important in order to deliver the expected reductions from regulatory measures, financial incentives and in order to provide reliable information to consumers.

In addition, many Member States do not comply with the requirements set in air quality legislation and are facing significant problems with ambient NO₂ concentrations. In particular, regulatory air quality requirements defined by Directive 2008/50 EC fail to be met in urban areas ("hotspots"), mainly for particulate matter, nitrogen oxides and ozone. This situation occurs in part due to the NOx (NO + NO₂) emissions of local traffic road vehicles, which are likely to be significantly higher under real driving conditions than the regulatory emission limits measured on a test cycle, particularly for diesel vehicles.

Given the pressing air quality problems, there is a need to proceed with the implementation of Euro 6 as foreseen and to identify measures as soon as practically possible to enhance the emission reductions of vehicles on the road.

The Commission recognises the importance of ensuring an effective reduction of real driving NOx emissions in order to meet current and future objectives set out in air quality legislation. As a result and in order to implement the requirements of Regulation (EC) 715/2007, the Commission launched in January 2011 the development of a future test procedure, to be integrated in the type approval framework, directly assessing the NOx emissions of light duty vehicles under real driving conditions.

Real driving emissions (RDE) of NOx measured by this "RDE procedure" should be recorded and communicated as from the mandatory Euro 6 dates (in 2014). At the latest three years after these dates, the RDE procedure should be applied together with robust not-to-exceed (NTE) emission limits, which will ensure a substantial reduction of real driving NOx emissions with respect to the emission level expected if such RDE procedure would not be applied. These three additional years, given in order to introduce binding NTE limits, are considered necessary since the Commission is aware that in many cases a significant redesign of diesel vehicles will be required to achieve Euro 6 NOx emission limits under normal driving conditions.

Further, the legislation on noise emissions from vehicles is being reviewed, based on an impact assessment. Noise related health impacts will be reduced through more stringent limit values. A new test procedure has been developed and tested in recent years. This procedure is more representative of real-world driving and can now be implemented. Together, these provisions will contribute to a reduction in road traffic noise levels.

The Commission:

– will actively support the development and implementation of a new driving test-cycle and test procedure to measure fuel consumption and emissions from cars and vans that is more representative of real-world driving, taking account of the characteristics of the EU market. The modalities for the inclusion into the EU legal
framework of the new cycle and test procedures should be defined before 2014, including the methodology for correlation of the CO₂ targets established on the basis of the old cycle and procedure. For the emission testing, the implementation of the new cycle and procedure should ensure compliance with the Euro 6 limit values under real driving conditions, with appropriate transitional arrangements from 2014 up to 2017. For CO₂ testing, the implementation of the new cycle and procedure should take into account and be consistent with the environmental objectives already defined and avoid imposing any unnecessary burdens on stakeholders. The definition of the driving range for electric vehicles will also be considered.

– will propose before 2014 complementary measures controlling vehicle pollutant emissions in use, based on a thorough analysis, with the aim of delivering a timely reduction of real-world pollutant emissions, hence, contributing to improved air quality.

– has in December 2011 proposed a new vehicle noise emissions Regulation¹⁹, as part of an integrated policy approach to ambient noise reduction, including a new noise measurement test procedure and a further reduction of vehicle noise levels. Appropriate 'lead-time' should be provided to industry, consistent with the extent of the required technical adaptations.

Road safety

Road safety has been and will remain an EU and national policy priority for many years. It offers an interesting example of the effective implementation of the integrated policy approach. The EU is a world leader in the area of road safety, and our vehicle fleet is comparably new and safe. Car design plays an important role both for crash avoidance and crash protection, not least with the help of safety devices mandated via the EU type approval framework.

Important progress has been achieved in the reduction of road fatalities by a combination of measures, tackling the vehicle, the driver and the infrastructure, applied at EU, national and local levels. These encouraging results should, however, not give rise to complacency and a new target for 2020 of a further reduction of road fatalities in the EU by 50% compared to 2010 was proposed²⁰.

The Commission:

– will continue to implement road safety work in line with the focus areas and objectives of its Policy Orientations 2011-2020²¹, covering actions on vehicles, infrastructure and driver behaviour. The right policy mix needs to be found, combining regulatory and other measures and will be defined based on an in-depth impact assessment. Priorities include motorcycles, safety of new vehicle technologies (EVs) and technologies supporting driver behaviour and enforcement of road rules (intelligent speed management devices, seat belt reminders, ITS, ecodriving).

¹⁹ COM/2011/856 final
²⁰ COM (2010) 389 final
²¹ Idem.
will further promote the deployment of Intelligent Transport Systems (ITS), including cooperative systems, in particular the EU-wide in-vehicle emergency call system "eCall". Appropriate legislative measures ensuring strong coordination and a timely and complete deployment of all elements related to eCall are being put in place in order for this life-saving system to function effectively from 2015.

calls on Member States, local authorities and stakeholders to cooperate in a constructive and coordinated way to develop the most promising measures to improve road safety and to deploy ITS. The Commission is also carrying out an in-depth-assessment of the most appropriate in-vehicle safety systems to improve further road safety and vehicle safety in the EU, preparing a roadmap for the deployment planned for the end of 2013.

**Alternative fuels and infrastructure**

An appropriate diversification of the energy sources used for transport will contribute to meeting the EU's climate goals and improve its energy security. While there are still substantial hydrocarbon reserves, it is likely that prices could become increasingly volatile while surplus capacity decreases. In parallel to the improvement of energy efficiency, this also requires the marketing of alternative fuels, such as electricity, hydrogen, sustainable biofuels, methane (natural gas and biomethane), LPG. For the overall policy framework, the merits of each fuel and powertrain combination should be assessed on a well-to-wheel basis, including also life cycle aspects. Given the novelty of many fuels, their performance should be kept under continuous review.

Market penetration of alternative fuels requires the build-up of appropriate infrastructure. This as well as the subsequent development of a market for the relevant vehicles would also serve to promote economic growth and job creation. The roll-out of alternative fuel infrastructure should be in step with technology development and market penetration rates of vehicles powered by alternative fuels, bearing in mind their cost-effectiveness. Different forms of public support for infrastructure are possible: pilot projects, standardisation, investment support and legislation. Public policy can support market introduction but thereafter markets must decide on the best solutions themselves, within the given policy framework, taking into account any economic and social impacts.

The Commission is currently preparing the Clean Power for Transport package which should provide a framework to guide investments and technological development in this area. It aims to facilitate the development of an internal market for alternative fuel vehicles and vessels including the necessary infrastructure, by removing technical and regulatory barriers across the EU.

With respect to electric vehicles, in 2010, the Commission gave a mandate to the European Standardisation Organisations (ESO) to adopt new standards with the aim of ensuring interoperability and connectivity between the electricity supply point and the charger of electric vehicles. The standardisation process has not yet delivered a satisfactory result on the infrastructure side. The CARS 21 Report called for the adoption of a single standard throughout the EU. The Commission will investigate the connection between the vehicle and the grid and also monitor new business models that may emerge that promote the synergies

22 Integrating emissions generated over the life-cycle of the fuel, including extraction, production and actual use
between electricity storage that electric vehicles provide and the flexibility that the electricity system needs, including common standards and protocols for the connection between electric vehicles and grids, as well as interoperability for communication and payment.

The provision of clear information for consumers on fuels and their compatibility with vehicles, such as labelling, requires further attention. The Commission will closely monitor the issue with a consumer market study currently being conducted on the functioning of the market for vehicle fuels from a consumer perspective.\textsuperscript{23}

The Commission will:

\begin{itemize}
  \item propose within the coming months an \textbf{Alternative Fuels Strategy}, as part of the Clean Power for Transport package, supporting the need for a range of alternative fuels in the context of delivering the EU climate and environmental objectives and in relation to security of the EU's energy supply.
  
  \item adopt, as part of the Clean Power for Transport package, a \textbf{legislative proposal on alternative fuel infrastructure}, concerning the deployment of a minimum refuelling/recharging infrastructure and common standards for certain fuels, including electric vehicles.
  
  \item propose a legislative measure at the latest by 2013 to ensure that practical and satisfactory solutions for \textit{the infrastructure side of the recharging interface for electric vehicles} are implemented throughout the EU, in case no agreement is reached on a voluntary approach among stakeholders involved through the standardisation process. It will take into account the synergies between the electricity system and the electric vehicles.
  
  \item pursue the dialogue with relevant stakeholders on a \textbf{fuel labelling scheme} consistent with the relevant European standards with a view to ensure that the consumer has easy-to-understand information about the compatibility of his/her vehicle with the different fuels offered at refuelling stations.
  
  \item \textbf{monitor} the implementation of the National Renewable Energy Action Plans, in particular \textit{the effective biofuel blending rates} used in different Member States and \textit{the compatibility} of fuels with vehicle technologies.
\end{itemize}

4.2. Improving market conditions

Maintaining an automotive manufacturing base in the EU can only be ensured if favourable business conditions are provided. For several of these conditions, such as labour law, this relies heavily on national policies. However, EU policy also has a clear influence on framework conditions, notably through regulatory policy. It remains a priority for the Commission to improve business conditions for industry in Europe by providing a reliable, predictable and favourable framework and to implement the principles of smart regulation, such as cost-effectiveness, lead times, long-term targets and stakeholder consultation.

\textsuperscript{23} The study will give an insight on whether consumers are able to make informed purchasing decisions including issues related to understanding and transparency of information, for example understanding of information on labels, understanding of differences between fuels and understanding of suitability of fuels for cars. The results will be published by end 2013.
A stronger internal market

A well-functioning internal market with a level playing field is a key contributor to a strong and prosperous European car industry in the long run. This is particularly true in the current difficult economic context, where manufacturers are under pressure to adapt capacity.

The European automotive industry represents a multitude of small and big companies, active in different parts of the distribution, supply and service chain. This enormous diversity is considered a strength and an asset for the future, as small companies today may deliver strategic innovation tomorrow and grow into major players. Therefore, it is important to foster constructive, transparent and respectful relations among the different actors in the automotive sector, including the repair, maintenance and customer service sector.

The changes in the competition law framework for the distribution of motor vehicles in Europe (further to the expiry of the Motor Vehicle Block Exemption Regulation 1400/2002) may have an impact on the organisation of the vertical relations between vehicle manufacturers and distributors. In order to manage this transition in a balanced way, a self-regulatory initiative is encouraged by the Commission. Furthermore, the Commission will continue to ensure the respect of EU rules on competition in the markets for the distribution of motor vehicles and for the provision of repair and maintenance services as well as the distribution of spare parts.

Another important objective of vehicle regulation is to strengthen the EU internal market for motor vehicles. One must recognise that today, while the regulatory requirements are identical throughout the EU, market conditions are very diverse in different Member States. The measures to influence demand, such as financial incentives, put in place to promote clean and energy efficient vehicles do not all follow the same approach. This fragmentation can be expected to reduce the potential for development and placing on the market of such vehicles. Therefore, stronger coordination of such measures is deemed necessary.

For consumers, the second hand car market is also important. A consumer market study will be carried out on the functioning of the second hand car market.

The Commission will:

– set up by 2013 a dialogue between stakeholders, encouraging them to work towards common principles on vertical agreements on the distribution of new vehicles. Stakeholders are invited to participate constructively in this dialogue, aiming at a balanced outcome.

– put forward in 2012 guidelines for financial incentives for clean and energy-efficient vehicles put in place by Member States in order to promote stronger coordination, to maximise their environmental effectiveness and limit the fragmentation of the market. Such incentives should avoid being technology-specific, instead relying on objective and commonly available performance data, such as the CO₂ emissions from the vehicle. Member States will be invited to take these guidelines duly into account when designing their incentive schemes.

---

24 Measures constituting State aid will continue to be assessed under the relevant State aid rules.
Smart regulation

A healthy and dynamic internal market also needs appropriate regulation, which avoids unnecessary burdens for stakeholders and offers an investment-friendly climate. Automotive products are essentially regulated through the EU legislative framework for type-approval. Although this system seems to generally function in a satisfactory way, continuous evaluation remains necessary to identify ways of improvement. In particular, a revision of the procedures for the surveillance of the automotive products placed on the EU market is needed, in order to make sure that vehicles are safe and citizens can fully trust the regulatory framework put in place. This will contribute to establishing a level playing field among all actors and to increased trust of consumers in effective product regulation, while limiting administrative burdens.

The principles of smart regulation have been the key deliverable in the first CARS 21 exercise and they have been reaffirmed in the re-launched process. The Final CARS 21 Report furthermore stressed the importance of taking into account the current competitive pressure on costs, the cumulative effect of the legislation and the situation of SMEs. A comprehensive and consistent application of principles of smart regulation will be ensured, integrating an in-depth assessment of the impacts on industry, society and other stakeholders, notably the associated costs and benefits, considering also that the affordability of buying and owning a car is a fundamental pre-requisite so as to maintain a strong market. On that basis, the impact assessments for policy proposals relevant for the automotive industry, such as those referred to in other parts of this Communication, should systematically include also a competitiveness proofing exercise in order to determine the impact of new measures on the automotive industry. The application of these principles will ensure that the Commission proposals will be well-targeted and cost-effective.

The Commission will:

– carry out an extensive and in-depth evaluation (fitness check) of the vehicle type-approval framework. In 2013, it will adopt a proposal to enhance the type-approval framework to include provisions for market surveillance in areas where a need has been identified, in order to ensure vehicles and their components are safe and compliant with relevant legal requirements, and that this framework effectively achieves the relevant policy objectives.

– within its impact assessment system, carry out a rigorous competitiveness proofing exercise for relevant major future initiatives, including those with a significant impact on the automotive industry. The competitiveness proofing will consider the economic situation and what impact a new initiative is likely to have on the industry's competitive position, especially on global markets. The future Free Trade Agreements, safety and emissions and other initiatives having a significant impact on vehicles will be subject to competitiveness proofing - in line with the operational guidance for assessing impacts on sectoral competitiveness within the Commission's impact assessment system25, which also takes into account the broader, overall societal and economic impacts. These principles have been very recently reiterated in the updated Industrial Policy Communication.

---

explore the possibility and added value of carrying out a proportionate economic analysis for some implementing acts, based on existing vehicle legislation, such as the proposals on the revision of evaporative emissions requirements for Euro 6 and anti-tampering measures for L-category vehicles (powered 2- and 3- wheelers and quadricycles). However, if these acts are expected to have significant impacts they will be accompanied by impact assessments in line with the Commission's Impact Assessment guidelines.

4.3. Enhancing competitiveness on global markets

The automotive industry is clearly global. Trade in automotive products is increasing steadily and third markets are becoming ever more important for the EU. The European automotive industry has a very strong position in international trade and clearly benefits from the market opportunities on both mature and emerging markets, which partly offsets the difficult situation in the European market. The current situation, cannot however be taken for granted. International competition intensifies rapidly with new entrants and the constant evolution of technology. At the same time, ensuring an open global market place remains a challenge - especially because of the existing and new non-tariff barriers (NTBs). While the industry strives to keep its competitive edge, the role of public policy is to ensure a level playing field in terms of market access. With that objective in mind, the CARS 21 Report advocates for action via trade policy in the broadest sense, including market access and regulatory harmonisation.

Trade policy

There is a need for trade and industrial policies to be closely coordinated.

Concerning the various trade instruments, Free Trade Agreements (FTA) are considered an important means to improve market access in third countries. The acceptance of international regulations under the 1958 UNECE Agreement is the best way to remove non-tariff barriers to trade. There is also a need to strengthen bilateral regulatory cooperation with third countries, such as those which are not Contracting Parties to this agreement, with a view to eliminating non-tariff barriers in the automotive sector.

The Commission will:

- take full account of the importance of maintaining a strong and competitive automotive manufacturing base in Europe when conducting its trade policy, using both multilateral and bilateral tools. Both should be used to tackle the key issues of removing tariff and non-tariff barriers. FTAs should aim at full tariff dismantling and removal of Non-Tariff Barriers. The overall impacts of each trade negotiation will be assessed in a thorough and comprehensive way.

- assess the impacts of trade agreements as well as their cumulative impact on the competitiveness of this industry by launching a study into already concluded FTAs and those likely to be concluded in the near future. The study will be launched shortly by the Commission and concluded by the end of 2013. The results will be discussed with the relevant stakeholders.

26 The 1958 Agreement of the United Nations Economic Commission for Europe (UNECE) on international technical harmonisation in the motor vehicle sector
complement multilateral regulatory cooperation under the UNECE framework with bilateral regulatory cooperation in particular with key new players, but also with, for example, the United States - under the Transatlantic Economic Council - and with Japan.

International harmonisation

International harmonisation of vehicle regulations has been a priority for the Commission for many years. Agreeing common regulations with other major markets around the globe offers the benefit of lower compliance costs, generates economies of scale and reduces technical barriers to trade. The overall objective must be to establish the principle of "tested once, admitted everywhere", whilst ensuring the promotion and maintenance of the highest safety and environmental standards. The final CARS21 Report concludes that the most effective instrument for international regulatory harmonisation is the UNECE 1958 Agreement, provided it is modernised to accommodate the needs of emerging economies and to the extent that it enables the mutual recognition of international whole vehicle type approvals (IWVTA) starting with the category of passenger cars. The Commission is committed to carrying out several actions in the coming years.

The Commission will:

- promote and actively support further international harmonisation of vehicle regulations along the lines set out below. The reform of the 1958 UNECE Agreement is a key element of this strategy and will aim to make adoption and implementation of international regulations more attractive for third markets. Member States and stakeholders are invited to support this effort. The Commission will steer the development of a first proposal for the revised 1958 Agreement in March 2013.

- contribute to the development of a first proposal for a new Regulation on IWVTA by November 2013. The IWVTA Regulation will substantially reduce the administrative burden related to the introduction of the same vehicle model in countries which are Contracting Parties to the 1958 Agreement.

In parallel to the work on the 1958 Agreement, the Commission will also work to obtain concrete results under the 1998 Agreement. With the recent political momentum created by the EU-US High Level Working Group on Jobs and Growth and the Los Cabos statement acknowledging the potential benefits of a comprehensive free trade agreement between the EU-US, there is more potential for keener engagement of the US and more successful work under the 1998 UNECE Agreement. The most promising areas of work are breakthrough technologies, notably hydrogen and electric powertrains. The Commission together with the US agencies has taken leadership in 2011 in the framework of the Transatlantic Economic Council to launch the work on electric vehicles. Consequently, two informal working groups were set up, the first on regulatory requirements for safety and the second on environmental performance of electric vehicles. The groups quickly attracted interest from many other

---

27 According to the established principles of the 58 Agreement, Contracting Parties applying the most stringent version of the IWVTA Regulation will not have to accept type-approvals issued according to a less stringent version.

28 In the framework of 1998 Agreement Global Technical Regulations are developed.

29 MEMO/12/462, 19.06.2012
contracting parties and have grown into multilateral fora under the 1998 Agreement. Concrete results should be available in the next few years.

The Commission will:

– steer the work of the two informal working groups on (1) safety and (2) environmental performance of electric vehicles with a view to agreeing a Global Technical Regulation (GTR) on the safety of electric vehicles in 2014 and a common approach in terms of policy on environmental performance of electric vehicles. Both informal working groups were launched on the initiative of both the EU and the US but have already attracted a broad membership, including Japan, China and Canada. The agreement on a GTR on electric vehicle safety will be of key importance so as to ensure economies of scale for manufacturers and reassure consumers on the adequate level of safety of electric vehicles.

– promote, based on input from stakeholders, stronger international cooperation between standardisers to achieve common or compatible standards on electric vehicle safety, infrastructure and interoperability.

4.4. Anticipating adaptation and managing restructuring

Economic and social parameters evolve over time, changing the competitive position of production locations. Companies, workers and economies that are quickest to adapt to the new situation are the ones gaining an advantage in the global marketplace. The strengths of the European economy are based on knowledge and excellence. This means that Europe needs to invest in its human capital and adapt its production capacities to the new realities, including new technologies and evolving markets. Public intervention should be targeted to help workers and companies carry out this adaptation, safeguard the internal market and a level playing field and ensure that the negative social consequences of any restructuring are kept to a minimum.

**Human capital and skills**

The investment in human capital via skills development and training is absolutely essential in order to keep a manufacturing base in Europe. The availability of a skilled workforce is a key factor for growth and competitiveness of the automotive industry and it will be indispensable in order to build up leadership in break-through technologies. On the other hand, industry is already faced with existing qualified labour shortages and the need to correctly identify the skills needed in the future. Appropriate qualifications for workers, as well as vocational training and life-long learning have to be ensured.

Skill shortage is a critical issue. Quick actions with long-term goals are needed at the national level to fundamentally modernise education and training systems in order to upgrade the supply of skills, through, inter alia, new curricula, opening up education and training through ICTs and new forms of partnership with employers. At the European level, this problem relates not only to the automotive sector but to other sectors as well. The Commission will shortly outline a set of strategic priorities for addressing these issues in its communication on "Rethinking Education: Investing in skills for better socio-economic outcomes". As a horizontal issue it is also tackled within Europe's employment policy, notably by the recent Employment Package\(^\text{30}\). In addition, the following sectoral initiatives will be of key

importance. Given the changes in skill needs witnessed in the EU labour market a complementary solution to the shortages could be also to attract the necessary skills from outside the Union.

The Commission will:

- following the recently completed feasibility and added value assessments, support in 2013 the creation of a European Automotive Skills Council\textsuperscript{31}, which will bring together existing national organisations conducting research on skills development and employment in the automotive sector. The Skills Council will also involve employers’ and workers’ representatives at European and national levels and education and training providers' organisations. The Skills Council will encourage peer learning based on the exchange of information and good practice as well as providing a platform for dialogue. It will start by analysing trends in automotive employment and skills, which will form the basis of recommendations aimed at policymakers, education, training providers and other stakeholders.

- encourage the use of European Social Fund (ESF) for workers' retraining and re-skilling. Without prejudice to the decisions that will be taken in the Multi Annual Financial Framework on the ESF, Member States will be encouraged to make more use of the systemic projects addressing skills needs, skills matching and anticipation of change and propose life-long learning opportunities.

Dealing with industrial adjustment

While on the one hand, the automotive industry faces the problem of availability of a qualified workforce, on the other hand there is a need to deal with the social consequences of restructuring, when job losses are unavoidable. Some restructuring decisions have already taken place reflecting declining sales on the European market and more adjustments may be necessary. It is of the utmost importance to avoid a situation in which plant closures or downsizing provoke a ripple effect throughout the regional economy because of redundancies. Companies have to observe the EU Directives on collective redundancies and information and consultation of workers as well as the good practice of anticipating change\textsuperscript{32}. In this regard, good social dialogue at all levels (company, local, national and EU levels) is a key element in the anticipation and good management of restructuring processes. The restructuring process is mainly the responsibility of the industry, yet there is a complementary role for the Commission, Member States and local authorities.

The Commission adopted early 2012 a Green Paper on restructuring with the aim to identify successful practices and policies in the field of restructuring and adaptation to change\textsuperscript{33}.

The Commission has also proposed to continue the European Globalisation Adjustment Fund (EGF) over the period 2014-2020, improve its functioning and to expand its scope, in particular to new categories of workers (e.g. temporary workers). Until now, the EGF has

\textsuperscript{31} Project run by the social partners and supported by the European Commission / DG Employment, Social Affairs and Equal Opportunities

\textsuperscript{32} These good practices notably include the text of 2003 entitled "Orientations for reference in managing change and its social consequences" which, however, was not formally adopted by ETUC.

\textsuperscript{33} COM(2012) 7 final
provided support in 16 cases in the automotive sectors and almost 21,000 automotive workers have been targeted by EGF assistance worth EUR 113 million.

The Commission will:

– continue to **monitor/review restructuring activities as regards to their strict compliance with EU legislation**, in particular concerning state aid and internal market rules.

– **identify good practice and promote an anticipative approach in restructuring** in consultation with representatives of the automotive-intensive regions, employment authorities and the sector's stakeholders, including the social partners.

– re-launch the **inter-service task force** to **study and follow up the main cases of automotive plant closures or significant downsizing**. The task force has been active and highly efficient in past cases in the automotive industry. The task force would streamline the use of the relevant EU Funds (by providing technical assistance, reducing waiting time, advising on the most effective use of resources, monitoring and reporting).

– for the cases of plant closures and significant downsizing, **invite the Member States to consider using the European Globalisation Adjustment Fund (EGF)**.

– encourage Member States to make use of **labour flexibility schemes and their co-financing by ESF** in support of the suppliers who might need additional time to find new clients following a closure/downsizing of an automotive plant.

5. **MONITORING AND GOVERNANCE**

The constructive discussions in the CARS 21 High Level Group have highlighted the usefulness and the need to continue the dialogue among major stakeholders (from both the private and the public sector, as well as from civil society) in this strategic industrial sector. In addition, the updated Industrial Policy Communication called for the creation of a Task Force for clean vehicles.

The Commission proposes to launch the CARS 2020 process to monitor and take stock on a regular basis of the implementation of the CARS 21 recommendations and the Action Plan. This process would entail an informal annual high-level meeting, prepared by a Sherpa group. In order to ensure coherence and continuity, the composition of this group would remain similar to the one of CARS 21, without prejudice to possible adaptations.

Also, dedicated meetings at expert level could be set up on an ad-hoc basis with a view to enhancing the knowledge base of the Commission and broaden stakeholder consultation.

The Commission will:

– set up in 2013 a **high-level process called CARS 2020**, in order to monitor the implementation of the CARS 21 recommendations, as well as the measures set out in this Action Plan.

---

34 For example, the cases concerning VW Forest and MG Rover in West Midlands;
organise ad-hoc expert meetings on economic and competitiveness issues for the automotive sector.

It will be up to the new College to consider whether this process should be maintained in its proposed format, or whether adjustments or adaptations may be necessary.