

**THE SOCIETY OF MOTOR
MANUFACTURERS AND TRADERS**
2012 AUTOMOTIVE SUSTAINABILITY REPORT
13th Edition - 2011 Data



THE SOCIETY OF
MOTOR MANUFACTURERS
AND TRADERS LIMITED

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IN SUMMARY

		2010	2011	Percentage change 2011 on 2010	
ECONOMIC PERFORMANCE					
Automotive manufacturing sector turnover	(£ billion)	49	55	12.2	●
Expenditure on business R&D	(£ billion)	1.3	1.3	0.0	●
Total number of cars and CVs produced	(million) (UK) (WI)	1.39	1.46	5.1	●
Total new cars and CV registrations	(million) (UK) (WI)	2.30	2.25	-2.3	●
Signatories' combined turnover	(£ billion) (AS)	42.3	45.3	7.0	●
Total number of vehicles produced	(million) (AS)	1.30	1.38	6.0	●
ENVIRONMENTAL PERFORMANCE					
Production inputs					
Total combined energy use	(GWh) (AS)	4,659	4,381	-6.0	●
Energy used per vehicle produced	(MWh/unit) (VMs)	2.6	2.2	-14.0	●
Total combined water use	(000m ³) (AS)	5,468	4,875	-10.8	●
Water use per vehicle produced	(m ³ /unit) (VMs)	3.2	2.8	-14.9	●
Material output					
Total combined CO ₂ equivalents	(tonnes) (AS)	1,442,896	1,395,233	-3.3	●
CO ₂ equivalents per vehicle produced	(tonnes/unit) (VMs)	0.8	0.7	-13.3	●
Volatile Organic Compounds emissions (cars)	(g/m ²) (VMs)	36	35	-0.6	●
Volatile Organic Compounds emissions (vans)	(g/m ²) (VMs)	64	61	-4.1	●
Total combined waste to landfill	(tonnes) (AS)	18,302	13,971	-23.7	●
Waste to landfill per vehicle produced	(kg/unit) (VMs)	8.8	7.1	-19.8	●
Vehicle use					
Average new car CO ₂ emissions	(g/km) (AC)	144.2	138.1	-4.2	●
SOCIAL PERFORMANCE					
Number of jobs dependent on the sector	('000) (WI)	737*	719*	-2.4	●
Combined number of employees	(AS)	67,791	74,155	9.4	●
Number of lost-time incidents	(AS)	198	180	-9.1	●
Number of training days per employee	(AS)	2.93	2.94	0.3	●
Number of new apprentices (retail, engineering)	(WI)	27,450**	30,650**	11.7	●

(WI) Whole industry data, (AC) All car sales in the UK, (AS) All signatories, (VMs) UK vehicle manufacturer signatories, (CV) Commercial vehicles, (CO₂) Carbon Dioxide.

The report has 17 signatories which represent 94.1% of vehicle production in the UK.

Economic performance

- Due to increased demand, especially for export, vehicle manufacturing rose by 5.1% in the UK and signatories' turnover increased by 7% to £45.3billion. At the same time, UK domestic vehicle registrations dropped by 2.3%.
- Automotive sector turnover rose 12.2% whereas expenditure on R&D remained stable.

Environmental performance

- All absolute environmental key performance indicators for manufacturing improved in 2011, despite 5.1% more vehicles being produced. This demonstrates industry's commitment to resource efficiency. Energy use dropped 6.0%, CO₂ equivalent 3.3%, water use 10.8% and waste to landfill 23.7%. All relative figures also improved.

- Volatile Organic Compounds (VOCs) from manufacturing cars and vans fell by 1% and 4% respectively.
- Average new car CO₂ fell to 138.1g/km, down 4.2% on 2010.

Social performance

- The number of jobs dependent on the sector saw a 2.4% drop.
- Signatories' employment rose 9.4% and the number of lost time incidents at signatories fell a further 5.1% on 2010. The number of training days remains stable at 2.9 per employee. The number of new apprentices in the sector rose by 11.7%.

(* jobs data is compiled from several official sources using expert SMMT analysis)

(** due to changes with the way the data is collected, the 2010 and 2011 figures have been revised to include all engineering, rather than just automotive apprentices).

FOREWORD

SMMT's 13th Sustainability Report reflects more clearly than ever the progress UK automotive is making towards its long-term environmental commitment, driven by sustained investment in resource efficiency and the development of low and ultra-low carbon products.

This report highlights key achievements in 2011, supported by detailed information at www.smmt.co.uk/sustainability. The data, analysis and case studies provide a wealth of valuable information illustrating the economic, social and environmental credentials of automotive companies in the UK.

Besides the substantial 23% improvement in average new car CO₂ emissions since 2000, an efficient and globally competitive manufacturing base has contributed to driving down every single key environmental indicator. From substantially cutting the amount of waste going to landfill to significant reductions in total water usage, efficiencies at every level of manufacturing have produced outstanding environmental results for UK automotive.

Ensuring it remains at the forefront of global automotive innovation and manufacturing, companies in the UK have continued to invest in their workforce, which is why in 2011 the industry continued to provide training to more than 14,500 apprentices and employ nearly 720,000 people – 140,000 of who work directly in manufacturing. With UK automotive taking the lead on government initiatives like 'See Inside Manufacturing', as well as industry's close relationship with academia, it fully recognises the need to attract generation after generation of bright young talent into a challenging and rewarding industry.

Generating over £50 billion turnover, the sector remains the largest in UK manufacturing and global demand for UK-built vehicles sustains healthy production volumes and export levels. As government, industry and academia work together, automotive continues to attract global investment, with over £1.3 billion spent on R&D each year ensuring the UK maintains effective long-term progress on the low carbon agenda.

2011 was a year when UK manufacturing maintained a good rate of growth as the sector continued its recovery from recession. Industry committed £4 billion investment in UK automotive, securing jobs, guaranteeing our substantial contribution to the economy, and directing huge resources into enhancing and developing manufacturing facilities. It is this commitment that will maintain our global competitiveness and the sustainability of our industry well into the future.



Paul Everitt,
SMMT Chief Executive



New SMMT headquarters awarded Bronze Ska Rating

SMMT is committed to the continuous improvement of environmental best practice in the workplace. Through the introduction of a series of eco-innovations and measures, its new office in the heart of Westminster was awarded an acclaimed Bronze Ska Certificate. Ska Rating was developed by the Royal Institute of Chartered Surveyors (RICS) to assess the environmental performance of office fit-out projects.

SMMT positioned sustainability at the core of the new office design, using low-global warming potential insulation, lighting and water usage controls, as well as the use of sustainable hardwoods and timbers. SMMT's new office retrofit saw the refurbishment of a 1970s building to meet 2011 UK regulatory standards.

BUSINESS PERFORMANCE, R&D AND INVESTMENT

The UK automotive sector experienced a major, sharp and deep recession from 2008 to 2009, as did the whole UK economy. Partial recovery has been aided by macroeconomic policy measures, but for the UK economy as a whole, the nature and duration of recovery is more complex, slower and more variable than with other major recessions. However, the recovery in activity to pre-recession levels has been much quicker and firmer for the automotive manufacturing sector and has become overwhelmingly export focused. Recovery in the retail and services sectors is taking longer and is more incomplete. Across the sector, Scrappage Incentive Schemes (ending in 2010) gave a strong, but short-term boost to output and demand in the UK, other EC states and in other key global markets like China and the US.

The short-term outlook is for a period of stability after the firm bounce-back in activity in the sector. From 2013 the expectation is that the automotive manufacturing sector in the UK will continue with robust growth in activity and output and that domestic demand for new vehicles will start to recover.

With vehicle manufacturers announcing **investments of over £4bn in 2011⁽¹⁾**, the future for UK automotive is bright with the prospect of more jobs and higher output. For the longer term, to 2015, the outlook is for sustained growth, especially in the car sector. Some forecasts see total output exceeding 2 million.

Table 1 – UK vehicle registrations and production data, volumes in ‘000s

‘000s	2007	2008	2009	2010	2011	% ch 11 v 10	% ch 11 v 07
Car output	1,535	1,447	999	1,270	1,344	5.8%	-12.4%
CV output	216	203	91	123	120	-2.3%	-44.3%
New car registrations	2,404	2,132	1,995	2,031	1,941	-4.4%	-19.2%
New CV registrations	392	351	225	261	306	17.6%	-21.9%

UK automotive manufacturing

The UK retained its position as the fourth largest vehicle manufacturer in Europe in 2011 after **combined car and commercial vehicle output grew by 5.1% to 1.46 million units**. This was up from a low of 1.09 million units in 2009 when the global recession caused output to fall sharply and several factories temporarily to reduce output volumes. Further growth was constrained by natural disasters in Asia, which caused some disruption of component supply to some UK-based plants. As investment plans are realised, output is forecast to grow to some two million units by 2015 and surpass the 1.75 million units produced in 2007, pre-recession. With exports accounting for the majority of UK manufacturing, demand across the EU and beyond will be key to realising growth plans.

Export focus to growth

In 2011 a record 81.6% of all vehicles manufactured in the UK were destined for export, up 10.1%, whilst output for the home market fell 12.5%. Export destinations for their products vary by manufacturer, but on the whole the EU remains key – see Table 2. Emerging markets, such as China and Russia, have taken an increased share of UK exports, reflecting recent economic growth trends. Demand in these recently emerged markets is often for higher-end products from the UK.

Table 2 - Exports of UK-built cars, by destination, 2007-2011

	2007	2008	2009	2010	2011
All (millions)	1.321	1.257	0.839	1.035	1.160
EU 27 (%)	65.3%	60.3%	71.3%	64.6%	60.9%
US	8.5%	8.5%	9.5%	9.1%	7.5%
Russia	8.6%	13.8%	3.8%	4.9%	8.1%
China	1.0%	1.4%	2.3%	4.2%	5.1%
Other	16.6%	16.0%	13.1%	17.2%	18.4%

Jaguar Land Rover New £355m engine facility

JLR invested £355 million in a new facility to manufacture all-new advanced technology low emission engines in the UK. The new facility will be built at a business park near Wolverhampton.

The engine manufacturing facility will create up to 750 highly-skilled engineering and manufacturing posts, along with hundreds more highly-skilled manufacturing jobs in the supply chain and the wider UK economy.

Jaguar Land Rover will also invest £1.5 billion a year for the next five years in new product development and expanding its range of vehicles and engine technologies.

New vehicle registrations

In a historical context, new vehicle markets remain restrained following the recession. Subdued household and business confidence is constraining their expenditure on new cars. The 2011 market also suffered as the first quarter of 2010 was boosted by the Scrappage Incentive Scheme (SIS) that ended in March 2010.

New car registrations fell by 4.4% in 2011 to 1.94 million units, averaging 1.99 million units over the past three years, compared with 2.4 million units between 2005 and 2007. The private market was especially weak in 2011, although fleet volumes showed modest growth. Diesels took a record 50.6% of the market, outselling petrol cars for the first time.

The commercial vehicle (CV) market recovered further in 2011 to 306,488 units, but remained 21.9% below the 2007 peak of 392,476 units. Light commercial vehicles to 3.5t (vans) account for some 85% of the total CV market and recorded a further 16.7% rise in registrations in 2011. Truck registrations rose by 25% and bus and coach registrations rose by 5% in the year.

The markets are expected to show little change in 2012, given the subdued economic setting, but as consumer confidence returns, the market is forecast to grow more strongly in 2013 towards two million units and the CV market to some 330,000 units.

Vehicles in use

The total number of vehicles in use (parc) in the UK rose 0.4% to a record 35.63 million (SMMT Motorparc database). The car parc rose 0.3% to 31.36 million units and the CV parc rose 1.2% to 4.27 million. The net volume of parc and the age profile is determined by the number of new vehicles entering the market place and the greater reliability and longevity of vehicles. The slowdown in new vehicle demand will have adversely impacted the replacement cycle. Given the technological improvements in new vehicles, improving the rate of vehicle replacement would ensure a more efficient, lower emitting and safer vehicle fleet.

UK as a focus for the European industry

The ACEA Board of Directors held its annual meeting at SMMT in June 2011. SMMT arranged a series of high level engagements with Ministers and senior officials, the highlight of which was a direct meeting with the Prime Minister. SMMT also managed a news conference led by Dr Dieter Zetsche the ACEA President and Chairman, Daimler AG, as well as Ivan Hodac, ACEA Secretary-General and Paul Everitt, SMMT Chief Executive. It was attended by 20 national and international journalists.

Developing the UK supply chain

The industry is committed to supporting growth across the UK automotive supply chain, working to identify key opportunities to build the sector's supply chain capabilities. In 2011, more than £4 billion⁽¹⁾ was invested by UK-based vehicle manufacturers into projects ranging from low carbon technology development to the introduction of all-new vehicle models. **The current purchasing spend of UK-based vehicle manufacturers is valued at £7.4 billion, representing approximately 36% of their global purchasing spend.**

It is estimated that 80% of component production required for vehicle assembly can be sourced from UK-based companies and, by supporting the long-term growth of the supply chain sector, industry can grow its contribution to the UK economy, secure higher gross value export value and employment within the automotive sector⁽²⁾.

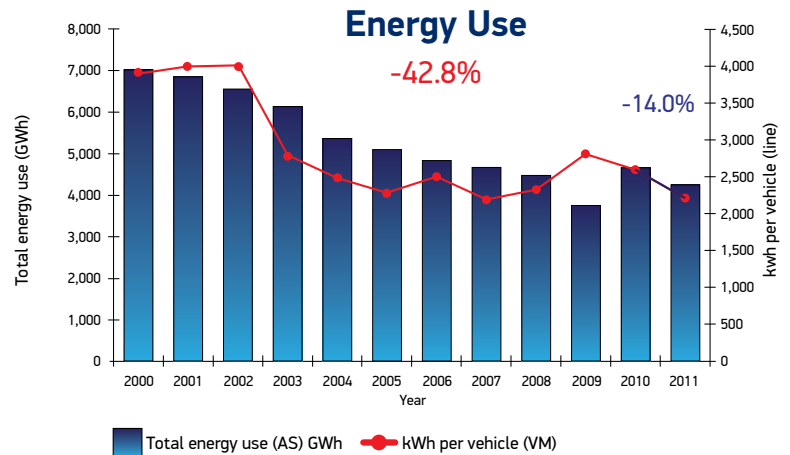
The SMMT's regular 'Meet the Buyer' events seek to increase local UK sourcing by matching OEM demand with companies in the automotive supply chain. In 2011, SMMT staged four 'Meet the Buyer' events and organised more than 400 one-to-one meetings between buyers and suppliers covering over 80 different automotive commodities.

The 2012 'Meet the Buyer' event will build on the successes of previous years and with the support of initiatives, including the recently launched £125 million⁽³⁾ Supply Chain Fund, the supply chain sector is poised to grow and attract greater inward investment.

ENERGY AND RESOURCE EFFICIENCY

Manufacturing performance

Total energy consumption in automotive manufacturing (AS) fell by 6.0% in 2011 despite a 6% rise in production volumes due to further optimisation of manufacturing processes, greater engagement with staff and greater utilisation of renewable energy. That is a **14.0% reduction in energy per vehicle** produced. Resulting **CO₂ emissions** show a similar trend, **down 3.3% in absolute terms** and 13.3% per vehicle. Since 2000, energy consumption per vehicle is down 42.8% and CO₂ emissions down 37.9%.



Renewable energy

Overall, renewable energy installations at **automotive facilities generated 16,178 MWh renewable energy, enough to power 3,900 homes**. Signatories also purchased 143,302 MWh of green energy produced from renewable energy sources.

In 2011, the automotive industry was proud to unveil some new solar installations, in addition to those featured in last year's report, but the sharp reduction the Feed-In-Tariff (FIT) rates is likely severely to impact the prospect for future projects.

Bentley New benchmark in energy management

In 2011 Bentley Motors' headquarters became the first plant in the UK automotive industry – and one of the first companies anywhere – to achieve the new energy management standard, ISO 50001. The accreditation recognises the company's continuous improvement in energy efficiency, reflecting Bentley's long-term commitment to reduce its overall environmental impact. A series of initiatives have been undertaken including improved heating and lighting, better controlled boiler and compressed air systems, greater insulation and more efficient variable speed drives. The results have been significant. Between 2000 and 2010 the energy used on site for each car produced was reduced by two thirds, and by 14% for the overall site. This has delivered overall savings of 230GWh of energy – enough to power 11,500 houses for a year.

Honda, Volkswagen Group and Perkins Investing in solar power

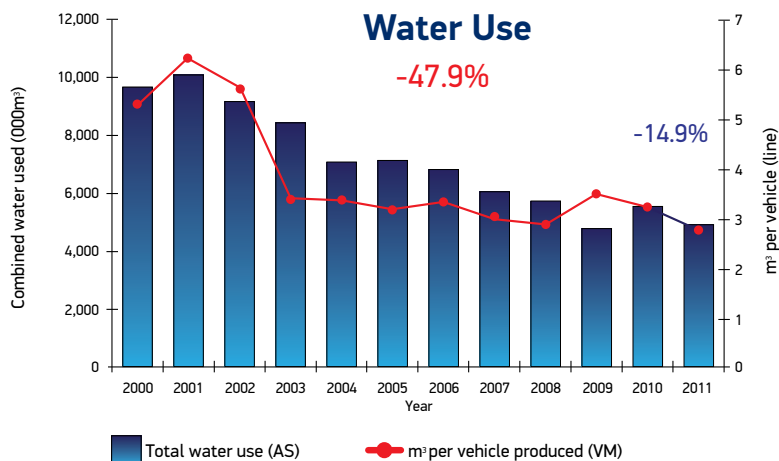
In October 2011 a solar photovoltaic (PV) array directly connected to Honda's manufacturing operation in Swindon was switched on. The installation consists of 21,300 ground mounted panels covering a development area of 32 acres. The array has a peak output of 5MW, and will generate 4.2 - 4.6 GWh of electricity per year enough to power over 1,000 houses. This is the third and biggest solar array directly feeding the Honda site.

Volkswagen Group's main distribution warehouse near Tamworth also installed a solar PV array in 2011, generating 27MWh of electricity.

In 2011 Perkins installed 260 solar panels, equivalent to 60kW, on the main building at its Eastfield site. It's estimated the solar panels will generate around 52,000 kWh per year.



All data and graphs are available online for 2011 performance in energy, CO₂, water, VOC and waste to landfill and recycling.



Water use followed a similar positive trend to energy, falling 10.8% (absolute) and **14.9% per vehicle**. Signatories also reduced **per vehicle waste to landfill by 19.8%** on 2010 and 83% since 2000. The waste absolute figure also dropped by 23.7% on 2010 despite an increase in manufacturing volume. Optimisation of vehicle painting processes resulted in a further drop in Volatile Organic Compounds (VOC) emissions. In 2011, **VOC emissions from cars and van manufacturing were 41% and 32% below the legal requirements**.

SMMT developed further guidance and tips for saving water and waste management in 2011, which follow on from the successful launch of the Dealer Energy Efficiency Guide in 2010. These follow many of the same basic principles of how to become energy efficient and suggest adopting a seven-step action plan for change. Please see online for details.

www.smmt.co.uk/industry-topics/environment/dealer-energy-efficiency

GKN Autostructures Supplier resource efficiency club

To understand how to reduce its carbon footprint and reduce waste to landfill, GKN Autostructures set up a resource efficiency club where guidance and support is offered to its suppliers with the help of the Manufacturing Advisory Service and Briar Associates. Topics for discussion have been awareness of the Carbon Trust Standard, the Carbon Reduction Commitment, Climate Change Levy, energy management systems and environmental management systems. Guest speakers have included ABB, Siemens, The Carbon Trust and The Manufacturing Advisory Service.

The club's aim is to highlight opportunities for reducing environmental impact and was set up in response to the major automotive OEMs' environmental requirements for its suppliers.

Ford Green manufacturing plan to slash landfill waste

At the ISO14001-accredited Ford Dagenham Estate, the environmental team actively pursues Ford of Europe environmental objectives. Of the 5,937 tonnes of waste produced at Dagenham in 2011, 85% was recycled and 15% went to landfill.

The Dagenham Engine Plant is currently working on an 'oil reclamation' process which, if successful, will eliminate virtually all of the remaining 15% landfill.

End-of-life-vehicles

Vehicle manufacturers' recycling networks have achieved the 85% (by weight) recycling/recovery target imposed by the End-of-Life-Vehicle Directive since its introduction in 2006 and the automotive industry supports the recycling industry's moves to develop new processes to meet the challenging 95% target by 2015. 10% of this target needs to be met through energy recovery from 2015, but cannot happen until UK Government approves planned processes.

Further detail is on the SMMT website.

Supply chain emissions

SMMT members are committed to reducing the impact of transport related greenhouse gas emissions. The SMMT UK Logistics Forum started a project in 2011 aiming to establish a standardised approach for measuring and reporting CO₂ and other emissions related to transport in the supply chain. The project began by generating a matrix of various methods and assumptions currently in use.

Several larger SMMT members, such as BMW, CAT, Ford, GM/Vauxhall, Honda, Jaguar Land Rover, and others have already developed and used different calculation methods. However, they intend to review their processes and adopt a consistent approach across the industry.

The project has been raised at a European level and several companies in other EU Member States have expressed their interest in joining the project in 2012.

For further information, contact memberservices@smmt.co.uk

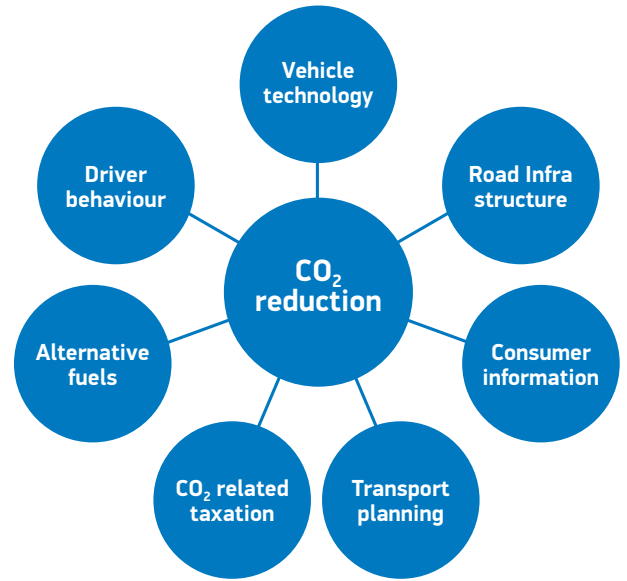
Vehicle Performance

Integrated approach

The industry's experience in driving down CO₂ emissions from vehicles has shown the EU strategy cannot rely solely on vehicle technology improvements in the longer term. An integrated approach represents the most cost-effective way to achieve CO₂ reduction through better road infrastructure, congestion reduction measures, better infrastructure for alternative fuels and energy sources, as well as taxation based on use, consumer information and eco-driving. In its last progress report⁽⁴⁾, the European Commission focused specifically on taxation, consumer information and ecodriving as having made limited progress

All the above factors also affect noise and air quality - see SMMT website for more details

www.smmt.co.uk/sustainability.



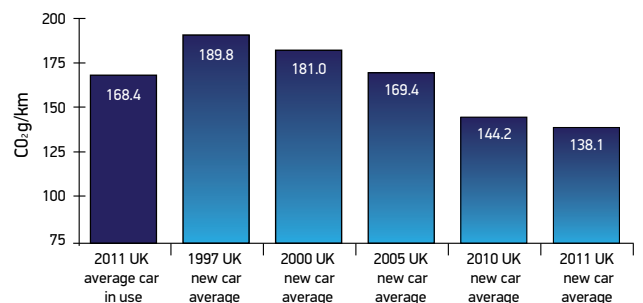
Toyota Green Month 2011

Since 1973, Toyota in Japan has traditionally celebrated Green Month in June by engaging staff in activities that promote environmental awareness. In 2011 Toyota GB celebrated Green Month with a range of activities, including 120 staff members participating in a Hybrid Challenge, to see who could achieve the best mpg on a set route. They achieved an average 71.6 mpg with the winning staff member achieving 99.9 mpg. A green charity of the month was also voted for by staff members, helping to introduce local conservation projects to Toyota GB. Green Month 2011 achieved high levels of staff engagement, with 85% of staff wanting to see more activities like those held during Green Month.

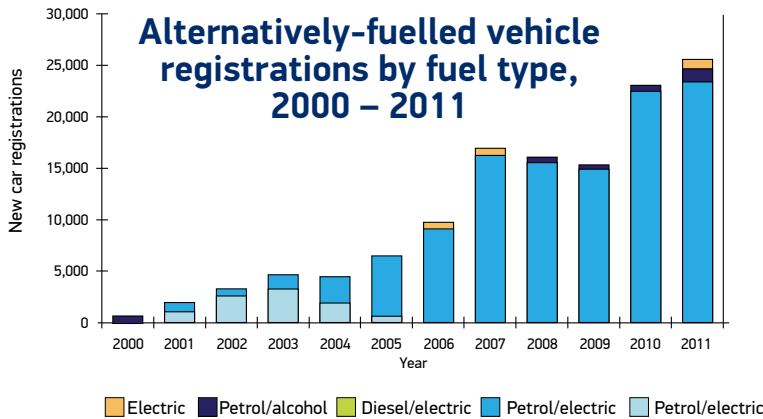


The automotive sector has invested huge resources to develop and bring to market lower CO₂ emitting technologies. This sustained progress in new car efficiency has helped to deliver a 10.2% reduction in CO₂ emissions from all cars in use between 2000 and 2010 as the new technology infiltrates the vehicle parc. Further progress on reducing emissions will be achieved by manufacturers delivering more efficient products, continued support from government and policy makers to facilitate the take-up of these vehicles and consumers purchasing them. **A new car bought in the UK is now 18.0% more efficient than the average car in use in the UK.** If the rate of vehicle replacement could be increased, the rate of emissions reduction would bring greater environmental and efficiency improvements.

Average new car CO₂ emissions 1997-2011



Registrations of alternatively-fuelled vehicles (AFVs) passed 25,000 units for the first time, boosted by a rise in electric vehicle volumes as mainstream models entered the market place and consumers took advantage of government's Plug-In Car Grant⁽⁵⁾. Petrol-electric hybrids, which accounted for 92% of all 2011 AFVs volumes, had average CO₂ emissions of 103g/km, 25% lower than the UK average.



Please see SMMT CO₂ report for details www.smmt.co.uk/co2report

Noise

In December 2011, the European Commission made a new proposal⁽⁶⁾ for further limiting noise from all categories of vehicle. The objective of the proposal is to ensure a high level of health and environmental protection. The proposal includes reviewing test methodology and noise limits.

The UK automotive industry is continually working to improve the environmental impact of its products and recognises the need to ensure stringent maximum and minimum noise limits, while ensuring safety and industry

competitiveness are a priority. Industry has four key areas of concern: the test speed used, lead times, vehicle categorisation and noise limits needing to be achievable for the diverse range of vehicles produced in the UK.

The European institutions will be considering the Commission proposal through 2012.

Further information on vehicle environmental performance (alternative fuels, petrol, diesel, alternative powertrains) can be found in SMMT's New Car CO₂ report 2012.

BMW Group Drives sustainable mobility for London 2012 and beyond

BMW has led the Dow Jones Sustainability Index for seven consecutive years and, as the Official Automotive Partner of London 2012, will provide low-emission diesel, hybrid and electric cars as well as motorcycles and bicycles to the London Organising Committee of the Olympic and Paralympic Games (LOCOG). BMW's fleet is representative of a potential future mix of vehicle types and powertrains that will keep our cities running in the short/medium term, combining electric and hybrid powertrains with efficient diesel engines. Together, the various elements of BMW's fleet achieve 116g/km CO₂, beating LOCOG's challenging 120g/km CO₂ average emissions target.



Leyland Trucks DAF Aerobody to reduce fuel consumption

Leyland Trucks has added the DAF Aerobody to its range of conventional box and curtain-sided bodies built on the production line at the Leyland truck plant in Lancashire. Computational fluid dynamics were used in the design of a moulded roof fairing and cab collars, which are aerodynamically integrated with the DAF LF cab, a curved front part of the body, and a rear tailgate air diffuser over the rear frame. Compared to a similar capacity conventional 'square' box body with a simple roof fairing, the Aerobody has been developed to reduce fuel consumption by up to 8% at cruising speeds, with equivalent savings in CO₂ emissions.



ENERGY AND RESOURCE EFFICIENCY

Volvo

World's first diesel plug-in hybrid - three Volvos in one

At the 2011 Geneva Motor Show, Volvo Cars unveiled the world's first diesel plug-in hybrid - a virtually production-ready Volvo V60 with CO₂ emissions below 50g/km. The plug-in hybrid, which will be launched in 2012, is the result of close co-operation between Volvo Cars and Swedish energy supplier Vattenfall.

The concept of a plug-in diesel hybrid gives the driver the very best of what an electric and diesel car can offer: very low fuel consumption and CO₂ levels, combined with long range and high performance. By simply pressing a button, the car gives the driver the option of how they want to drive:

- An electric car with a range of up to 32 miles.
- A high-efficiency hybrid with tailpipe CO₂ emissions averaging just 49 g/km.
- A dynamic and engaging car with a combined output of 215 + 70 horsepower and acceleration from 0 to 62 mph of just 6.9 seconds.



Informing customers

The colour coded new car CO₂ label has been almost universally adopted with 94% of dealers displaying it.

The Department for Business Innovation and Skills (BIS) and the Cabinet Office published *Better Choices, Better Deals: Consumers Powering Growth* in April 2011, aiming to help consumers get the best deal possible, and make business more dynamic in response⁽⁶⁾. This led to a project to look again at the car label design potentially to include running costs over a longer period than the 12 months currently on the label and consider whether the effectiveness of the label would be enhanced by providing information on how the model compares with others in that model range. There is also interest in developing the label for plug-in hybrids and pure electric vehicles.

The label design was last reviewed for the 2009 change from seven to 13 VED bands (A-M).

The Low Carbon Vehicle Partnership (LowCVP) is leading the project with Department for Transport (DfT), SMMT and the Energy Saving Trust, among other stakeholders, to develop and test designs with consumer focus groups and an online survey of 1,000 car buyers.

HPI and Experian to provide free used car labels

The used car label was developed in 2009 and adopted on a voluntary basis to continue the messaging and consumer information available to new car buyers. More than half a

million used car labels have been generated through the VCA system and a similar number through HPI. Approaching 1,500 dealers actively use the VCA service.

The DfT and industry still consider that the initiative is valuable. In 2011, DfT developed agreements with HPI and Experian to provide the used car label free of charge after DfT funding to the project ended in April 2012.

SMMT has been closely involved in ensuring a smooth handover from VCA to HPI and Experian and in raising awareness in the industry. Many dealers already use HPI or Experian to check for outstanding finance etc as part of the standard pre-sale checks for marketing a used car, so printing the label can become integral to standard practice.

Fuel Economy - Used Cars	Reg No.
<p>CO₂ emission figure (g/km)</p> <p>≤100 A</p> <p>101-110 B</p> <p>111-120 C</p> <p>121-130 D</p> <p>131-140 E</p> <p>141-150 F</p> <p>151-160 G</p> <p>161-170 H</p> <p>171-180 I</p> <p>181-200 J</p> <p>201-220 K</p> <p>221-250 L</p> <p>251+ M</p>	<p>C g/km</p>
<p>Fuel cost (estimated) for 12,000 miles</p> <p><small>A fuel cost figure indicates to the consumer a guide price for comparison purposes. This figure is calculated by using the combined drive cycle (town centre and motorway) and average fuel price. Re-calculated annually, the cost per litre is as follows - petrol 112p, diesel 113p, LPG 62p.</small></p> <p>VED for 12 months</p> <p><small>Vehicle excise duty (VED) or road tax varies according to the CO₂ emissions and fuel type of the vehicle.</small></p>	
Environmental Information	
<p><small>A guide on fuel economy and CO₂ emissions which contains data for all new passenger car models is available at any point of sale free of charge. In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel consumption and CO₂ emissions. CO₂ is the main greenhouse gas responsible for global warming.</small></p>	

PEOPLE AND COMMUNITIES

Overall automotive employment

2011 saw a **9.4% growth in the number of employees reported by signatories**. Signatories not only increased the employment level, but also raised the staff retention, resulting in **turnover reaching new record low of 2.9%**.

In 2011 **the number of lost time accidents dropped by 9.1%** on the 2010 level and reached 2.7 per 1,000 employees.

The number of training days per employee remained stable in 2011, reaching 2.94 training days per employee. This performance is in line with the pre-recession levels.

After pioneering the initiative in 2010, **over 40 automotive companies across the UK participated in 'See Inside Manufacturing' in June and October 2011**. The campaign gives young people across the UK a glimpse of what it might be like to work in one of the most innovative and vibrant advanced manufacturing sectors. It was successful

in attracting young talent with over half of those of school age who attended an event saying they would now consider a career in the industry, and more than 80% of teachers and careers advisors likely to advise a career in UK automotive manufacturing.

From design to manufacturing, the automotive sector presents a fantastic range of career opportunities for young people at all levels. The UK is home to some of the world's most productive manufacturing facilities and exciting technological innovations. Initiatives like 'See Inside Manufacturing' give young people contemplating their future a real chance to experience firsthand the diversity of our industry and the potential jobs and rewards it can offer. Attracting the brightest talent to our sector will be crucial to maintaining and improving the UK's role in a fast moving global industry.

For more information, see www.automotivecouncil.co.uk/join-the-industry/see-inside-manufacturing/

Vauxhall Future employees

In partnership with Bedford College and West Cheshire College, which are near to Vauxhall's two UK manufacturing facilities, Vauxhall hired 124 apprentices in 2011. Supported by Vauxhall's global network and resources, the manufacturing, engineering and commercial apprenticeships provide young people with the opportunity to gain hands-on experience while continuing their studies.

In addition, Vauxhall has operated a successful undergraduate scheme for more than 30 years, which had an intake of over 100 students in 2011.

Volkswagen Group Mentoring schemes

Audi was involved in many mentoring schemes in 2011, all of which are designed to provide important role models and to give students confidence to raise their aspirations and broaden their horizons.

'Can Do Women' is a project aimed at female students who are at risk of under-achieving. The mentors meet students fortnightly, starting at the end of Year Nine and following students through to Year 11. Audi was the source of all mentors for the 'Can Do Women' 2011/12 cohort. Out of the 14 girls, 13 have been reported as making improvements in their attendance, behaviour, motivation, self-confidence or achievement and many in more than one area.

Audi also provided mentors for the 'Steps to Success' motivational mentoring programme. On this programme, mentors meet more academically-able students over a six week period to boost self-esteem and talk through strategies for success.

The Compact Mentor programme is aimed at more vocationally-minded students who meet mentors every six weeks. They help students reflect on their performance and review their progress, while at the same time passing on advice about employability skills.



Skills, apprenticeships and employment in the UK automotive industry

Employment in the UK automotive industry: key facts

- New engineering and technology graduates have a starting salary more than 10% higher than other new UK graduates.
- From manufacturing and engineering to sales, maintenance and repair, there is a role in industry which suits every skill set.
- 719,000* jobs are directly dependent on the industry, of which 139,000 are in automotive manufacturing.
- Approximately 50,000 people are employed in UK motorsport and more than 7,500 jobs are within automotive R&D.

Apprenticeships, skills and training in industry

The UK automotive industry is a dynamic and evolving sector which demands a highly-skilled and flexible workforce. Apprentices are vital for the automotive industry to develop and maintain a world-class skills base.

- In 2011, 64% of UK automotive companies provided training with 58% of companies recruiting 16-year-olds, direct from school and 11% directly from university/higher education institutions.
- There are approximately 18,000 apprentices working in automotive retail.
- The Gross Value Added per employee is £61,100 within the UK automotive sector, compared with £35,000 across the whole UK economy.



Nissan

SASMI skills academy

Nissan Sunderland Plant's training partner, Gateshead College, opened an Academy to provide training and skills to those working and looking for jobs created in the emerging low carbon vehicle sector.

The Skills Academy for Sustainable Manufacturing and Innovation (SASMI), is the first of its kind in the UK – unique in its focus on electric vehicle battery manufacturing, testing and safety. Working closely with Nissan and other locally-based companies, SASMI put forward a plan to create 1,500 apprenticeships in the low carbon vehicle sector.

As a result, SASMI received a grant offer from the government's Regional Growth Fund further to develop the low carbon vehicle sector, advancing the North East as a national and international leader in the production of low carbon vehicles, associated technologies, infrastructure and the development of the workforce in these areas.



Mercedes-Benz

Apprentice Training Academy

In 2011, Mercedes-Benz we invested £2.1 million to build new Apprentice Training Academy facilities at UK site. The facilities will provide industry leading training for young people to become Mercedes-Benz qualified technicians and parts advisors and opens in Spring 2012. It's a great example of how Mercedes-Benz UK is making a long-term investment in the future of British industry.

150 apprentices a year enter its Advanced Apprentice Programme, from 10,000 applications received. In total, 1,148 apprentices have graduated from the Apprentice Academy and 60% of those who graduated are still with the brand 10 years later.

FUTURE VISION

A low carbon industrial agenda for the UK, Automotive Council roadmaps, sticky technologies

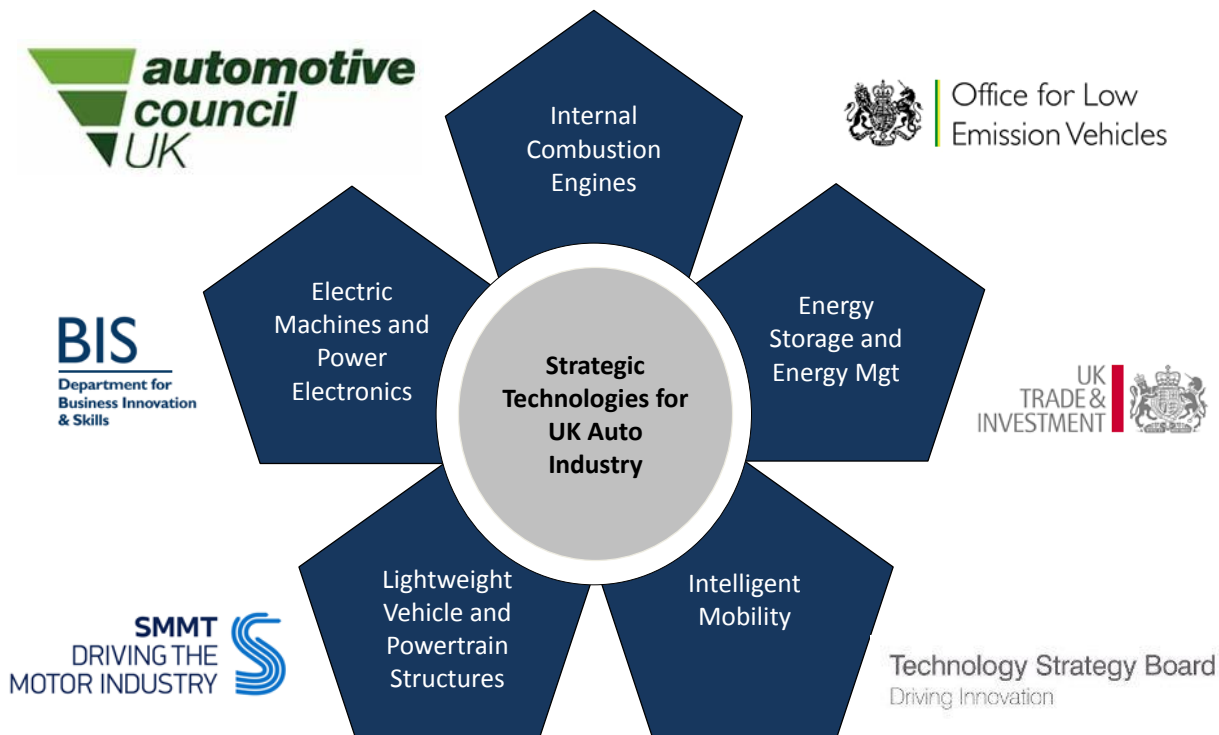
The preceding pages show the progress made and the £4 billion committed by industry to investment in UK automotive, securing jobs and guaranteeing our substantial contribution to the economy.

In the **Automotive Council, industry and government** have been working to set a **strategic agenda** for the UK industry, securing maximum benefit from the **global shift to low and ultra-low carbon technologies and developing the supply chain**. This agenda is about investment, capability building, competitive advantage, growth and jobs in UK automotive manufacturing, R&D and the supply chain.

If this is a shared agenda across Whitehall, it can become a central part of the UK industrial policy, which will rebalance the economy, deliver export-led growth and a low carbon economy.

The Automotive Council has developed a common view of the five priority R&D areas in which the UK has a competitive advantage and will get a good return on private and public investment. These strategic areas are known as the five 'sticky technologies' for UK automotive.

The UK's Five Strategic Technology Priorities



The Automotive Council has also sketched out its vision for technology development over the coming decades in its consensus roadmaps for cars and for commercial and off-highway vehicles (see above).

The transition to ultra-low carbon vehicles and fuels will continue to be a high priority in 2012. SMMT will focus its attention on **developing the early market for ultra-low carbon vehicles and infrastructure** development, continuing the downward trend of average new car CO₂ emissions and retaining challenging, but achievable car and van CO₂ targets that support a diverse and dynamic market.

The introduction of the Euro VI emission standard for heavy commercial vehicles, the development of the worldwide harmonised light vehicles test procedure, the European drive for greater resource efficiency and new EU noise limits and test procedures will create significant new challenges for industry.

SMMT is mapping-out the progress made by industry and next steps on air quality. A Ministerial Strategic Task Force will also see SMMT working closely with transport operators and other stakeholders to ensure policy makers effectively address the barriers to uptake of low emission trucks in the UK.

FUTURE VISION

Biofuels

Biofuels offer a way to reduce CO₂ emissions from transport⁽⁷⁾. At present biofuels account for around 3% by volume of blend in petrol and diesel fuel. New petrol cars are generally capable of running with a blend of up to 5% biofuel, while for diesels it is 7%, but concerns about the sustainability of biofuels have so far limited their reach. The Renewable Energy Directive requires the transport share by energy to rise to 10% by 2020. The Committee on Climate Change supports a rise to 8%, as in the Gallagher report. Industry is developing cars to run on higher blends of fuel, but at present not all cars can do so.

Carbon plan

In December 2011, SMMT welcomed government's Carbon Plan⁽⁸⁾ as a policy framework to deliver the ambitious CO₂ reduction targets set out in the legally binding Carbon Budgets. It sets out a number of CO₂ reduction pathways for each sector of the economy through the 2020s, all of which are consistent with the UK's carbon budgets to 2027 and the statutory 80% CO₂ reduction target for 2050.

SMMT seeks a plan that reflects the UK government desire for a strong, growing and globally competitive manufacturing sector. The plan needs to deliver greater incentivisation of private sector R&D investment and technology development in line with the joint industry and government Automotive Council work and its technology roadmaps. See the commercial vehicle and off-highway roadmap (Automotive Council, 2011)⁽⁹⁾.

Car and van CO₂

The Commission is expected to publish conclusions on the review of the 2020 targets for cars and vans before the summer of 2012 and an indicative Commission Communication on post-2020 strategy later in 2012. There is sound logic in focusing efforts on the development of a post-2020 strategy.

The Van CO₂ Regulation was only published May 2011 and the technologies available and their costs are unchanged since the targets were agreed in co-decision between the European Institutions shortly before that.

In January 2012, SMMT welcomed the news that the Plug-In Car Grant will be retained and a new Plug-In Van Grant created – reducing the cost of eligible vans by 20%, up to the value of £8,000⁽⁵⁾. This sends a strong signal to the global automotive industry about the UK's determination to be a leading market for ultra-low carbon vehicles. We will reap significant industrial and environmental benefits from establishing an early and flourishing ultra-low carbon vehicle market, attracting high value investment in R&D, innovation and automotive manufacturing.

HGV CO₂

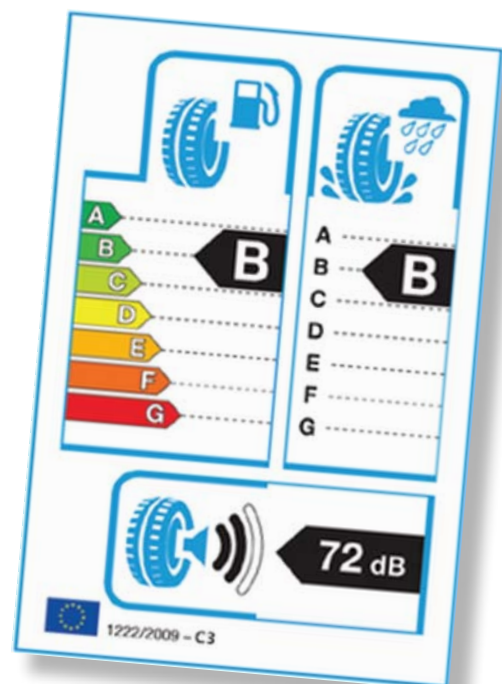
SMMT will continue to engage with the European Commission process to develop an HGV CO₂ reduction strategy. In the UK, the government's 2011 Logistics Growth Review led to the establishment of a Ministerial Strategic Task Force to look at the barriers to the widespread uptake of low carbon trucks and opportunities for interventions to overcome them. This will see SMMT working closely with DfT, transport operators (Freight Transport Association, Road Haulage Association), and stakeholders like the Low Carbon Vehicle Partnership and the Transport Knowledge Transfer Network (KTN).

A £9.5m InTechnology Strategy Board (TSB) competition for low carbon truck demonstration and refuelling infrastructure will also provide a welcome opportunity to showcase to a wider UK audience the capabilities of the truck technologies that are already available and to develop alternative fuel infrastructures across the country.

See www.innovateuk.org/content/competition/low-carbon-truck-demonstration-trial.ashx

Tyre labelling

Where end-users are offered a choice at the point of sale between different tyres to be fitted on a new vehicle, the EU Tyre Labelling Regulation 1222/2009 requires information to be provided on the fuel efficiency class, wet grip class and external noise from 1 November 2012. If all cars were fitted with low rolling resistance tyres, direct emissions of eight million tonnes CO₂ per year would be saved. The Regulation is also expected to improve road safety, emissions and tyre life through increased consumer awareness of tyre-related issues (eg correct inflation).



REFERENCES AND ONLINE CONTENT

References and detailed data on the automotive industry performance can be found at www.smmmt.co.uk/sustainability

1. SMMT Motor Industry Facts 2012
2. Automotive Council; Growing the Automotive Supply Chain Report
3. Department of Business, Innovation and Skills
4. Commission to the European Parliament, the Council, and the European Economic and Social Committee; Progress report on implementation of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles
5. Office for Low Emissions Vehicles (OLEV)
6. European Commission proposal for a regulation of the European Parliament and of the Council on the sound level of motor vehicles COM(2011) 856
7. Department of Business, Innovation and Skills and the Cabinet Office; Better Choices, Better Deals: Consumers Powering Growth Report
8. Department for Transport
9. Department for Energy and Climate Change; Carbon Plan 2011
10. Automotive Council; Technology Roadmap

Automotive glossary of abbreviations can be found at: www.smmmt.co.uk/acronyms

Signatories to this report

Bentley Motors Limited	Bentley
BMW Group including Rolls-Royce Motor Cars Limited	BMW, MINI, Rolls-Royce
Caterpillar	Caterpillar, Perkins
Ford Motor Company Limited	Ford
General Motors UK Limited	Vauxhall, Chevrolet
GKN Driveline Limited	GKN
Honda of the UK Manufacturing Limited	Honda
IBC Vehicles Limited	Vauxhall, Renault, Nissan Commercial Vehicles
Jaguar Cars	Jaguar
Land Rover	Land Rover
Leyland Trucks	DAF Trucks
Mercedes-Benz UK Limited	Mercedes-Benz, smart
Nissan Motor Manufacturing (UK) Limited and Nissan Technology Centre Group	Nissan
PSA Peugeot Citroën Automobiles UK Limited	Peugeot, Citroën
Toyota (GB) plc and Toyota Motor Manufacturing (UK) Limited	Toyota, Lexus
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