



# Towards Sustainability



## The Automotive Sector

**Third Annual Report**

## Signatories to the UK Automotive Sector Strategy for Sustainable Development

BMW Group Ltd

Dunlop Tyres Ltd

ERF Ltd

Ford Motor Company Ltd

GKN Automotive Ltd

Honda of the UK Manufacturing Ltd

Jaguar Cars Ltd

Land Rover UK Ltd

LDV Ltd

MG Rover Group Ltd

Nissan Motor Manufacturing (UK) Ltd and  
Nissan Technology Centre Europe

Perkins Engine Ltd

Rolls Royce and Bentley Motor Cars Ltd

Toyota (GB) Plc and Toyota Motor  
Manufacturing UK Ltd

Unipart Group of Companies

Vauxhall Motors Ltd

Volex Wiring Systems

Volvo Cars UK Ltd

## The Global Reporting Initiative

This third annual sustainability report follows the format of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. The format has been adapted for sector level reporting rather than the corporate level, for which the Guidelines are designed. The Global Reporting Initiative is a multi-stakeholder collaboration convened by the Coalition of Environmentally Responsible Economies (CERES) in partnership with the United Nations Environment Programme (UNEP). The Guidelines attempt to create a standard framework for sustainability reporting which, globally, numerous companies have started to pilot and/or use. The full guidelines can be obtained from [www.globalreporting.org](http://www.globalreporting.org).



## Report Coverage

Unless otherwise stated:

- the data in this report relates to the 2001 calendar year (trends in values over three years are reported in several instances);
- the sector data relates to the UK automotive sector;
- signatory data relates to the 18 signatories to the UK automotive sector strategy for sustainable development.

## Contact for this report

Environmental Affairs  
The Society of Motor Manufacturers  
and Traders Limited

Forbes House,  
Halkin Street  
London  
SW1X 7DS

Tel: +44(0)207 344 9200

Email: [sustainability@smtt.co.uk](mailto:sustainability@smtt.co.uk)

Web: [www.smtt.co.uk/sustainability](http://www.smtt.co.uk/sustainability)

<b>1 Chief Executive Statement</b>	
<b>2 Executive Summary and Key Indicators</b>	
<b>3 Sector Profile</b>	
3.1 The Society of Motor Manufacturers and Traders	3
3.2 UK Automotive Sector Overview	3
3.3 Trends and Driving Forces	4
<b>4 Sectoral Sustainability</b>	
4.1 Vision and Objectives	5
4.2 The Sectoral Sustainability Strategy	6
4.3 Further Commitments	7
<b>5 Stakeholder Dialogue</b>	
5.1 The Process	8
5.2 Stakeholder Dialogue – Key Issues	8
<b>6 Product Environmental Performance</b>	
6.1 Fuel Economy and Carbon Dioxide Emissions	12
6.2 Tailpipe Emission Standards and Expansion of Cleaner Technology	13
6.3 Vehicle Recycling	16
<b>7 Company Operational Environmental Performance</b>	
7.1 Environmental Management Indicators	18
7.2 Resource/Emission Indicators	19
<b>8 Economic Performance</b>	
8.1 Commercial Competition and Economic Prosperity	23
8.2 Contribution to the UK Economy	25
8.3 Employment	26
8.4 Supply Chain Efficiency	26
<b>9 Social Performance</b>	
9.1 Stakeholder Engagement	28
9.2 Road and Vehicle Safety	29
9.3 Employment Development	30
9.4 Community Involvement	32
9.5 Responsible Product Use	33







## Chief Executive Statement

*Welcome to the UK automotive sector's third annual sustainability report. The SMMT continues to develop the sectoral approach to sustainability reporting, engaging with all companies within the automotive supply chain and building a greater awareness of the business benefits of this approach.*

The UK automotive sector recognises that its long term success lies in its commitment and ability to balance economic progress with environmental care and social responsibility. This third annual sustainability report aims to outline the sector's progress in achieving this balance and meeting the objectives defined in the SMMT sustainability strategy.

The report follows the Global Reporting Initiative (GRI) format and provides data and trends from the 18 signatories to the sustainability strategy and the sector as a whole. In addition to summarising the sector's economic, environmental and social performance, it also aims to address topics of an increasingly global character and translate those to the UK context.

The UK automotive sector endured significant restructuring throughout 2001, but succeeded in maintaining a historically high new vehicle market and remaining a key contributor to the UK economy. The sector continues to make significant investments in developing cleaner vehicle technologies and has made positive steps to improve the performance of both manufacturing operations and products, notably in relation to energy efficiency and CO<sub>2</sub> emissions.

The SMMT is committed to working with its members to develop strategies that address the long term issues of importance to both the industry and external stakeholders. In 2002 for example, the SMMT Future Fuels Strategy Group developed a pan-industry vision of the long-term future of automotive fuels, and considered the options for a fuels strategy within a 20-year time frame in the light of the simultaneous need for CO<sub>2</sub> reductions, emission control and security of energy supply.

The UK automotive industry is committed to continue to address its environmental and social responsibilities, and demonstrate leadership in sectoral sustainability reporting. Engagement remains a key element of the UK automotive sector's sustainability strategy and we would welcome any feedback from readers so that we may continue to build a positive and robust relationship with our stakeholders.

**Christopher Macgowan**  
Chief Executive SMMT

## 2. Executive Summary and Key Indicators

This *Third Annual Sustainability Report* outlines the automotive sector's progress in addressing the challenges of sustainable development and contributes to an on-going dialogue with a wide range of stakeholders. The automotive industry has made significant progress in improving product performance as well as in addressing the challenges of minimising the impact of both its product and

manufacturing operations. The industry is working closely with the automotive supply chain, fuel producers and Government to ensure that vehicles in the UK offer consumers choice and benefits, while contributing to improvements in quality of life. Key results for the 2001 data reporting year are outlined in the table below.

Table 2.1 Key Performance Indicators	1999	2000	2001
Number of signatories	11	18	18
<b>Economic Performance (Sector)</b>			
UK automotive sector turnover (£bn)	46	43.4	44.1
Total UK number of new vehicles produced	1,972,528	1,813,759	1,685,018
Total new vehicles registrations	2,485,715	2,519,690	2,772,180
Total employees directly dependent on the sector	-	835,000	827,000
<b>Economic Performance (Signatories)</b>			
Signatories' combined turnover (£bn)	20.1	21.0	24.4
Total signatories combined number of employees	95,214	100,036	96,357
Total number of vehicles produced by signatories	-	1,527,642	1,470,659
<b>Product Environmental Performance (Sector)</b>			
Average new car CO <sub>2</sub> emissions (g/km)	185	181	177.7
Average new car fuel economy (mpg)	38.5	38.94	40.35
End-of-life recovery percentage	77%	80%	-
<b>Company Operational Environmental Performance (signatories)</b>			
Energy use (MWh)	6,110	7,013	6,671
CO <sub>2</sub> equivalent (tonnes) <sup>2</sup>	1,821,586	2,182,926	2,149,771
Emissions of VOC (kg) <sup>1</sup>	4,018,951	7,136,682	6,926,340
Water use ('000m <sup>3</sup> )	-	9,620 <sup>1</sup>	10,105
Waste to landfill (tonnes) <sup>1</sup>	54,954	80,399	125,860
Packaging waste for recovery (tonnes) <sup>1</sup>	10,900	20,272	16,768
Packaging waste for recycling (tonnes) <sup>1</sup>	1,802	5,058	6,344
<b>Social Performance (signatories)</b>			
No. of signatories engaging with external stakeholders	6	9	12
No. of signatories participating in community development programmes	7	15	13
Signatories' average staff turnover	-	10%	7.6%

*1 Includes data from 17 out of 18 signatories    2 Does not include CO<sub>2</sub> from transport and logistics*

Although the year 2001 was marked by global economic uncertainty, the UK automotive sector's economic performance remained robust. The total number of vehicles produced in the UK was down on 2000 levels, but new vehicle registrations reached a record annual total, turnover for both the sector and the signatories increased on 2000 levels and investment remained high.

Signatories made significant progress in improving the fuel efficiency of new vehicles and reducing related CO<sub>2</sub> emissions whilst improving energy efficiency in manufacturing operations. However, due to considerable

restructuring, a high level of structural and machinery waste was generated and increased waste production on 2000 levels. This would not arise under normal operating conditions.

Social indicators show that good progress was achieved by both the sector and the signatories. Efforts focused on continuing to provide a high level of employment, engaging actively with stakeholders, improving the safety for occupants and other road users and actively promoting responsible product use.

### 3. Sector Profile

#### 3.1 The Society of Motor Manufacturers and Traders

For 100 years, the Society of Motor Manufacturers and Traders Limited (SMMT) has represented the automotive industry in the UK. With over 600 members, the society has a large range of member companies and represents the whole value chain including vehicle manufacturers, component suppliers, research, design and engineering companies, retailers, consultants and many others, from the largest multi-national public companies to small private firms. The Society works closely with government agencies at both a national and international level. In the UK, such close cooperation has created a unique partnership between international vehicle manufacturers and component suppliers – the SMMT Industry Forum.

#### 3.2 UK Automotive Sector Overview

##### Manufacturing

In 2001 the UK automotive sector generated just over £44.1 billion of annual sales (a 1.6 per cent increase on 2000). This growth was achieved despite significant restructuring in the component, car and commercial vehicle sectors and is also reflected in the sector's total value added and share of total manufacturing turnover. This on-going restructuring which impacted the sector throughout 2001 focused on (1) the shutting down of car manufacturing facilities (e.g. two major UK manufacturers each closed a major car manufacturing facility in 2001), (2) shifts in activities (e.g. one major player in the UK stopped car production to focus on engine production) and (3) launch of new models (during the launch phase of a new model, production is not at its optimum level and this applied to

several UK manufacturers in 2001).

This inevitably impacted the vehicle manufacturing results as well as employment levels. The total number of passenger cars manufactured in the UK in 2001 was down 7.2 per cent on 2000 levels and employment was down 4.9 per cent. However, the sector is recovering from this transition period and is expected to increase production by about 10 per cent in 2002-2003.

##### The Market

The UK new car market grew to its highest ever total in 2001. Whilst new car demand across the EU rose by just 0.5 per cent in 2001 to 14.4 million units, the UK new car market climbed 10.7 per cent to 2.45 million units. Growth was very much concentrated within the private sector and focused around supermini models, the lower medium segment and the diesel segment which climbed by almost 40 per cent to account for 17.8 per cent of the market. This general down-sizing in the market place and technological advances have helped reduce the environmental impact of new cars. The market this year is forecast to rise to over 2.5 million units and post a new record level. Commercial vehicle production was sustained at around 200,000 units in 2001. Demand improved, mostly on the back of surging demand for medium and heavy sized vans. Levels are expected to cool a little in 2002 towards the bottom end of this range. Total CV volumes though should end 2002 broadly in line with 2001 levels.

▀▀▀ [Section 8.1 Economic Performance](#)

Table 3.1 Sector fact Sheet	2000	2001
Automotive sector turnover	£43.4bn	£44.1bn
Share of total manufacturing turnover	9.1%	9.3%
Total Net Capital Investment	£2.26bn	£2.17bn
Automotive sector value added	£8bn	£8.6bn
Total employees directly dependent on the automotive sector	835,000	827,000
Value of exports	£19.8bn	£18.9bn
Percentage of total UK exports	10.5%	9.9%
Sector value added share of UK GDP	3.5%	3.5%
UK sector share of global passenger car production	4%	3.7%
No. of UK volume passenger car manufacturers	9	9
No. of UK CV manufacturers	10	10
Number of cars and CVs produced	1.81m	1.68m
New car registrations	2.22m	2.45m
Cars and Light CVs on the road	29.9m	31.1m



### 3.3 Trends and Driving Forces

The automotive sector in the UK faces the same pressures and challenges found in most other general engineering and manufacturing sectors. In order to maintain its global competitiveness, the sector underwent major reorganisation and saw the introduction of new management practices and innovations that have influenced the entire sector and resulted in increased quality, safety and environmental performance. The component sector also underwent significant consolidation and is increasingly dominated by large multi-national firms. Outside these conglomerates, there are a large number of SMEs engaged in the automotive sector. SMEs are more vulnerable to the overall changes and need to focus on productivity improvements combined with ongoing pressures to reduce the cost of supply.

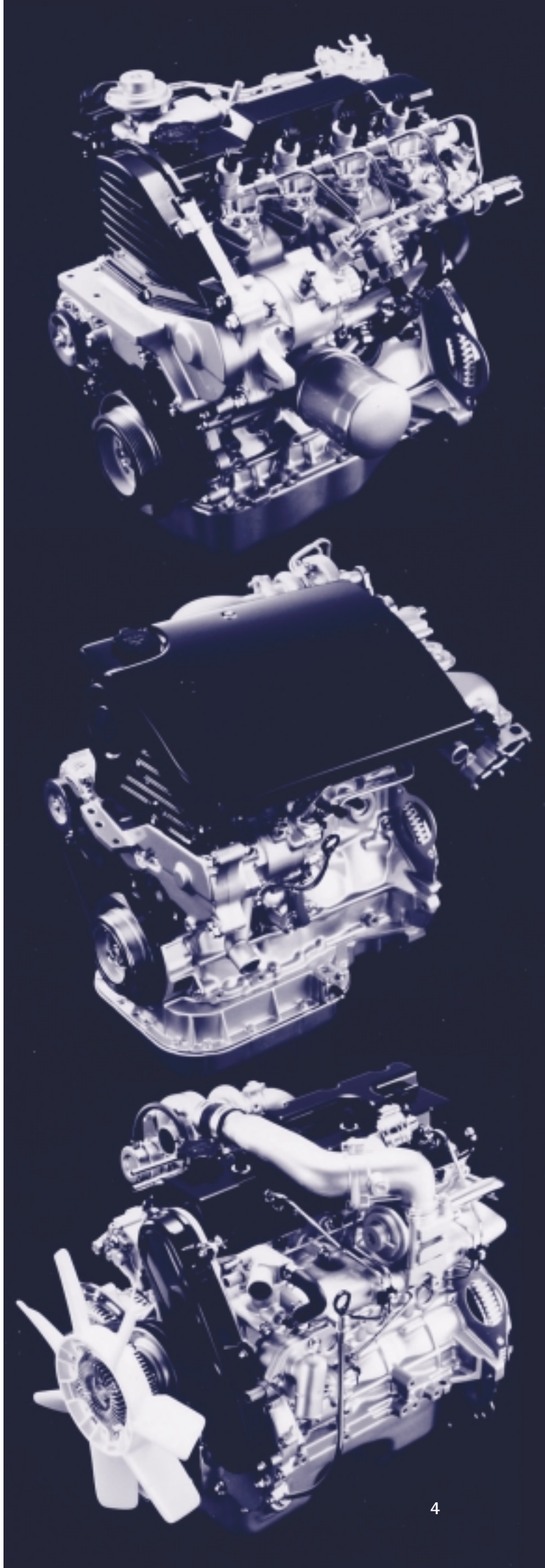
However, the sector remained a key part of the UK industry and hosts nine of the world's leading volume manufacturers, ten commercial vehicle production facilities and 17 of the top tier one suppliers<sup>1</sup>. The automotive industry remains a leader in best practice management, technology/process transfer and is a major source of innovation for the general manufacturing industry.

The UK has also become a centre for engine development and production for both petrol and diesel variants. In the last year, three major volume manufacturers have decided to invest in significant engine production facilities in the UK. Forecasts suggest that this sector is set for steady growth with a high proportion of the engine sourced nationally.

The UK automotive industry must capitalise on the technologies, resources and capabilities available in the UK and must maximise its global competitiveness through:

- establishing a strong industry-government partnership;
- continued dialogue at the strategic level to develop the sector as a premium source of manufacturing and engineering expertise;
- industry-led programmes to improve efficiency in the supply chain;
- cost saving through waste minimisation and energy efficiency.

<sup>1</sup> *Automotive Innovative and Growth Team (2002), design, development and manufacture report.*



## 4. Sectoral Sustainability

### 4.1 Vision and Objectives

The motor vehicle has made a major contribution to improving the quality of life for everyone by providing unprecedented access to mobility. However, the automotive industry recognises the considerable sustainable development pressures it faces in its everyday operations and in the use of its products. The automotive industry recognises that its long term success depends on its ability to address those challenges and balance economic progress with environmental care and social responsibility.

'Sustainable transport should contribute to social and economic welfare, without harming human health and the environment!'

ACEA 2001

The SMMT sustainability strategy (and related activities) forms a major contribution to the sector's continuous efforts in developing a vision of sustainable mobility and in addressing environmental, societal and economic pressures. During 2001-2002, the SMMT and the signatories had an active programme in place, which included the development of the business case for sustainability in the supply chain, regional seminars and the development of best practice guidance. Although the total number of signatories to the strategy remained unchanged in 2001, a larger number of companies throughout the supply chain became involved and showed interest in both the strategy and the programme. This was achieved through training and raising awareness.

The UK automotive sector fully supports the Government's call for establishing a strong partnership with industry. It will remain actively engaged in key technological, policy and regulatory areas and will continue to play a leading role in the development of a low carbon and integrated transport system. However, it also calls on the Government to ensure inter-operability of transport modes and to commit to better exploitation of technologies, resources and capabilities available in the UK in order to accelerate the development of a more sustainable transport system and make Britain a leader in the field.

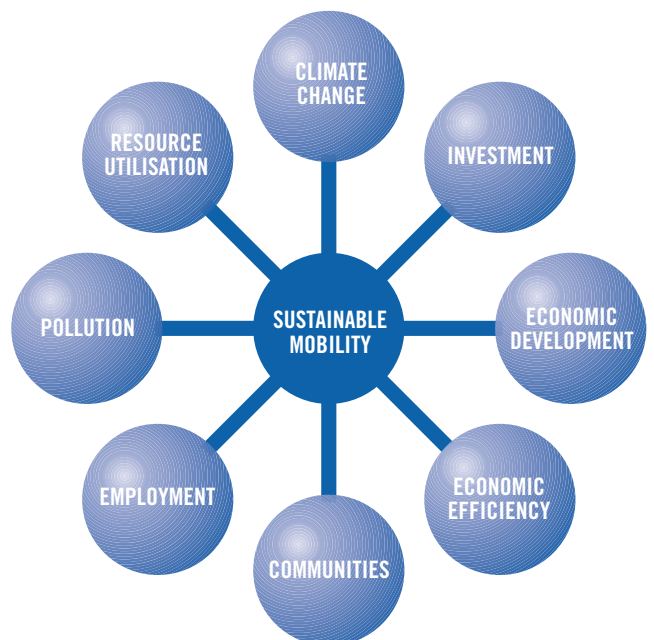
### Sustainable Mobility

In developing a vision of sustainable mobility, the sector has identified a number of themes where sustainability challenges arise and which involve the vehicle's lifecycle – design, manufacture, use and disposal. These are summarised in the diagram below.

As illustrated in this report, the sector is positively engaged and is actively addressing some of the challenges arising under these main themes with the aim of achieving a number of generic objectives:

- Minimise greenhouse gas (GHG) emissions;
- Maximise the use of recycle, sustainable fuels and materials;
- Minimise and control pollution of air, water and land;
- Enhance a skilled and stable workforce and raise employment standards;
- Engage actively and positively with stakeholders;
- Work towards 'mobility for all' and take a significant role in the development of an improved and integrated transport system;
- Develop and improve company structure and technology;
- Maximise company competitiveness and development;
- Maximise the sector's contribution to overall economic development.

The generic objectives listed above are all closely linked and are related to the commitments of the sectoral sustainability strategy. Signatories have made significant progress in addressing some of the issues of concern and towards meeting these objectives, as highlighted in the following chapters.





## 4.2 The Sectoral Sustainability Strategy

### Review of the Strategy

In the second annual report, SMMT and the signatories made a commitment to review the sustainability strategy<sup>2</sup> 'Towards Sustainability' which forms the building blocks of this report and the sustainability programme. The strategy was therefore reviewed internally by SMMT and the signatories and externally by the Sustainable Development Commission. The main findings are outlined below.

**INTERNAL REVIEW** – A review of the overall structure as well as individual objectives was carried out by the SMMT and the signatories. It was felt that the strategy, in its current form, still provides an adequate framework to continue progress across the triple bottom line and report on the performance in meeting the objectives of the strategy. Indeed, the principles outlined in the strategy remain valid and attention should be turned to the indicators used to report on the performance in meeting the strategy's objectives. It was agreed by the signatories that indicators should be further developed, some modified and some normalised in alternative ways. Hopefully this is adequately reflected in Sections 6-8.

**SUSTAINABLE DEVELOPMENT COMMISSION (SDC)** – An assessment of the strategy was carried out by SDC within the context of the DTI Pioneers Group. Some of the main findings include:

- The strategy is particularly strong in its involvement of a wide range of stakeholders in the development and achievement of the strategy;
- The strategy looks beyond its own production process and seeks to influence sustainable development more widely. However, there is no specific recognition of the precautionary principle. It is important that the sector accepts this principle and it should not wait for proof of harm before acting;
- More could be done to provide data on unsustainable impacts of the use of motor vehicles such as the cost of pollution, congestion and road accidents. However, these areas are recognised and identified as areas where action is needed;
- Selection of indicators and data are well developed and the reporting and reviewing process clearly established. It could also include data on transport, workplace safety, pay and productivity;

- Within a strategy, there is a need to establish targets with timescales and plans for how they may be achieved. Target setting is at a very early stage and needs to be developed as a priority. The use of the signatory approach may facilitate this process (as opposed to having the whole sector making a public commitment). Challenging targets based on the indicators set out in the strategy should be at the heart of any future strategy or progress report;
- It is important to try to see the impact of the strategy as a whole, in addition to assessing the impact of the individual elements and targets.

### SMMT Stewardship

Addressing the challenges of sustainable development will bring significant changes to the entire sector and to the supply chain in particular. Their future survival may well depend on how well they minimise the threats and maximise the opportunities. Through the sustainability strategy, SMMT continues to provide member companies with a strategic framework for a wider adoption of sustainability principles, as well as a platform for engagement and reporting. The support provided by the SMMT was sustained throughout 2001-2002 and focused on:

- Third Annual Report - revising and improving the annual reporting process (inc. indicators);
- Development of the 'Business Case for Sustainability in the Automotive Supply Chain';
- Regional sustainability seminars organised for the automotive supply chain;
- Development of 'Best Practice Guidelines on Sustainability Principles' for the supply chain;
- Widespread dissemination of the sustainability programme amongst SMMT members (e.g. Aftermarket CV Activity Group, Component Section, etc), external audiences (e.g. DTI) and various industry sectors (e.g. Pioneers group).

<sup>2</sup> The UK automotive sector's sustainability strategy 'Towards Sustainability' can be downloaded from [www.smmt.co.uk/sustainability](http://www.smmt.co.uk/sustainability)

## Signatories

Founding Signatories	New Signatories	Leavers
1. BMW Group Ltd	12. ERF Ltd (2000)	1. Tennex Europe Ltd (2001) <sup>2</sup>
2. Dunlop Tyres Ltd	13. Honda of the UK Manufacturing Ltd (2000)	
3. Ford Motor Company Ltd	14. Jaguar Cars Ltd (2000)	
4. GKN Automotive Ltd	15. Land Rover UK Ltd (2000) <sup>1</sup>	
5. Nissan Motor Manufacturing (UK) Ltd and Nissan Technology Centre - Europe	16. MG Rover Group Ltd (2000) <sup>1</sup>	
6. Rolls Royce and Bentley Motor Cars Ltd	17. Perkins Engine (2000)	
7. Tennex Europe Ltd	18. Volvo Car UK Ltd (2000)	
8. Toyota (GB) PLC and Toyota Motor Manufacturing UK Ltd	19. LDV Ltd (2001)	
9. Unipart Group of Companies		
10. Vauxhall Motors Ltd		
11. Volex Wiring Systems		

<sup>1</sup>During the 1999 calendar year, BMW Group Ltd included Rover Group Ltd and Land Rover UK Ltd.

<sup>2</sup>In 2001, Tennex Europe Ltd resigned its SMMT membership due to restructuring activities

### 4.3 Further Commitments

#### Vision

- **VISION** - SMMT and the signatories will continue to develop a vision of sustainable mobility and will investigate how the issue can be better (and more openly) presented in the report;
- **UK PERSPECTIVE** - Decisions on strategic issues such as sustainable mobility are often taken by vehicle manufacturers at headquarters, outside the UK. The SMMT will therefore investigate how it can provide a better perspective of the UK industry within a global industry and better reflect some of the key decisions that are taken outside the UK by translating it to the UK situation.

#### Reporting

- **INDICATORS** - key areas where indicators will be improved or developed: social performance, resource efficiency and environmental performance of products (in particular toxic emissions);
- **BENCHMARKING** - SMMT will consider introducing a benchmarking tool in subsequent annual reports. Benchmarking would enable to rank individual signatories according to their individual sustainability performance, using a methodology similar to that used with financial indices (e.g. Dow Jones Sustainability Index). The introduction of such a tool would (a) act as a driver for improvement amongst signatories, (b) introduce a valuable self-assessment tool in the annual report and (c) improve the transparency and objectivity of the report.

#### Engagement and Dissemination

- **KEY ISSUES** - SMMT will continue to engage actively with Government and other stakeholders on key issues such as Corporate Social Responsibility, low carbon transport and responsible product use;
- **DIALOGUE** - SMMT aims to use innovative ways to approach stakeholders (e.g. a focal point or forum);
- **SUPPLY CHAIN** - SMMT will continue to disseminate the sustainability strategy and associated activities throughout the entire supply chain and will continue to assist companies by providing best practice examples as well as case studies.

#### Responsible Product Use

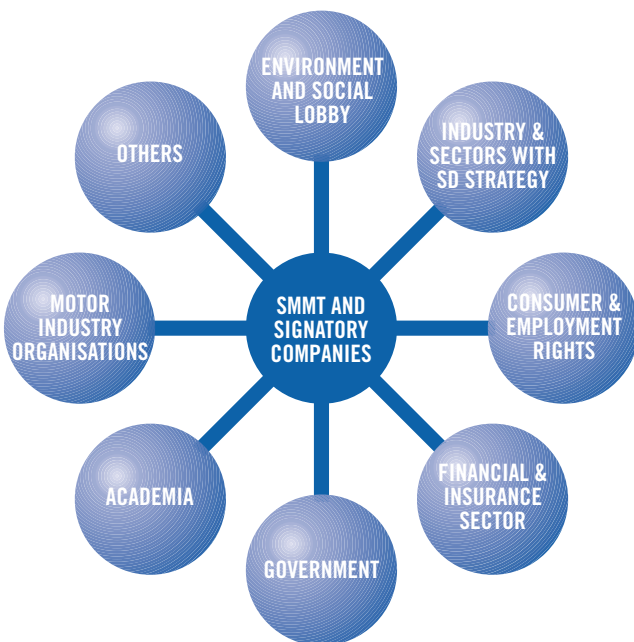
- **DISSEMINATION** - SMMT will investigate how environmental, safety and vehicle security information can be promoted or disseminated more widely and more effectively;
- **SAFETY** - SMMT will pay particular attention to safety-related issues and will investigate how lobbying/engagement/reporting on this important issue can be improved.

## 5. Stakeholder Dialogue

### 5.1 The process

Building on the experience and trust gained in 2000-2001, SMMT remained committed to engaging with all stakeholders on key issues such as low carbon economy and sustainable mobility. The SMMT strives towards equity and accountability in its communication with stakeholders, respecting democratic principles of transparency and participation. Open and continuous dialogue with stakeholders therefore remained an integral part of the sustainability programme throughout 2002. This third annual report aims to contribute to this on-going dialogue.

In the second annual sustainability report, the SMMT committed itself to widening stakeholder groupings and using different ways to approach stakeholders. This formed the basis for this year's main event which evolved from single stakeholder group meetings to a multi-stakeholders dialogue event which took place on 16th July 2002 and to which over 60 organisations were invited. The stakeholder groups were extended to include other industry sectors with sustainability strategies, academia and a range of other organisations with significant direct interest in the automotive industry (e.g. Envirowise), as shown in the diagram below.



'The terms in which sustainable development is discussed creates confusion and makes it appear as a new concept which must be adhered to.'  
Stakeholder, 16 July 2002

Whilst last year's single-group events were based on an open agenda, this year's event focused on the following issues:

1. Automotive Sector's Second Annual Sustainability report
2. The Sector's Key Sustainability Challenges:
  - Corporate social responsibility;
  - Low carbon transport;
  - Responsible product use;
  - The automotive supply chain.

The meeting was recorded and output distributed to all participants. It enabled identification of a series of key issues which, in developing this report, the SMMT has endeavoured to address as far as possible. The key issues, as well as stakeholders' requirements and expectations, are summarised in the following section.

### 5.2 Stakeholder dialogue - Key Issues

#### The Sustainability Strategy and Annual Sustainability reports

Background - For some time now, the automotive industry has recognised that addressing sustainability challenges and developing a sustainability strategy should be a key objective in order to ensure the long term viability of the sector. In the UK, the automotive sector was the first sector to launch a sustainability strategy with a commitment to annual public reporting. There are 18 signatories to the strategy, representing over 50 per cent of the sector's turnover in the UK. The strategy and associated annual reports are seen as a means to an end rather than an end in themselves. It is a continuously evolving process of which engagement, promotion and dissemination are essential elements.



## Stakeholder Comments

### INDICATORS

- **CONTINUITY** - The report must be transparent and show continuity (e.g. where there are changes in signatories) as well as being clearer about what it does and does not include;
- **BEST PRACTICE** - Some of the indicators are qualitative (e.g. social indicators – engagement with stakeholders). The use of case studies would help the reader to better understand the issue of concern and would provide the opportunity to disseminate/encourage best practice;
- **PRODUCTS** - Indicators should focus on both company operations and product. Environmental performance should include air quality factors other than CO<sub>2</sub>;
- **IMPROVEMENT** - Areas where indicators need to be improved or developed: social performance, resource efficiency, air quality (product).

### ISSUE COVERAGE

- **SUSTAINABLE MOBILITY** - Stakeholders share the view that the issue of 'sustainable mobility' is not adequately addressed in the second annual report and, given its importance, this may be a significant gap. The report provides an ideal opportunity to start developing a UK perspective or to translate decisions taken abroad to the UK situation. The report should be open about the reasons why the issue has not been explored in more depth.

### VISION AND OBJECTIVE

- **PERSPECTIVE** - The report should focus on the sector's strategy and where it is going (10-20 years perspective) and not just on what has happened in the last 12 months;
- **GLOBAL** - The report should explain the position of the UK industry within the global industry.

## Corporate Social Responsibility

**BACKGROUND** - The European Commission defines CSR as "a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment". Although there are differing views as to whether or not CSR requirements should become mandatory, the EC recognised in its July 2002 strategy that CSR is a voluntary endeavour largely dictated by business imperatives. In the UK, the Government set itself two key challenges: (1) *Promotion* - encouraging more organisations to adopt socially and environmentally responsible practices and (2) *Mainstreaming* - ensuring that responsible behaviour becomes an integral part of organisations' operations, and

not just a peripheral matter. The key tools that the Government aims to use are CSR guidance, best practice, fiscal incentives, benchmarking and socially responsible investment (SRI) tools.

**UK AUTOMOTIVE SECTOR'S RESPONSE** - CSR is considered by the industry as a fundamental element in strategic decision-making processes. The automotive industry supports the EU and UK Government objectives and has adopted the principles of sustainable development for a number of years. It is committed (a) to balancing economic progress with environmental care and social responsibility and (b) to reporting on its environmental, economic and social performance. The sustainability strategy, which outlines the commitments, is accompanied by annual sustainability reports which outline the sector's performance across the triple bottom line. A high number of SMMT members and signatories to the strategy have also adopted CSR principles individually. In 2001, seven signatories produced a corporate sustainability report and nine produced an annual environmental report in 2001.

➡ [Section 5.2, Sustainability Strategy](#)

## Stakeholder Comments

- **DEFINITION** - The main concern is the terms in which CSR is discussed. The current/planned legislative framework creates confusion and there are different views on what CSR means. Some view CSR as part of the broader sustainable development concept and not as a new concept which stands on its own. Others view CSR as 'sustainable development'. Therefore, it is up to the industry to define what CSR is for them and how it fits with sustainability (or vice versa). This is very much in line with the EU definition.
- **RESPONSIBILITY** - CSR also implies government responsibility. Government actions sometimes send confusing signals. For example: in the context of the congestion charging scheme, gas-powered vehicles will be exempted, irrespective of tailpipe emissions. This is not viewed as socially responsible.
- **IMPORTANCE** - CSR is a very complex and important issue that concerns the entire supply chain and should not be under-estimated. The current mistrust of corporate America is a good example of how important this issue is. It concerns both the social impact of company operations as well as the social impact of products.

■ **SCOPE** – How far does one go with CSR? For instance, a company totally committed to CSR would probably not produce sport utility vehicles (SUV). But on the other hand there is consumer demand for such products.

■ **PARTNERSHIP** – In order to reach the objectives of sustainable development, industry must establish a strong partnership with Government and ensure engagement, proactivity and involvement in setting the agenda. The annual sustainability report provides an opportunity to identify what is needed to develop this partnership and set out what the sector would like Government to do.

## The Low Carbon Economy

**BACKGROUND** – In April 2002 the Government's Performance and Innovation Unit (PIU) published the Energy Review which reports on the tasks facing Government, industry and society in addressing national CO<sub>2</sub> emissions in line with the Royal Commission on Environment and Pollution's recommendations (which includes a 60 per cent cut in CO<sub>2</sub> emissions from 2000 levels by 2050). It was followed by the launch of a consultation on energy policies in May 2002.

**UK AUTOMOTIVE SECTOR RESPONSE** – A number of achievements can be reported in relation to manufacturing operations (e.g. reductions in energy use and associated CO<sub>2</sub> emissions from manufacturing activities), product performance (e.g. continual reduction in vehicle CO<sub>2</sub> emissions) and resource use (e.g. vehicle fuel economy and recycling). More information on environmental performance is provided in Section 6 and Section 7 of this report. In March 2002, the SMMT Future Fuels Strategy Group also published its report recommending measures for the development and take-up of cleaner conventional and alternative fuels over the next 20 years (see Section 6.2). It is worth noting that the SMMT was an active member of the DTI Automotive Innovation and Growth Team which identified two key recommendations (see Section 8).

## Stakeholder Comments

■ **GOVERNMENT PARTNERSHIP** – The Government is deeply engaged in developing low carbon technologies and a major initiative is the Powering Future Vehicles draft strategy. It calls for the UK automotive industry to use the movement towards a low carbon transport system as an opportunity to build on competitive advantage in

cleaner technologies (the emphasis here should be on 'low carbon' and not fuel). The final strategy was released in August 2002 and emphasises the need for a low carbon vehicle partnership bringing together the different stakeholders. The strategy also proposes a first target which can be achieved through an industry/Government partnership.

■ **OPPORTUNITY** – The low carbon economy is viewed by stakeholders as an opportunity for both industry and the Government. For instance, fuel cell technology is not developed in the UK but has to be brought into the UK. It is an opportunity to make the UK a 'first mover' and leader in low carbon transport. Sectoral organisations such as the SMMT have a very important role to play in ensuring that engagement takes place and that progress is being made.

■ **HYDROGEN** – While hydrogen may be seen as the long-term solution by the automotive industry, there is a need to understand how it is going to be achieved and what the road to hydrogen transport entails. Furthermore, some stakeholders have reservations about hydrogen technologies (from renewable sources) as they are not particularly efficient and not yet cost-effective. It therefore questions whether this is the best way to achieve low carbon transport. It is viewed that there is a need to make sure that stakeholders are engaged and interact/move together, with industry being clear on what it wants. There is a need for a flexible strategy.

■ **AIR QUALITY** – It is important to bear in mind that it is not only about greenhouse gases (GHG) and CO<sub>2</sub>. Air quality is very important and other toxic emissions should be taken into account. There must be a coordinated response with a high level of honesty.

## Responsible Product Use

**BACKGROUND** – Motor vehicles have made major contributions to society. The car is a primary enabler of personal mobility, which many people regard as an essential personal right. However, the industry recognises that there are limits to its use and that alternative forms of mobility, or indeed alternative solutions to the need for mobility itself, can contribute to a more sustainable future.

**UK AUTOMOTIVE SECTOR RESPONSE** – Industry is continuously developing new vehicles with improved environmental performance (i.e. reduced levels of climate changing and pollutant emissions) along with increasing levels of vehicle

safety. It is equally important that motorists are encouraged to purchase the cleanest models available and to use these responsibly. Notably, 2002 saw the implementation of the new car environmental labelling regulations, the negotiated pedestrian protection agreement and improved Euro NCAP ratings.

### Stakeholder Comments

■ **UNCERTAINTIES** - In recent years, consumers have seen significant improvements in both environmental and safety performance of vehicles. But does the responsibility of manufacturers go beyond that? Where does one draw the line between driver responsibility and manufacturer responsibility? Or is it a Government issue (i.e. the issue of responsible product use is very closely linked to that of transport infrastructure). There are also uncertainties as to whether manufacturers provide enough information on the environmental performance of the vehicle.

■ **ENGAGEMENT** - This is viewed as a key debate and the SMMT must monitor actively developments in this area and engage appropriately (e.g. with the Health and Safety Executive and the Police).

■ **AWARENESS RAISING** - This is an area where perhaps there is a role for both industry and Government in educating consumers and raising awareness on environmental and safety issues. For example, fleet management is an important issue in the UK. Providing training to fleet drivers would be a starting point.

■ **UK** - Some stakeholders are concerned about the specific UK situation (in terms of environment and safety). For example, environmental information currently solely focuses on CO<sub>2</sub> emissions and does not take toxic emissions into account. This is also reflected in the tax regime (VED) which is solely based on CO<sub>2</sub> emissions. Environmental information must give a complete picture, must reach consumers simply and accessibly, and must be widely available.

■ **SMMT** has a role to play in promoting safety measures and environmental information and identifying/promoting best practice (as well as lobbying for safety measures such as training to become standard). While the SMMT is already engaged in such issues, it must be more widely acknowledged and translated into indicators that can be included in the annual sustainability report.

## The Automotive Supply Chain

**BACKGROUND** - Addressing the challenges of sustainable development will bring significant changes to the entire sector and to the supply chain in particular. In 2001, stakeholders told the SMMT to focus on feeding the sustainability strategy down the supply chain and ensuring that steps are taken to ensure that the supply chain is targeted for new signatories.

**UK AUTOMOTIVE SECTOR RESPONSE** - SMMT's 2002 sustainability programme focussed on disseminating the sustainability programme throughout the entire supply chain. It focused on presenting the activities and results of the programme to SMMT membership (non-signatories), Government, industry sectors, etc. The SMMT also organised a series of regional seminars aimed at showing the value of sustainability principles by presenting the business case and translating such principles into practical steps on how companies can start addressing sustainability issues and implementing them in everyday operations.

### Section 8.4, Supply Chain Efficiency

### Stakeholder Comments

■ Supply chain initiatives must take into account both the upstream and downstream supply chain. This should also be reflected in the report.

■ **BEST PRACTICE GUIDELINES** - The SMMT will develop best practice guidelines on sustainability principles which will be made available together with the third annual report.

■ **SMMT** - The role of SMMT in disseminating sustainability in the supply chain is very important. Indeed, whilst multinationals have the capability of undertaking sustainability programmes, SMEs may be struggling and might not be able to fully identify the benefits of doing so. This may be caused by a lack of knowledge and understanding. It is therefore key to develop trust and the SMMT has an important role to play (for example by disseminating best practice case studies).

■ **RESOURCES** - Resource productivity through the supply chain is an issue that has not figured at all and should be considered in the future.



## 6. Product Environmental Performance

This section summarises the signatories and the sector's performance in improving the environmental performance

of new vehicles. Table 6.1 summarises the performance and trends for the period 1999-2001. Each indicator is discussed in more detail in the following sub-sections.

	1999	2000	2001
UK average new car CO <sub>2</sub> emissions (g/km)	185	181	177.7
UK average new car fuel economy (mpg)	38.5	38.9	40.3
Number of models meeting Euro IV emission standard	15	51	75
Sales of alternative fuel/hybrid vehicles (no. units)	4,255	5,506	4,026
ELV recovery rate (%) <sup>1</sup>	77%	80%	-

<sup>1</sup> ACORD data for 2001 calendar year were not available at the time of writing

### 6.1 Fuel Economy and Carbon Dioxide Emissions

**Strategy commitment:** continue to improve new vehicle fuel efficiency

**EU commitment:** reduce CO<sub>2</sub> emissions by 25 per cent between 1995 and 2008 across Europe

#### Sector performance

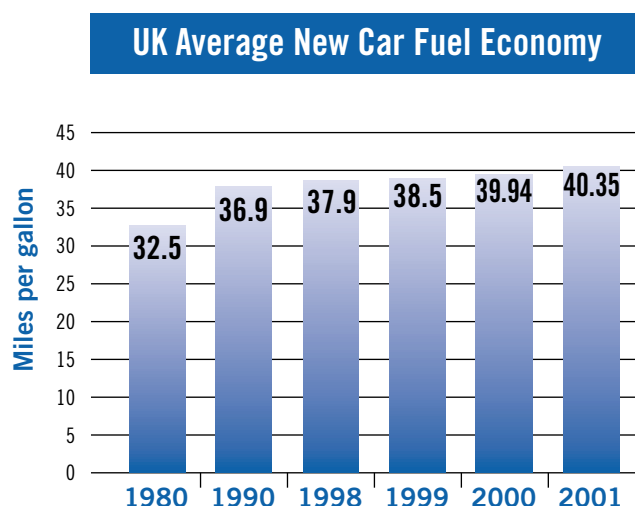
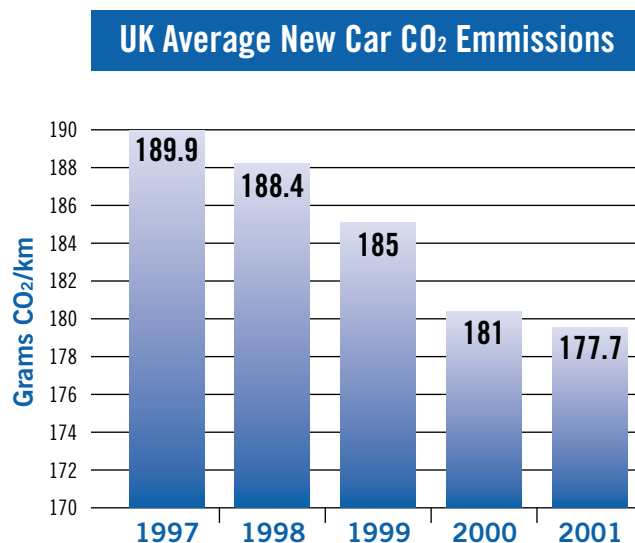
Through the continuous introduction of new technologies and designs, progressive penetration of diesel cars in the market and ongoing progress in vehicle fuel efficiency, the industry has made positive steps in reducing CO<sub>2</sub> emissions, at both EU and UK levels.

Vehicle manufacturers in the UK are working actively with the automotive supply chain, fuel producers and Government and are committed to significant future reductions. The average new car CO<sub>2</sub> emissions in the UK have fallen consistently since SMMT began monitoring the data in 1997. The graph below shows that average new car CO<sub>2</sub> emissions in 2001 were 177.7 grams per kilometre. That represents a 6.4 per cent reduction on the 1997 baseline and a 1.8 per cent reduction on the year 2000.

The difference between the UK and ACEA average is mainly due to the UK market characteristics: low diesel penetration (17 per cent in the UK compared to 38 per cent in the EU) and a high proportion of 4x4 and sports cars in the UK. It should also be noted the ACEA average does not include figures from Japanese and Korean manufacturers while the SMMT figure is all inclusive.

#### EU Perspective

On an EU level, figures from the European Automobile Manufacturers Association (ACEA) show that in 2001 the average CO<sub>2</sub> emission level of ACEA members' new car fleet (petrol + diesel) was 164g/km. This represents a 2.5 per cent reduction on 2000 and is below the 2003 target range of 165-170g/km. In line with another objective of the ACEA commitment, over 306,000 cars with CO<sub>2</sub> emission levels below 120g/km were sold in 2001, accounting for more than 2.5 per cent of total sales.



The CO<sub>2</sub> profile of the new car market peaked around 180g/km in 1997 but the distribution has since become more evenly spread. The proportion of cars under 140g/km rose to 9.4 per cent in 2001 and over 15,000 vehicles were registered that had CO<sub>2</sub> emission below 120g/km.

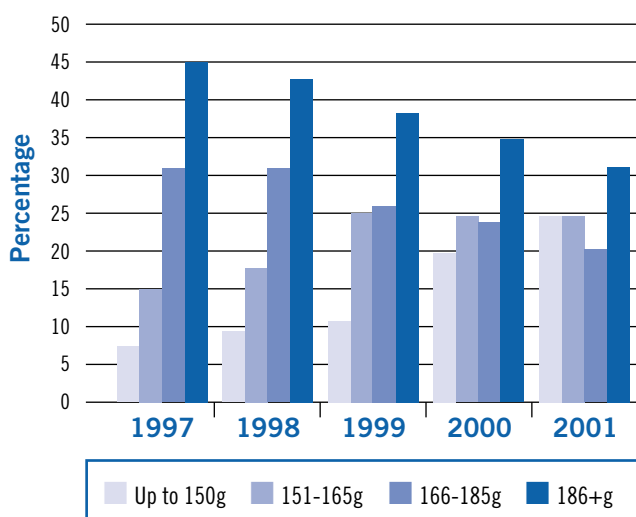
These reductions in CO<sub>2</sub> emissions are directly linked to improvements in the fuel economy of vehicles. As shown on the graph above, the average new car fuel economy has improved by just under 10 per cent in the last ten years with specific models today making 64 mpg. This is the result of extensive research and technical innovation in engine technology (e.g. DDI/GDI) and structure, materials and light-weight construction technology (e.g. passenger cabins made of carbon fibre reinforced polymers).

### Vehicle Excise Duty (VED) Profile of the New Car Market and CO<sub>2</sub> Performance

In 2001, a number of steps have been taken to promote the purchase and use of more efficient vehicles. Since March 2001 the UK has had a VED scheme based upon CO<sub>2</sub> emissions for new cars. This replaced the banded scheme based on engine size, which has been retained for existing cars. In general the rates are the same or lower than the standard VED charge of £155. Alternative fuel cars get a £10 discount compared with petrol cars, whilst diesel-fuelled cars face a £10 penalty. In the March 2002 budget an 'AA' class was established for cars with CO<sub>2</sub> emission below 120g/km.

The graph shows that the market was already shifting into the lower bands prior to the introduction of the new VED system in 2001, but the government hopes that the scheme helps to speed up this shift. It also shows that 24 per cent of all new cars are now in the sub-150g bracket - the lowest VED band - compared with 19 per cent a year ago, and less than eight per cent in 1997.

**New Car Market Distribution by VED Band**



### Incentives for low-CO<sub>2</sub> cars

The Government has introduced incentive for the purchase of low-CO<sub>2</sub> car: a new low rate of VED for cars emitting 120g CO<sub>2</sub>/km or less. The Government expects 34,000 cars to qualify in 2002/2003, rising to 105,000 in 2004/2005. The Budget also introduced enhanced capital allowances for the purchase of low-CO<sub>2</sub> cars (i.e. emitting up to 120g/km). This is expected to support the purchase of 7,000 low-CO<sub>2</sub> cars this year, rising to over 10,000 in 2003/2004. (HC Written Answers, 30 April 2002, Cols 725-6W)

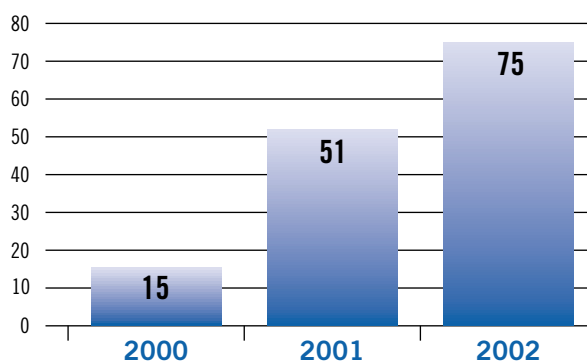
## 6.2 Tailpipe Emission Standards and Expansion of Cleaner Technology

**Strategy commitment:** *to continue to research, develop and bring cleaner technologies to the market to improve tailpipe emission standards*

### Exhaust Emissions

The Euro III emission standard was introduced in January 2000. It became fully effective from January 2001 for passenger cars and light commercial vehicles and from October 2001 for heavy diesels. A more stringent standard (Euro IV) takes effect from 1 January 2005 and will be fully in force by 2007. However, a continually rising proportion of new vehicles on sale in the UK already meet the Euro IV limits. To date, 17 manufacturers (UK and non-UK) already provide over 75 new (petrol) car models that meet the EURO IV limits. In 2001, six signatories (vehicle manufacturers) already offered gasoline vehicles meeting the Euro IV limits. For some of them this represented just above 10 per cent of vehicles sold whilst for others it represented 100 per cent of gasoline vehicles sold.

**Number of Models Available in the UK Meeting Euro IV Emissions Standard**



The motor industry's efforts to reduce vehicle emissions have yielded significant improvements by concentrating on design of induction and combustion systems, by use of after-treatment and by understanding the influence of fuel composition. This is demonstrated by the recent Auto-Oil 2 projections for the UK that show that, by 2010, significant reductions of all major pollutants will have been achieved as the current vehicle parc is gradually replaced by newer, less polluting vehicles.

## Alternative Fuel and Hybrid Vehicles

The use of innovative leaner engine technologies and a shift in buying patterns have enabled significant progress in the reduction of new car CO<sub>2</sub> emissions. However, it is recognised that in order to sustain this trend in the long term, there is a need to develop alternative technologies. Significant advances have already been made. For example, cleaner fuels such as ultra-low sulphur diesel and compressed natural gas (CNG) are available, together with bi-fuelled and electric vehicles. Options are broadened as significant breakthroughs continue to be made (e.g. hydrogen technologies, diesel particulate trap technologies, etc).

Table 6.2 Alternative Fuel	1999	2000	2001
<b>Cars</b>			
Dual fuel (petrol/gas)	3,993	4,893	2,764
Dual fuel (petrol/electric)	2	0	3
Electric	40	48	70
Other	1	3	3
<b>Light Commercial Vehicles</b>			
Dual fuel (petrol/gas)	156	457	1,071
Dual fuel (petrol/electric)	0	0	8
Electric	63	103	101
Other	0	2	6
<b>TOTAL</b>	<b>4,255</b>	<b>5,506</b>	<b>4,026</b>

As shown in Table 6.2 a total of 4,026 alternative fuel/hybrid vehicles were registered in 2001 (year of first registration). 87 per cent of those (3,500) were sold by signatories. This still represents a relatively small proportion of total sales but it is expected to grow rapidly as technologies develop.

Whilst registration of dual fuel (petrol/gas) cars has decreased in 2001 by 40 per cent on 2000 levels, it has more

than doubled for commercial vehicles.

2001 saw the launch of several hybrid and fuel cell vehicles which are the focus of a significant proportion of manufacturers' research and development budgets. Whilst the technology has advanced considerably in the last three years, the sales of such vehicles are yet to pick up in the UK.

### Hybrid Systems

Hybrid systems use conventional petrol/diesel engines together with an electric motor. One signatory launched a model using this technology which is highly efficient as the ratio of power provided by each system is monitored electronically, depending on speed and load, to keep the car in its most efficient operating mode. For instance, at low speeds, the petrol engine shuts down and the electric motor takes over which, in heavy traffic, makes the car emission free. During braking or deceleration, the electric motor acts as a generator transforming the kinetic energy of the wheels into electricity. This vehicle's emissions are almost 50 per cent below the 2005 EU emissions limit (Euro IV).

### Dual Fuel Range

A signatory has now introduced a full range of dual fuel cars which are all factory built, so as to ensure quality and performance. The two fuel systems are integrated into the floor of the vehicle, giving the same space in the trunk as all other petrol models. These vehicles are fully available in the UK but are selling better in other European countries where the infrastructure is more developed.



### Hydrogen Systems

Several car manufacturers have made significant advances in hydrogen technologies. One signatory completed a 100,000 miles test with prototypes. In this vehicle, the liquid hydrogen is pumped into the car by a robot that uses laser guidance to locate the pressure sealed nozzle. The tank is double-walled with multi-layered insulation and vacuum sealed and is designed to survive crashes and fires. The clean burning hydrogen combines with oxygen in the combustion chamber. The combustion by-product is water, which comes out of the tailpipe as steam.

### LPG Powered CV's

A major UK CV manufacturer (signatory) launched factory finished and warranted LPG powered products in 2000 and has since integrated the complete production process into its normal manufacturing operations. Servicing and parts support has also been integrated into existing structures and processes.

### The Future Fuels Strategy Group

In 2001, SMMT member companies established a strategy group to consider the future of automotive fuels and recommend measures to encourage the development and take-up of cleaner conventional and alternative fuels over the next 20 years. The group considered the options for a fuels strategy within a 20-year time frame in the light of the simultaneous need for CO<sub>2</sub> reductions, emission control and security of energy supply and developed a pan-industry vision. In its report, the FFSG has identified measures to encourage the development of clean fuels and low carbon vehicle technologies, including the build-up of mainstream markets and the necessary fuels infrastructure. It has also identified the importance of considering the entire 'well to wheel' life cycle of a fuel.

The key recommendations are as follows:

- The motor industry considers that hydrogen is the fuel that offers the greatest long term potential for reducing motor vehicle CO<sub>2</sub> emission;
- Government should engage constructively with the motor, fuel supply and other key industries affected to develop the optimum strategy to support a shared vision;

- Policy approaches need to consider the influence of product life cycle on technology introduction, including the time needed for product development and validation, a phased introduction to gain customer acceptance and a sufficient period of stability to achieve acceptable commercial viability;
- The UK Government needs to work in co-ordination with the EU and ECE to ensure a co-ordinated long term European approach to future fuel strategy;
- UK Government should establish a Hydrogen Task Force to develop and manage a (minimum) ten year hydrogen introduction strategy;
- Government and industry should participate in the development of international standards;
- Fiscal policies need to be developed and implemented with long term commitment to (a) make the use of hydrogen attractive to consumers, (b) provide capital purchase assistance and (c) promote infrastructure development.

### 6.3 Vehicle recycling

**Strategy commitment:** *to continue to facilitate efforts to improve the level of material recovery from End of Life Vehicles (ELV)*

#### ACORD Performance

The Automotive Consortium On Recycling and Disposal (ACORD) voluntary agreement was launched in the UK in 1997 by the automotive sector and its partners in order to improve the recovery of materials from 'End-of-Life Vehicles' (ELVs). The European Directive on ELVs sets a recycling target of 80 per cent by 2006 within an overall recovery target of 85 per cent. The sector has made significant progress in meeting this target and has been working to increase the recycling and recovery of both

metallic and non-metallic materials such as plastics, glass and rubber, which make up an increasing proportion of the overall vehicle weight.

As shown in Table 6.3, the UK scrapped 2,017,000 vehicles in 2000 which is equivalent to 2,108,000 tonnes. Of this, 11 per cent was parts re-used as parts, 69 per cent was recycled, giving a total of 80 per cent recovery. This recovery percentage was achieved using existing collection and dismantling/shredding infrastructure.

Table 6.3 All weights in tonnes*		1997	1998	1999	2000
Number of ELV vehicles (units)	Cars	1,700,00	1,600,000	1,600,000	1,832,431
	Vans	200,000	200,000	200,000	184,706
	<b>Total</b>	<b>1,900,000</b>	<b>1,800,000</b>	<b>1,800,000</b>	<b>2,017,137</b>
Weight of material for disposal		2,007,500	1,884,000	1,884,000	2,108,000
Weight of parts re-used (all types)		207,000	193,000	193,000	240,000
Materials recycling	Metals	1,256,000	1,147,000	1,195,000	1,402,000
	Non-metals	64,500	58,500	58,500	58,000
	<b>Sub-total</b>	<b>1,320,500</b>	<b>1,205,000</b>	<b>1,253,000</b>	<b>1,460,000</b>
Total re-use and recovery		1,527,500	1,398,500	1,446,500	1,700,000
Landfill of residue		480,000	485,500	437,500	408,000
<b>Recovery percentage</b>		<b>76%</b>	<b>74%</b>	<b>77%</b>	<b>80%</b>

\* ACORD data for 2001 calendar year were not available at the time of writing

Results for 2000 show a 10.8 per cent increase (200,000 units) in vehicles reaching end-of-life and being disposed of. This figure is still running at around half a million vehicles less than new registrations which means that the car parc is still growing, if more slowly than before. Dismantlers also increased the amount of material re-used, by one per cent to 11 per cent of the total weight of material available for disposal. The overall figure for recycling improved from 67 per cent to 69 per cent of material available reflecting small gains from both ferrous and non-ferrous metals.

However, the ELV directive requires recycling targets of 80 per cent by 2006 and 85 per cent by 2015 within overall recovery percentages of 85 and 95 per cent respectively. This 2015 target in particular will be difficult to meet in the UK as there is a potential of around 100,000 tonnes of shredder residue to be recovered as energy but a predicted spare incineration capacity of only 5,000 tonnes.

Other notable developments include:

- Vehicle manufacturers have continued to extend their coverage of models with dismantling manuals and parts marking which is now almost complete among major producers;
- Further updated editions of the computer-based dismantling information system, ISIS, have been produced and distributed to dismantlers;
- A generic specification for recycled propylene for automotive use has been developed and a project is under way to extend this to cover other polymers;
- Tyre burning trials at several UK cement kilns have proved successful in terms of both emissions and energy recovery (and fossil fuel substitution). Further permanent authorisations for burning of tyres have been granted and more applications for authorisation are envisaged. Another CARE project (funded through Landfill Tax Credits) is under development looking into the recycling of tyres by pyrolysis, thereby moving them up the hierarchy from recovery to recycling;

<sup>4</sup> Automotive Consortium on Recycling and Disposal, 2001 Report

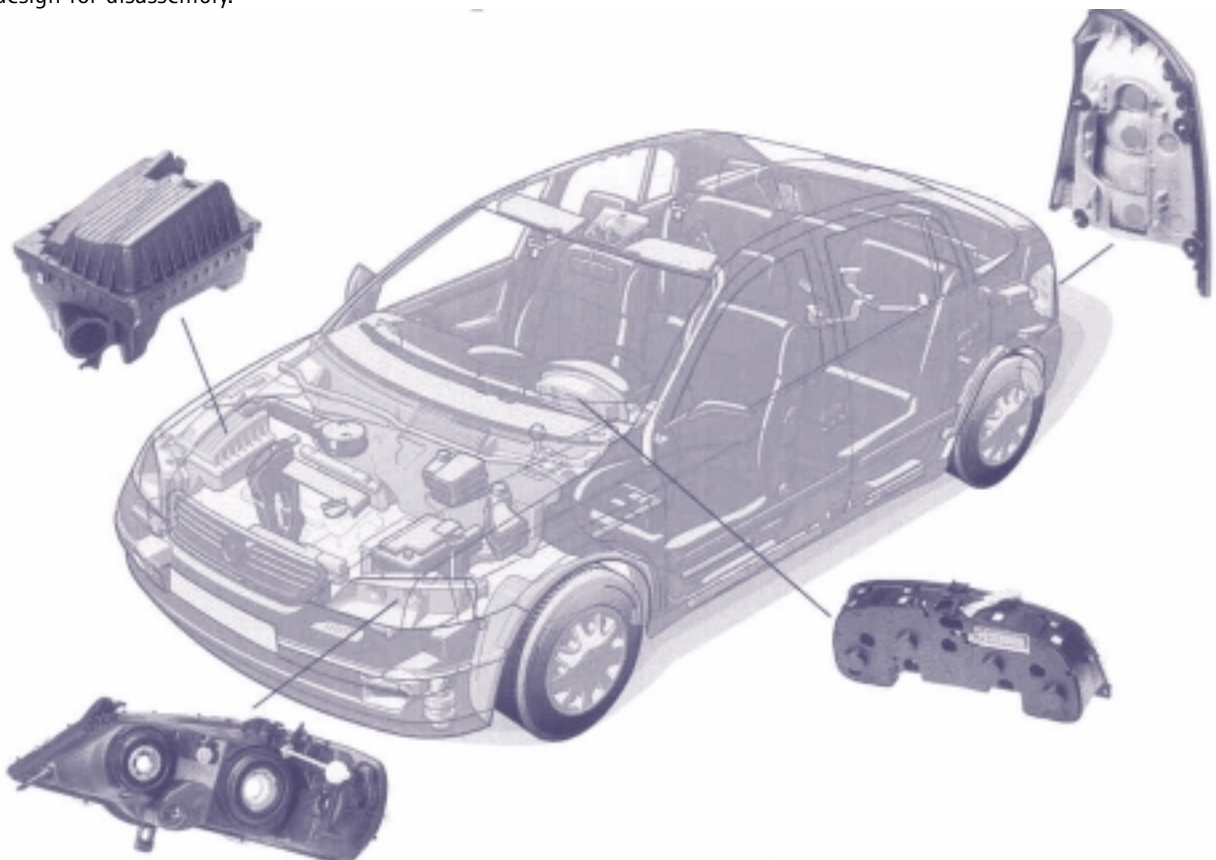
- The greatest threat to improving vehicle recycling at present and progression towards the 85 per cent recovery target by 2006 is the current status of the End of Life Vehicle Directive. The Government is yet to clarify many points outlined in the Directive. Few treatment operators are investing in facilities to meet the requirements of the directive as many of the technical requirements are yet to be clarified and financial returns are unclear.

### Signatory Performance

Individual signatories have made particular progress towards increasing recovery of materials from vehicles as well as increasing the use of recycled materials in vehicles. Some notable facts include:

- The recyclability of individual vehicles continuously increases.
- 'Design for recycling' principles are increasingly being adopted and implemented in the product design process. Some of the key principles applied by a particular signatory includes: (a) use of pure, recyclable plastics, (b) use of composite materials which may subsequently be recycled together as one compound, (c) application of appropriate joining methods such as plug-in connections instead of bolts, (d) use of high-quality secondary raw materials (recycled materials).
- some signatories perform teardown audits of vehicles to verify recyclability rating, ease and time of disassembly, and to demonstrate continuous improvement in terms of design for disassembly.

- Several signatories compile complete datasets in the IDIS (International Dismantling Information System) database. IDIS is an international system incorporating more than 20 car makers and the components/materials lists of over 20,000 car components. This allows for improvement in recycling rates and applies today to over 360 models.
- A new particular model contains more recycled materials than any previous vehicle of that make. For example, it contains over 23kg of non-metallic recycled material and utilises materials from old battery casings, carpets, packaging, reclaimed textiles and manufacturing off-cuts. This accounts for ten per cent of the plastics (by weight) used in the vehicle. The use of recycled plastic materials is illustrated below;
- A signatory introduced its own internal recycling standard. Within the vehicle range, 228 components contain some form of recyclates, which totals to an annual usage of 23,340t of recycled materials (EU production);
- A particular hybrid vehicle includes a high voltage NiMH battery weighing approximately 40kg. The battery contains 38 modules, each sealed and comprising six cells. In all countries where this model is sold, emergency services and roadside assistance services are informed on how to handle the battery. The manufacturer also established a dedicated NiMH battery recycling network. After collection, the batteries are transferred to a certified recycling company.



## 7. Company Operational Environmental Performance

**Strategy commitment:** *to continue to control and reduce the environmental impact of company operations*

Since the year 2000, the UK automotive sector has seen changing corporate strategies and significant restructuring which often resulted in changes in company operations as well as, in some instances, shifts in activities. This inevitably had an impact on the performance of signatories and is reflected in the data provided.

Since the number of signatories, the number of sites and the range of activities covered by the sustainability strategy vary year-on-year, the data presented in the following sections focuses on total combined results for all signatories as opposed to results for the original 11 signatories. These totals have been normalised so as to present trends in

values that are not affected by changing circumstances amongst signatories.

### 7.1 Environmental Management Indicators

The environmental management performance of signatories is summarised in table 7.1. Whilst the figures show that the strategy covers only one additional site in 2001, it should be noted that two new major vehicle manufacturing facilities became operational in 2001. This inevitably affects the performance figures and in some cases results in proportional increases in resources used and emissions.

Table 7.1 Environmental Management Indicators	1999	2000	2001
Number of signatories	11	18	18 <sup>1</sup>
Number of sites covered by SMMT's sustainability strategy	40	44	45
Number of sites with a certified Environmental Management System	26 (65%)	35 (79%)	37 (82%)
Number of companies having minimum environmental standards applying to UK-based suppliers	-	11 (65%)	12 (67%)

<sup>1</sup> *In 2001 one founding signatory resigned its SMMT membership due to restructuring activities and one vehicle manufacturer became signatory to the SMMT sustainability strategy*

Figures in Table 7.1 show that an increasing number of sites covered by the strategy are certified to an environmental management system (EMS). 14 out of 18 signatories have all of their sites certified to ISO 14001. A consistent number of signatories also apply minimum environmental standards

to UK-based suppliers. The majority of those refer to an EMS such as ISO 14001 or ISO TS16949. Three of the signatories also apply minimum standards referring to product recyclability or use of recyclable material in products.

A signatory obtained two national awards for environmental best practice, beating 300 other companies in the process. The judges praised one of the signatory's plant's 'eco-chariot', a converted fire engine which responds immediately to any alarms or spillages. The judges mentioned that it is probably under-used as the company's investment in prevention and containment is very effective. They have no history of polluting incidents and are continually well within all consent limits set by legislation. One of the company's other facilities was named National runner-up for best practice amongst motor manufacturers. The judges highlighted the fact that reducing energy use is now part of the culture, with a continuing focus on low energy and high efficiency equipment. They were particularly impressed by the fuel savings – 100,000 cubic metres of water have been saved and electricity use has dropped by almost 14 million kWh. Earlier this year, the company secured ISO14001 environmental accreditation at its head office.



## 7.2 Resource/Emission Indicators

This section summarises signatories' performance in relation to resource use and emissions. Performance and trends for the period 1999–2001 are summarised in Table 7.2. It should be noted that base data, such as the number of signatories, varies year-on-year and should be taken into account when

interpreting the figures. For the 2001 reporting year, both total number of employees and total number of vehicles manufactured were down on 2000 levels. This inevitably impacts the results normalised according to these two factors and does not always reflect the actual overall positive trend for the indicator of interest.

Table 7.2 Resources and Emissions Indicators	1999	2000 <sup>1</sup>	2001
Number of signatories	11	18	18
Total combined turnover	£20,111m	£21,035m	£24,399m
Total combined number of employees	95,214	100,036	96,357
Total number of vehicles produced by signatories	1,972,528	1,572,642	1,470,659
<b>Input</b>			
Energy use (MWh)	6,110	7,013	6,671
Energy use (kWh) per employee	64,175	70,108	69,232
Energy use (kWh) per £1million turnover	303,828	309,717	273,406
Energy use (kWh/unit) per vehicle produced <sup>2</sup>	3.1	3.9	4.2
Water use ('000m <sup>3</sup> )	-	9,620	10,105
Water use per employee (m <sup>3</sup> /employee)	-	96.2	104.9
Water use (m <sup>3</sup> ) per £1M turnover	-	0.46	0.4
Water use (m <sup>3</sup> ) per vehicle produced <sup>2</sup>	-	5.3	6.2
<b>Output</b>			
CO <sub>2</sub> equivalent (tonnes) <sup>3</sup>	1,821,586	2,182,926	2,149,771
CO <sub>2</sub> equivalent (tonnes) per employee	19.3	21.8	22.3
CO <sub>2</sub> equivalent (tonnes) per £1M turnover	90.6	95.3	88.1
CO <sub>2</sub> equivalent (tonnes) per vehicle produced <sup>2</sup>	1.08	1.1	1.3
Emissions of VOC (kg)	4,018,951	7,136,682 <sup>b</sup>	6,926,340
Emissions of VOC (kg) per employee	42.2	71.3	71.9
Emissions of VOC (kg) per £1M turnover	199.8	339	284
Emissions of VOC (kg) per vehicle produced <sup>2</sup>	2.9	4.4	4.6
Waste to landfill (tonnes)	54,954	80,399	121,207 <sup>a</sup>
Waste to landfill (tonnes) per employee	0.6	0.8	1.3
Waste to landfill (tonnes) per £1M turnover	2.7	3.7	4.9
Waste to landfill (kg) per vehicle produced <sup>2</sup>	-	40.3	66.4
Packaging waste for recovery (tonnes)	10,900	20,272	16,768 <sup>a</sup>
Packaging waste (tonnes) for recovery per employee	0.11	0.20	0.17
Packaging waste (tonnes) for recovery per £1M turnover	0.5	0.9	0.7
Packaging waste (kg) for recovery per vehicle produced <sup>2</sup>	5.6	10.5	8.4
Packaging waste for recycling (tonnes)	1,802	5,058	6,344 <sup>a</sup>
Packaging waste (kg) for recycling per employee	18.9	50.5	65.8
Packaging waste (kg) for recycling per £1M turnover	89.6	240	260
Packaging waste (kg) for recycling per vehicle produced <sup>2</sup>	1.1	2.5	3.5

<sup>1</sup> Includes data from 17 out of 18 signatories

<sup>2</sup> In some cases, data from vehicle manufacturers includes data for both vehicle and engine production (hence an overestimation per vehicle). The 'per vehicle' normalisation does not take data from component manufacturers into account.

<sup>3</sup> Does not include CO<sub>2</sub> emissions from logistics and transport

<sup>a</sup> includes data from 17 out of 18 signatories

<sup>b</sup> this figure has been rectified for accuracy – Table 6.4 in the second annual report shows it to be 4,948,173 tonnes. That figure did not include the data from several signatories (not available at the time of printing).

## Energy and CO<sub>2</sub> Equivalentents

The total reported combined energy use for all signatories has decreased by five per cent on 2000 levels. This reduction in energy use has been achieved despite the opening of several new facilities in 2001, including two major vehicle plants producing over 70,000 units. The data shows that the energy use per employee also decreased, despite a three per cent drop in the signatories' total combined workforce. The same trend is observed for the energy used per £1M turnover which has dropped by 11.8 per cent on 2000 levels.

One signatory has achieved significant energy savings by integrating auxiliary compressors around the site into the site compressed air system, so that appropriate, smaller compressors are used instead of the large central compressors. Through such measures, they have achieved a 33 per cent reduction in energy use per car since 1997.

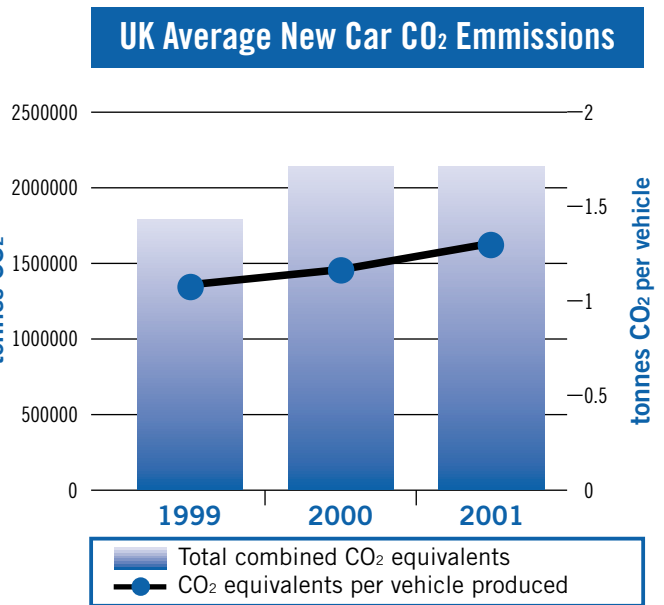
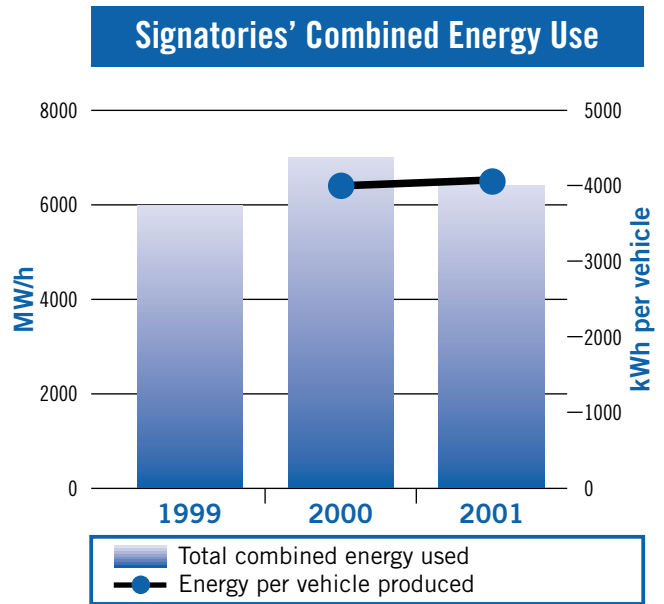
Energy used per vehicle produced, however, has increased slightly (1.5 per cent) and is due to the reduction in production volume. Indeed, the operation of a manufacturing plant always requires a base load level of energy, irrespective of the production volume. When the production volume decreases, the energy use per vehicle almost always increases, even if the total energy use goes down. The relationship between energy use and production volume is very complex and not linear. This also applies to emissions of CO<sub>2</sub> equivalentents.

In relation to energy sources, only one signatory produces over 60 per cent of its total energy use on-site (non-grid). Another three signatories produce a small proportion (> one per cent) of their energy from technologies such as CHP units. The rest of the energy used by signatories comes directly from the grid. While certain energy providers have a renewable energy obligation (three per cent), no signatories have yet opted for renewable energies as their main source of energy (costs and availability being the main decision factor).

SMMT also started to survey signatories on their fleet fuel consumption and related contribution to CO<sub>2</sub> emissions. While some interesting data has been collected, not all signatories are yet in a position to provide accurate data for this year. One of the main reasons is that, in many cases, product transport and distribution is subcontracted and data is not easily available. SMMT will continue to look at this aspect of CO<sub>2</sub> emission in 2002.

CO<sub>2</sub> emissions are calculated from the amount of energy, including electricity, used to power operations. The reduction

in total energy use resulted in a 1.5 per cent reduction in emissions of CO<sub>2</sub> equivalentents. Reductions would be more significant if comparisons were made amongst signatories who reported from 1999 and only including facilities used since 1999.



A signatory completed a programme to install automated monitoring systems across all sites. These systems monitor energy usage, identify energy-efficient areas and develop performance indicators. The energy consumption data was manipulated into Energy and Utility reports giving details of targets and performance. In addition, CHP units generating together up to 9MW of electricity were also installed at two sites as part of the energy efficiency programme. This enabled a cut in CO<sub>2</sub> emissions by over 50 per cent which is well above the Government target (20 per cent).

## The SMMT Climate Change Agreement

SMMT was one of the first sectors to sign up to the climate change agreement where participants get an 80 per cent discount on the levy in lieu of achieving stringent energy use targets. SMMT participants have agreed to reduce their energy per vehicle by 12 per cent by 2010 from a 1995 baseline (15 per cent in primary energy terms). A large number of signatories are currently participating in the SMMT agreement, including BMW, Ford, Jaguar, Land Rover, Honda, LDV, MG Rover, Nissan, Rolls-Royce and Bentley Motor Cars, Toyota and Vauxhall.

Participants have made good progress towards meeting its first milestone target, which would ensure participants retain the levy relief over the 2003 and 2004 period. The SMMT is still pressing for the qualifying criteria to enter a negotiated agreement to be widened to enable more of the 7,000 companies involved in the automotive sector to enter agreements.

## Water

Combined total water consumption for all signatories has risen by 4.8 per cent from 2000 levels. The main reason for this increase is the opening of two vehicle production facilities which alone accounts for over ten per cent of the total water use. Together with a reduction in vehicle production this resulted in an increase in water use per vehicle on 2000 levels. However, when compared with last year's figures and excluding the new manufacturing plants that came into operation in 2001, water consumption has been reduced by about four per cent (or approximately 388,000 m<sup>3</sup>).

A signatory's specific actions to reduce water usage:

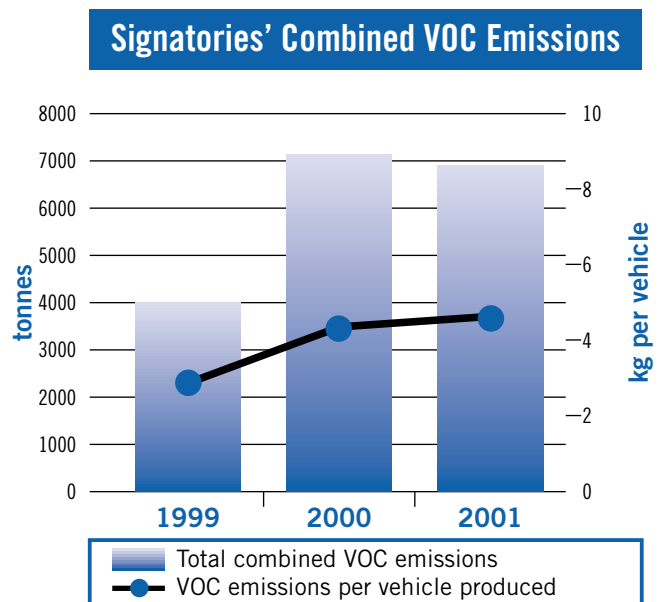
- Water usage in paint sludge ponds reduced by optimising the chemical dosing regime;
- In-house water management system that enables to detect leaks and carry out repairs in real time;
- Adjustments to shower tester for the finished vehicle to minimise water loss through evaporation.

## VOC

Volatile organic compound (VOC) emissions arise mainly from vehicle manufacturers who use solvent intensive processes in vehicle painting operations. In the last few years, many companies have made significant investments in procedures and emission-control processes to satisfy stricter regulatory requirements. Signatories' total combined VOC emissions have been reduced by almost 3 per cent on 2000 levels.

It must be noted that, due to a calculation error, the total combined figure for 2000 was underestimated by about 40 per cent. This was a significant increase on 1999 levels, proportional to the increase in the number of signatories reporting in 2000. In 2001, the use of VOC per £1M turnover

fell by about 16 per cent on 2000 levels. However, this is not reflected in VOC emitted per vehicle produced (4.4 per cent increase). This is explained by the reduction in vehicle production in 2001 by signatories and for the sector as a whole.



A signatory has been using powder-based clear paint in production since 1997. It also operates direct recycling within the paintshop which ensures a clean material cycle with virtually no waste. This particular signatory has reduced VOC emissions by 36 per cent since 1999.

Another signatory has achieved consistent reductions in VOC emissions through (a) the use of low-solvent (water-based) basecoat paint technologies, (b) collection and recycling of the automatic paint machine cleaning solvents, (c) metering and limiting systems for the control of solvent usage, (d) capturing and abating of selected solvent-laden process air and (e) continued improvements by changing to materials with lower solvent content where possible.

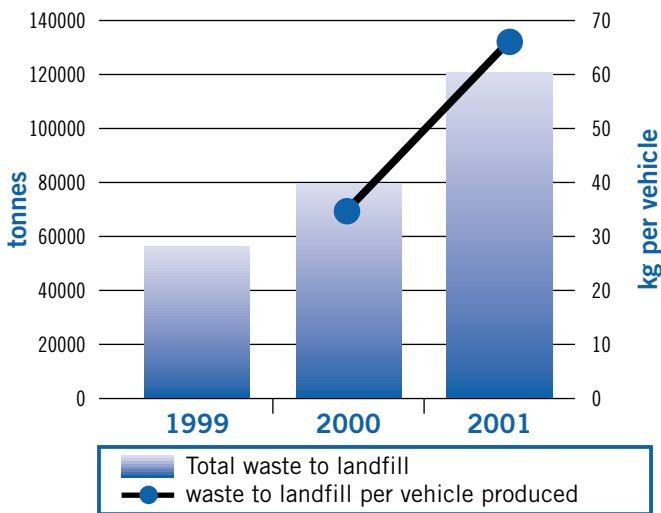
## Waste

Total combined waste to landfill from signatories has increased from 80,399 tonnes in 2000 to 121,207 tonnes in 2001. This increase is explained by several signatories being severely impacted by restructuring activities in 2000-2001. This restructuring resulted in (a) changes in activities, (b) construction of new facilities and (c) disposal of unusually large quantities of structural waste and machinery which would not occur under normal operating conditions. It is therefore estimated that the combined waste to landfill for the 2002 reporting year will be significantly lower.

One of the main sources of waste has traditionally been packaging for transporting components. The packaging waste data for signatories shows a decrease (17 per cent) in packaging waste recovery and an increase (20 per cent) in packaging waste recycling. The decrease in packaging waste recovery should not necessarily be seen as a negative trend. Indeed, several signatories have made great strides in reducing or eliminating packaging waste by introducing reusable containers or 100 per cent returnable packaging and thereby improving purchasing and logistics systems.



**Signatories' Combined Waste to Landfill**



In conjunction with the new environmental management system being implemented, a signatory formed special teams focusing on waste disposal, energy, and chemical control. Working with local employees, these teams were tasked with reducing environmental impacts in their areas. As a result of this work, a new waste material separation system was introduced, designed to sort 20 different materials. The system has already paid for itself, and in 2001 alone the plant expects to generate nearly £100,000 from recovered waste materials.



## 8. Economic Performance

### 8.1 Commercial Competition and Economic Prosperity

**Strategy commitment:** *To continue to seek economic growth and secure competitiveness in the global environment*

Table 8.1 Economic Indicators	1999	2000	2001
UK Automotive Sector Turnover	£46bn	£43.4bn	£44.1bn
Signatories combined turnover	£20,111m	£21,035m	£24,399m
Signatories combined UK investments	-	£1,280m	£1,222m
Total UK number of new cars produced	1,786,623	1,641,317	1,492,146
Total UK number of new CVs produced	185,905	172,442	192,872
Total UK number of new vehicles produced	1,972,528	1,813,759	1,685,018
Total number of new vehicles produced by signatories		1,572,642	1,470,659
Total number of new car registrations	2,197,615	2,221,647	2,458,769
Total number of new CV registrations	288,100	298,043	313,411

#### Sector Overview

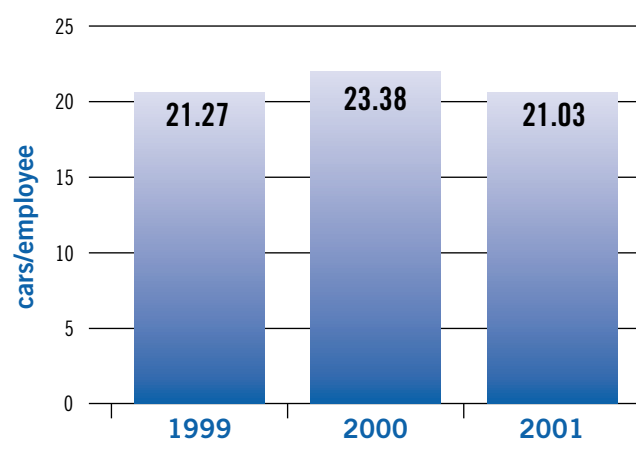
Overall, the UK automotive industry performed reasonably well during 2001. Despite a reduction in the number of vehicles produced, new vehicle registrations reached a record annual total. Turnover for both the sector and the signatories rose and investments were sustained at around £1.2bn. The prospects for 2002 are reasonably optimistic given the uncertainty that surrounds growth in the world economy. Domestic consumer demand remains strong and despite forecasts of a gentle cooling of demand in the latter part of the year, it is likely that registrations will remain at historically high levels. On an EU scale, the UK is outperforming most other EU countries and is a strong contributor to stabilising market statistics in Western Europe.

In terms of productivity, the UK has one factory (signatory) that ranks fourth in the top nine positions (worldwide). For the UK in general, the productivity trend is increasingly positive despite the high level of new product introduction and large scale restructuring that usually tend to slow assembly productivity. As can be seen on the graph, productivity amongst signatories is relatively constant between 21 and 22 cars/employee/year.

It should be noted that one particular sector of the supply chain has enjoyed significant growth in the last few years. Engine manufacturing saw continued growth and forecasts suggest that this sector is set for steady growth of products with long lifecycles and a good proportion of the engine that is sourced from the UK<sup>5</sup>.

In the Eurozone, and indeed in the whole of Western Europe apart from the UK, the level of demand has now retreated back to what it was in mid-1997, and the downward trend is more pronounced. [www.just-auto.com](http://www.just-auto.com) (8 August 2002)

#### Signatories Productivity (cars/employee)



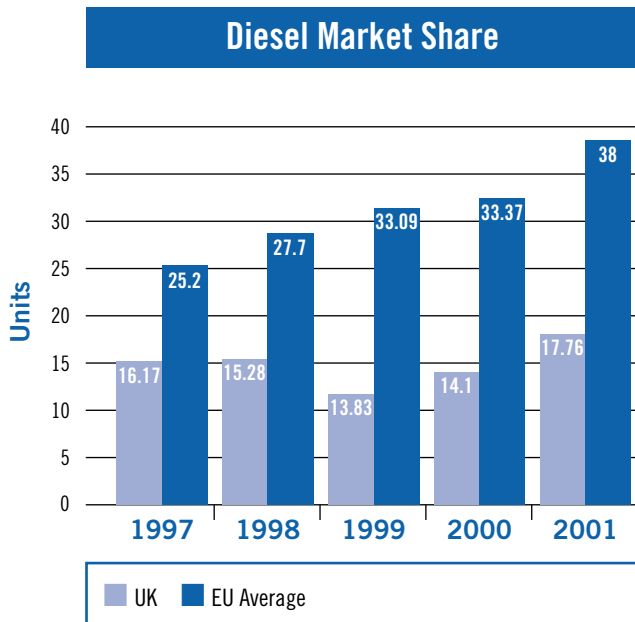
#### Registration and Production

**CARS** Following a record year in 1999, car production has remained in decline due to the significant restructuring that took place in 2000 and 2001. Car production in 2001 fell by 9.1 per cent on 2000 levels to 1.49 million vehicles. Despite an overall 3.4 per cent growth for the UK market, the export market fell by 15.9 per cent. However, output is expected to recover in 2002-2003 as new plants come into full operation and new models appear. Volumes rose by 4.8 per cent in the second quarter of 2002 and the industry is generally looking forward to more steady growth. The SMMT forecasts production rising to 1.55 million units in 2002.

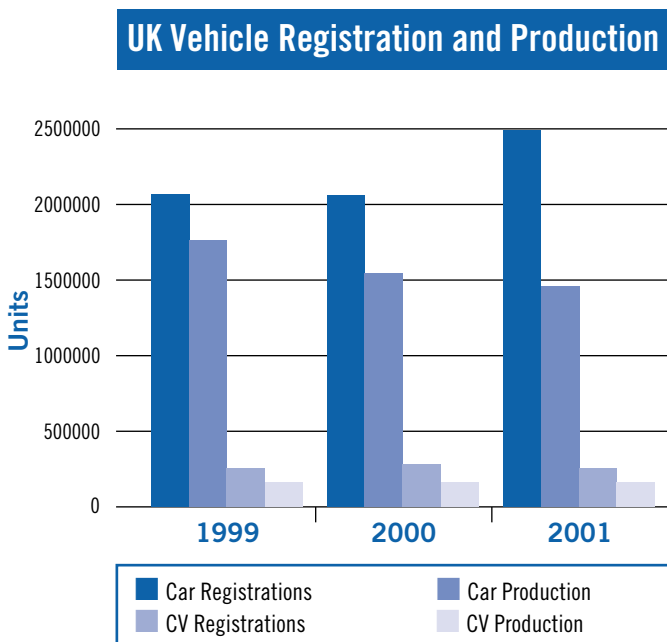
Total car registrations on the other hand hit 2,458,769 units in 2001, a record annual total well above industry forecasts and 10.7 per cent ahead of total sales in 2000. This is a considerable performance considering the global slowdown and economic uncertainty. The 2001 market was buoyed by 22 per cent growth in private demand with market share at its highest level since 1993.

<sup>5</sup> *Automotive Innovative and Growth Team (May 2002), Design, Development and Manufacture*

2001 was also characterised by increased registrations in the supermini segment and diesel market. More diesel cars were sold in 2001 than ever before – a 39.4 per cent rise on 2000 (436,591 units registered). Diesels look on course to take a record 23 per cent market share in 2002 as factors such as better CO<sub>2</sub> performance should remain a positive influence. Consumer spending in the motor sector remained buoyant, fuelled by intense competition, lower list prices and attractive new models. A modest slowdown is envisaged next year, to around 2.3 million units.



**COMMERCIAL VEHICLES** CV production rose by 11.8 per cent on 2000 levels to 192, 872 units. The growth has been led by the heavy van sector (2.5- 3.5 tonnes). It should be noted that the year end was characterised by a seventh consecutive month of solid growth in exports. Growth continues to be influenced



by industrial changes which have seen the UK plants building for specific sectors of the European CV market. The SMMT expects this trend to continue as UK plants continue to increase their output to support EU-wide sales.

CV Registrations increased by 5.2 per cent on 2000 levels and the 313,411 units was the third highest ever achieved and the highest since 1989. The market was led by light commercial vehicles (LCVs) which accounted for 95 per cent of the overall CV market growth in 2001, reflecting increased demand from the service and distribution sectors of the economy.

### Challenges to Improve Competitive Position

The positive outlook described by improving production and registration figures should not divert attention from the serious difficulties being faced in automotive manufacturing. Indeed, the major vehicle manufacturers operating in the UK are finding it difficult to operate profitably and efforts to maintain competitiveness are resulting in significant shifts in component sourcing. The industry faces a number of challenges.

**EXCHANGE RATE** The automotive sector has been under pressure for some time, with Sterling appreciating by more than 35 per cent since 1996. Despite the industry's commitment to improved productivity the continued weakness of the Euro has impacted on the profitability of UK based operations. They are therefore seeking to secure cost reductions from their UK suppliers and/or looking to source more components from outside the UK. The inevitable consequence of this is the erosion of the supplier base in the UK. There is an increasing view among vehicle and component manufacturers that a stable and competitive exchange rate is unlikely to be achieved until the UK Government has established its commitment and a clear timetable for joining the Euro.

**TRAINING AND SKILLS** The automotive sector is at the cutting edge of global best practice in many areas of manufacturing, purchasing, product development and logistics. It requires a highly skilled workforce to implement these and has encountered difficulties in attracting, developing and retaining sufficient numbers of appropriately equipped individuals. Raising skill levels across the UK workforce is an essential part of improving competitiveness. The strength of the UK automotive skills base is key to future UK competitive advantage by attracting investment and development work to the UK.

**RESEARCH AND DEVELOPMENT** Modern motor vehicles have a highly sophisticated technological content and vehicle manufacturers require suppliers to take on an increasing role in

product development. Research in the automotive sector has seen strong growth in the last five to seven years, employing over 12,000 people specifically on automotive research (87.5 per cent involved in developmental research and 12.5 per cent in applied research). This demonstrates that the industry has recognised R&D as crucial in enhancing a viable vehicle and components manufacturing base. It is therefore crucial for Government to continue supporting the sector and to provide incentives for manufacturers to develop and utilise research, development and testing facilities in the UK.

### Sector Initiatives to Improve Competitiveness and Productivity

**FORESIGHT VEHICLE PROGRAMME** The automotive industry has been an active member of the Foresight Vehicle Programme which is generally accepted as the UK's 'flagship' mechanism for encouraging automotive R&D. As such, it attracts surprisingly polarised comments from industry participants and observers. The programme has created an excellent business network with over 100 projects and over 400 participants. This network has increased supplier capability, promoted UK industry abroad, and helped to link industry, government departments and academia. The involvement of EPSRC brings a welcome commitment to the generation of new knowledge and scientific excellence. It is relatively low cost with total funding of £75 million, of which well over half comes from industry.

**THE AUTOMOTIVE INNOVATION AND GROWTH TEAM** The AIGT is the first of a series of Innovation and Growth teams which the DTI has set up following the March 2001 White Paper on Enterprise Skills and Innovation. They drew on the expertise of all the major stakeholders in the sector with the aim of identifying the key issues which will shape the future of the industry. Two key recommendations from AIGT are:

- The UK should establish two Centres of Automotive Excellence and Development to take forward work on low carbon/fuel cell technologies, and on transport telematics and technologies for sustainable mobility.
- A pilot mobility services project should be undertaken in London and one other city with the aims of accelerating the adoption of low pollution vehicles and demonstrating new approaches to providing mobility.

## 8.2 Contribution to the UK Economy

### Performance

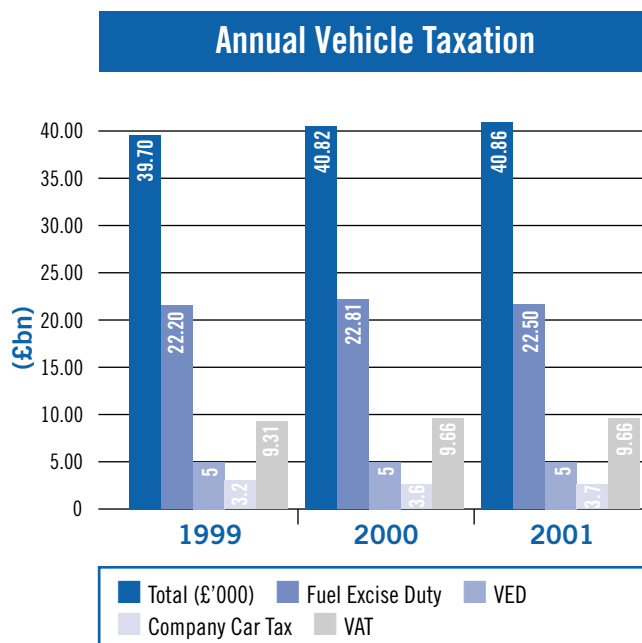
The automotive sector has continued to make an important contribution to the UK economy in 2001 with an estimated total turnover of £44.1 billion which represents 9.3 per cent

of the total manufacturing sector turnover. Employment also remained very high with 827,000 people employed throughout the sector (a one per cent drop on 2000 levels). The value of exports totalled £18.9 billion, a 9.9 per cent contribution to total UK exports. It is estimated that UK automotive sector's net capital investment in 2001 amounted to £2.17 billion, together with £890 million spent on business research and development.

### Taxation

Record new vehicle registrations have helped to bring in all-time high tax revenues from Britain's motorists in 2001. Britain's truckers delivered an average £10million worth of goods on each and everyone of their trucks in 2001 and in turn handed £24,000 each to HM Treasury. UK car drivers also contributed an average £1,110 to the Chancellor as part of the huge revenue generated from motoring related taxation. Taxation from the sector amounted to £40.8 billion in 2001, a 0.9 per cent increase on 2000 levels, which includes £22.5 billion from fuel duty, £4.7 billion in vehicle excise duty (91 per cent from cars), £9.6 billion in VAT and £3.7 billion from company car taxes.

April 2002 heralded the introduction of a new company car tax regime. The new system is based on a driver's tax liability on the list price of the car adjusted by CO<sub>2</sub> thresholds. Where CO<sub>2</sub> output falls below 165g/km, liability is calculated at the lowest rate, 15 per cent of the list price. Increments of 5g/km add one per cent up to a maximum 35 per cent of list price. Diesel cars attract an additional three per cent levy. In 2001, low CO<sub>2</sub> output became a key factor in many fleet purchasing decisions. By the end of the year, more than 45 per cent of all new cars registered to fleet and business users fell below 165g/km CO<sub>2</sub> threshold for the lowest rate of tax.



### 8.3 Employment

**Strategy commitment:** *To continue to secure and enhance employment opportunities where appropriate*

Table 8.2 Employment Indicators	1999	2000	2001
Number of jobs dependant on the sector	800,000	835,000	827,000
• Manufacture of motor vehicles, parts and trailers	-	307,000	237,000
• Sales, servicing and repair	-	520,000	555,000
• Automotive rentals, finance and related sector	-	8,000	35,000
<b>Signatories total combined employees</b>	<b>95,214</b>	<b>100,036</b>	<b>96,357</b>

Although employment in the manufacturing sector in general has been falling since 2000, it remained relatively stable in the automotive sector as a whole (an overall reduction of less than one per cent on 2000 levels). The sector remains one of the largest employers in the UK. A slightly larger drop was observed amongst signatories (a 3.7

per cent reduction on 2000 levels). One of the main difficulties has been the strength of the Sterling against the Euro (appreciating more than 35 per cent since 1996) which has forced manufacturers to secure cost reductions, increasingly turning to overseas sources for components.

### 8.4 Supply Chain Efficiency

**Strategy commitment:** *To support Industry Forum and work to enhance supply chain efficiency*

#### Signatories Performance and Initiatives

Table 8.3 Supply Chain Indicators	1999	2000	2001
Number of reporting signatories involved in Industry Forum programmes	4	9	9
Number of reporting signatories operating supplier development networks	8	13	12

Signatories involved in Industry Forum (IF) activities and operating supplier development networks in 2000 carried on doing so in 2001. Activities undertaken by signatories with the IF include 'health checks' to monitor sustained improvements in implementing lean manufacturing, attendance of IF action groups and provision of Master Engineers seconded to IF.

Signatories have continued to work closely with suppliers throughout 2001. Some examples of specific activities are listed below:

- Specific development and continuous improvement programmes with individual suppliers. One signatory, for example, carried out improvement activities with over 20 suppliers within the UK;

- Establishment of partnership programme with Local Authority to secure funding from the European Social Fund for running management workshops and support programmes for suppliers;
- Implementation of electronic data interchange with all major suppliers;
- Product preparation support where multi-functional teams visit suppliers to ensure adequate new product introduction.

"The expertise gained from Industry Forum has delivered sustained improvement in our levels of quality, cost, delivery and response."  
**Founding signatory**

In December 2001, a signatory completed the first stage of an SME supply chain improvement programme, in partnership with the local authority and funded by the EU's 'Accelerate II' Programme. Of their 15 local suppliers on the programme, 14 had successfully achieve ISO 14001 certification. They have subsequently introduced a CD-ROM case study which aims to assist others to achieve certification by following the steps taken by those successful on the Accelerate programme. The second stage of the programme which was initiated in 2002, involves benchmarking the larger suppliers according to sustainability indicators and assisting suppliers on issues including environmental and sustainability reporting.



## Sustainability in the Automotive Supply Chain

In 2001, stakeholders highlighted the importance of feeding the sustainability strategy down the supply chain and involving as many companies as possible from throughout the supply chain. The 2002 SMMT sustainability programme very much focused on disseminating sustainability throughout the supply chain and included:

- Development of the 'Business Case for Sustainability in the Automotive Supply Chain';
- Regional seminars on sustainability in the automotive supply chain;
- Development of 'Best Practice Guidelines on Sustainability Principles' for the supply chain.

**REGIONAL SEMINARS** – A total of about 190 companies from throughout the supply chain were invited to participate in a series of innovative regional seminars on sustainability. The seminars, which took place in Coventry and Oxford in April 2002 were designed for companies to find out why they should make sustainability an integral part of their business strategies and why the sectoral approach provides an opportunity to improve bottom line performance (the business case). The seminars formed a major element of a DTI-funded programme aiming to show the value of sustainability principles by presenting the business case, then translating such principles into practical steps on how to start addressing sustainability issues and implementing them into everyday operations. It included sessions on cutting costs through waste reduction and introducing

measures to increase energy efficiency.

The seminars brought together companies from across the sector and sustainability experts were on hand to provide advice across a wide range of environmental, economic and social issues. Companies took part in a discussion forum where themes like funding and economic implications were discussed with experts from SMMT, Industry Forum, DTI, Envirowise and Action Energy (formerly the Energy Efficiency Best Practice Programme).

**BEST PRACTICE GUIDELINES** – The guidelines, which accompany this third annual report, provide guidance according to the following hierarchy:

- Strategies;
- Management approaches;
- Supporting tools.

The starting point for any company is to develop its own strategy, based on its vision, values and principles and taking account of its strengths and weaknesses and the potential threats and opportunities it faces. To develop and implement its strategy, the company will need to gain and maintain management commitment. The guidance describes a number of management approaches and tools which can be used to support the strategy. Many of the tools are applicable to more than one management approach and these in turn may be applicable in more than one strategy area.



## 9. Social Performance

### 9.1 Stakeholder Engagement

Strategy commitment: *Continue to engage positively with external stakeholders*

Table 9.1 Stakeholder Indicators	1999	2000	2001
Number of reporting signatories engaging (individually) with stakeholders	6	9	12

The above table shows that signatories are increasingly engaging with external stakeholders. These stakeholders include local, regional and national government, the Environment Agency, local communities, customers and suppliers, local industry and international organisations such as the World Business Council for Sustainable Development (WBCSD). Within the context of the sustainability strategy, stakeholder engagement remained a key part of the programme in 2001-2002 which culminated in a multi-stakeholder dialogue event organised by the SMMT on 16 July 2002. Over 60 organisations were invited to engage on the key sustainability challenges faced by the sector. Details of the dialogue process and its results are provided in Section 5 of this report.

#### Section 5, Stakeholder dialogue

In addition to the particular actions undertaken under the umbrella of the sustainability programme, the SMMT continued to work with a wide range of groups and organisations on issues related to the three pillars of sustainable development:

- Within the European Union, the Forum for the Automobile and Society brings together MEPs with key EU officials, decision-makers from the motor industry and motoring organisations as well as consumer representatives. The Forum acts as a place for debate and information exchange for all those interested in automotive issues. Accident avoidance and road safety issues are ongoing agenda items for the Forum;
- In the UK, the industry is represented on the Department for Transport's Road Safety Advisory Panel. This panel exists to advise government and monitor progress of its Road Safety Strategy. It is also represented on the Royal Society for the Prevention of Accidents' National Road Safety Committee. The aim of this committee is to raise awareness about the causes of road accidents and to seek and promote effective measures that will help prevent such accidents or reduce their severity. Other examples of initiatives in which SMMT participates are listed below.

**ROADSAFE** The SMMT is an active sponsor and member of RoadSafe (formerly the Prince Michael Road Safety Awards),

a road safety partnership launched on 31 October 2001 which aims to reduce deaths and injuries caused by road accidents and promote safer driving. RoadSafe brings together representatives from Government, the vehicle and component manufacturing and road transport industries, road safety professionals and the specialist media to work together to find new approaches to reducing casualties amongst vulnerable groups.

In 2001-2002, RoadSafe played a leading role in a new alliance to promote an occupational road safety culture. The 'Occupational Road Safety Alliance' (ORSA) was set up in April 2002 with representatives of some 40 organisations. Its broad aims are to:

- Encourage joint working to raise awareness of the need for action on work related road safety;
- Promote the exchange of information on new initiatives and best practice;
- Facilitate networking between key stakeholders and establish a statement of common goals;
- Establish technical co-operation.

RoadSafe took the lead in preparing the communication plan for rolling out initiatives and hopes to contribute to implementing the recommendations of the Government's independent Work Related Road Safety Task Group (WRRSTG).

**THE PIONEERS GROUP** The SMMT continued to be an active member of the DTI/DEFRA Pioneers Group throughout 2001-2002. The group, which brings together trade bodies from an extensive range of UK sectors, provides a forum to exchange experience and promote best practice in implementing sustainability at the sectoral level. The SMMT contributed to the development of the Pioneers Group report (Pioneering, The Strategic Route to Sector Sustainability) and the 'Best Practice Toolkit for Developing a Sectoral Sustainability Strategy'. The SMMT also provided the group with 'Best Practice Guidelines on Sectoral Sustainability Reporting'. These guidelines were developed as part of a DTI-funded research study and are based upon the experience of the UK automotive sector. The guidelines are aimed at helping sector level reporters (a) to learn from the experience of a leading sector in its preparation of a

sector level sustainability report and (b) by providing a set of tested stages for developing reporting and some tools with which to achieve those targets.

### ▣▣▣ Section 8.1, AIGT and Foresight vehicle programme

## 9.2 Road and Vehicle Safety

### Road Safety

Figures published by the Department for Transport (DfT) show that in 2001 the number of people seriously injured in accidents on Britain's roads fell by three per cent on 2000 levels (from 38,155 to 37,094). The number of children seriously injured was five per cent down on 2000 levels. Road deaths, however, increased by one per cent. Road deaths have fallen 24 per cent over the past decade (from 4,568 in 1991 to 3,443 in 2001). The number of car user deaths has fallen 14 per cent over that period (from 2,053 to 1,744) whilst cyclists' deaths and pedestrian deaths have been reduced by 40 per cent and 45 per cent respectively.

The safety of drivers, passengers and other road users has always been a priority for the motor industry. The industry is committed to continued involvement with road safety organisations and high levels of research and development. The industry invests significant resources every year to ensure the highest possible levels of safety performance. The SMMT is also active in encouraging safer driving and strives to ensure that motor vehicles are used responsibly. Some of the major developments that took place in 2001-2002 are summarised below.

### Vehicle Safety – Technology

The motor industry is committed to continuing to create a safe environment for drivers, passengers and pedestrians. Automotive manufacturers and suppliers have been at the forefront of technological research and development to improve safety. Technology continues to play an important role in progressing road safety developments by allowing manufacturers to continually adapt their processes. The last 20 years have seen a large number of safety measures incorporated into vehicles. These include:

- **Airbags** – front and side impact. Inflatable restraint system designed to inflate on impact providing protection to driver and passenger in the event of a collision;
- **Anti-lock brake system (ABS)** – prevents skidding, wheel locking and loss of control under heavy braking,

and can result in shorter braking distances on poor/slippery road surfaces;

- **Collapsible wing mirrors** – wing mirrors that are designed to collapse into the side of the vehicle following contact with pedestrians;
- **Traction control** – prevents wheel spinning under acceleration and therefore improves the stability of the vehicle;
- **Safety cells** – a whole vehicle safety structure designed to protect the occupants;
- **Energy absorbing and collapsible steering columns** – during frontal collision, the steering column will collapse, absorbing energy from the driver's impact on the steering wheel, helping to reduce injury;
- **Active head restraints** – head restraints that move during an impact to reduce the movement of the head and reduce whiplash injuries;
- **Side impact protection systems** – enhance the capabilities of the vehicle to withstand side impact and allow the structure to deform in a controlled way to provide optimum protection for the driver and passenger;
- **Front and rear deformation zones** – parts of the vehicle body structure designed to increase energy absorption when involved in a collision, reducing injury to vehicle occupants;
- **Pyrotechnic seatbelt pretensioner systems** – deploys in the event of a frontal collision to pull the belt tight around the occupant, reducing forward movement.

Next generation technologies are also currently being tested. These include external airbags, softer bonnet and front-end materials, shatterproof windscreens, standardisation of daytime running lights and intelligent road speed adaptation systems.

### Euro NCAP

The Euro NCAP programme is designed to provide the public with information about the safety performance of individual car models. The programme is supported in the UK and the national departments responsible for road and vehicle safety see Euro NCAP as a way of reducing heavy road death and injury tolls.

Euro NCAP is testing all the most popular new cars in the UK and manufacturers take the testing seriously – in a number of cases, manufacturers have modified designs and brought forward system improvements to improve ratings. The UK is at the forefront in pressing for improvements in vehicle safety and is supported in this by scientific research which focuses on accident prevention (e.g. ABS), better protection for vehicle occupants (e.g. seat belts, side/frontal

protection) and better protection for other road users (e.g. front car design, HGV front underrun guard).

## Pedestrian Protection

In July 2001 the European Commission published a Negotiated Agreement (NA) on Pedestrian Protection, in which European, Japanese and Korean vehicle manufacturers offered a binding commitment to implement challenging design changes for new models, to improve the protection of pedestrians, along with active safety measures. The industry believes that the NA offers an effective and workable way forward on pedestrian protection that stretches the industry's technical capabilities and is adaptable to technological progress. Both the European Council and European Parliament support the agreement. A framework Directive which aims to put the NA in a legal context is currently being developed. The technical requirements of the Directive are expected to be those of the NA to include provisions on bull bars, ABS and ICT and for the 2004 review to define the content of phase two.

## Areas for Future Progress

The safety of occupants and pedestrians can be best improved if the issue is being addressed effectively as a global issue. Consistent and integrated strategies for reducing pedestrian accidents can be developed if Government authorities, the industry and consumer groups work together to ensure any improvements made on vehicles are supplemented by infrastructure and education measures.

**ROAD ACCIDENT DATA – COLLECTION AND ANALYSIS** There is a clear need for high quality collection and analysis of road accident data in order to translate real-world findings into effective changes in vehicle design, education and infrastructure engineering. Some manufacturers run their own accident data collection programmes and participate in Government-led teams. The UK has one of the best studies of car occupant injuries, in the Cooperative Car Injury Study (CCIS). The UK Government has also just started an on-the-spot (OTS) study to improve understanding of accident causation factors. SMMT is also investigating possible methodologies for improving and extending data collection on pedestrian accidents and injuries in order to help improve the imperfect test tools currently available for assessing cars in pedestrian impacts.

**INFRASTRUCTURE – INTELLIGENT TRANSPORT SYSTEM** Changes to the transport infrastructure can help to reduce accidents

significantly. Separation and segregation of traffic and people is the most effective way of removing the potential for accidents. Established roads must be reviewed and adapted to remove or reduce potential dangers, given due environmental considerations. European proposals for integrated safety by means of intelligent road systems that integrate the road and the vehicle are generally supported by the industry.

**EDUCATION – VULNERABLE ROAD USERS** Educating the road user – drivers and pedestrians – plays a key role in improving road safety. Young driver schemes, learner driver programmes and advanced driver training can all help to raise awareness among drivers and pedestrians, helping reduce the number of injuries. Vehicle manufacturers have supported driver and young driver programmes as well as pedestrian education schemes.

## 9.3 Employee Development

**Strategy commitment:** *Continue to improve the skills, facilities and opportunities available for employees*

### Initiatives

In 2001 signatories continued to develop employee-focused initiatives including employee consultation, on-site improvements, health and safety, responsible product use initiatives and improvement in training opportunities. Some of those are detailed below.

**HEALTH AND SAFETY** Signatories are particularly committed to raise health and safety (H&S) standards and awareness amongst employees. 2001 figures show that 90 per cent of signatories have taken specific action to promote H&S. Specific initiatives undertaken by signatories include:

- H&S assessment review process at all facilities;
- Pedestrian safety initiative (segregating pedestrians from powered vehicle traffic);
- Awareness campaign and promotion of ergonomics;
- Standardisation of job rotation for all models;
- Establishment of safety committees;
- Award scheme for improvement in safety performance;
- Development of H&S manual;
- Running of IOSH Managing Safety course;
- Running of H&S awareness and competency training courses;
- OHAS 18001 certification;
- Establishment of detailed H&S policy across the organisation.

Such initiatives have enabled signatories to improve their H&S performance in 2001. On average, for all signatories, lost-time incidents were reduced by 27 per cent in 2001 (one particular signatory achieved a 65 per cent reduction on 2000 levels).

A signatory's plant won a regional award from the HSE for its contribution to the European Week of Health and Safety. The plant organised activities that not only covered safety at work but also looked at safety in the home. H&S training continued throughout the year (inc. induction programmes, training all personnel in safety assessment).

**ON-SITE IMPROVEMENT** Signatories are committed to improve on-site facilities for employees. These improvements are made in a number of areas and in 2001 have focused on (a) canteen and rest areas and (b) fitness and well-being areas. Other improvements include the opening of 'cyber-cafes', installation of ATM banking facilities and introduction of crèche facilities.

One signatory established a Landscape and Conservation Group, planted a wild flower meadow and re-developed two existing ponds to attract wildlife. The Group is applying for site accreditation by the Wildlife Habitat Council.

**TRAINING OPPORTUNITIES** A large proportion of signatories are continually improving training opportunities for employees (job and non-job related training). In order to start measuring signatories' performance a new indicator was introduced: average number of training days per employee. Whilst not all signatories were able to provide accurate figures this year (for example, it is often very difficult to separate training days from other seminars and conferences), amongst those who did, the average number of training days ranged between two and 10 days per year per employee. This included technical training (e.g. ISO geometric drawing tolerance or robotic training), IT training as well as managerial-level training.

Some signatories do not measure the number of training days per employee but rather use competency matrices, skill profiles and training and versatility matrices to track employees' competence. Such matrices enable the manager to create a development path to close any skill gaps.

Some signatories have extensive training programmes for their employees. One particular signatory offered the following training to employees across all facilities: H&S risk assessment, interview training, stress management programme, basic skills and training programme, SIGMA programmes, 'logistics' degree course, supervisor/group leader alignment, IT training, vocational training, mid-life planning programme, lean distribution workshops, e-business seminar, direct data link training for supply chain management personnel, production system training and ISO 14001 training.

**EMPLOYEE CONSULTATION** Signatories foster communication and dialogue with employees through a variety of initiatives such as:

- Cross-functional teams;
- Continuous Improvement process;
- Employee and representative councils;
- Employee suggestion scheme;
- Kaizen involvement;
- Performance development plans;
- Group leader briefings;
- Staff surveys;
- Investor In People standard.

A signatory established the Associate Representative Council in 2000. It is made up of elected associate representatives and nominated company representatives. The purpose is to provide a formal means for including all associates' views, opinions and requirements in the company decision making process.

### Staff Turnover

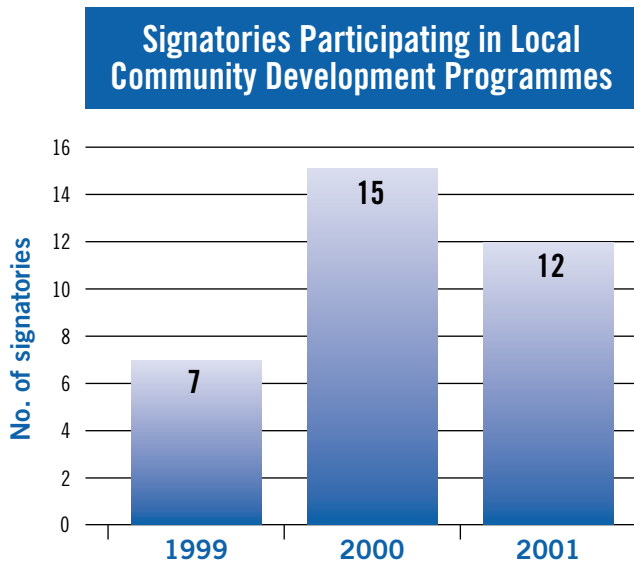
Employee turnover was selected as an indicator to measure employee satisfaction amongst signatories. For those signatories who were able to supply data on staff turnover (thirteen out of eighteen), all but one have a turnover below 10 per cent (range: one to eighteen). The average turnover for those signatories reporting is 7.6 per cent down from 10 per cent in 2000.



## 9.4 Community Involvement

**Strategy commitment:** *To continue to engage positively with external stakeholders*

The UK automotive sector aims to be accountable for its social impacts and establish a strong and positive relationship with the community. This is well illustrated by BEN, a motor industry benevolent fund, which is funded through charity events organised through the year. The industry recognises that access to affordable and reliable transport is a basic civil right and is actively contributing to building an integrated transport system.



A large number of signatories have worked with their local communities throughout 2001 on a variety of projects, both automotive and non-automotive. Some signatories have devoted over 2,500 hours towards community-based initiatives. Such initiatives usually fall under the categories listed below:

- training of in-house community relation staff;
- financial support and donations;
- vehicle loans;
- employee volunteering;
- education and business partnerships;
- community grants schemes;

In 2001, a signatory's Environment and Community Affairs department sponsored over 240 organisations, charity projects and schools. They were also involved in over 50 local business partnerships and community groups including:

- Arts and Business Awards West Midlands and North West
- Ben
- Birmingham and Coventry Common Purpose
- NSPCC
- Women's Engineering Society
- Young Enterprise

A signatory established a volunteering scheme for graduate trainees. Every graduate trainee is expected to participate in a community project, as part of the Graduate Challenge Programme. Developed with the help of Business in the Community the main focus of the challenge is on helping young people. Graduate trainees are also encouraged to join the Prince's Trust Volunteer Scheme, as part of their Management Development Programme. As part of a 20-week course, the graduates spend a day a week working on projects such as organising holidays for young disabled people, or helping at a school for children with learning difficulties.

One signatory has paid particular attention to building and maintaining good relationships with local people and business. To achieve this, the company established a 'Community Liaison Committee'. The function of the committee is for site neighbours to meet regularly with the company's senior management to exchange information and discuss issues. The group includes representatives from police, fire brigade, ambulance and planning authority as well as county councillors, local government officials, and local parish councillors from the surrounding towns.

One signatory undertook a large variety of projects for each manufacturing plant. Below are listed examples of initiatives for a particular plant: competition on the environment involving 16 local schools; arrangements made for children from local schools to take part in banner shaking events at London teams Champions League matches; organised football matches for under 11 year olds; organised free sports coaching for girls from Dagenham, Redbridge and Havering; supported a holiday for local disabled children. In partnership with Thames Gateway organised for 80 girls and 130 boys aged between six and 16 years to participate in a football programme over four days with high-quality coaching provided by West Ham United, Leyton Orient, Millwall and Charlton Athletic. Two vehicles supplied to Epping Forest College; training of 16 year olds through school projects and vocational training from NVQ level one to three for 16 to 18 year olds; supported a programme to reduce truancy at Eastbury School.

## 9.5 Responsible Product Use

Motor vehicles have made some important contributions to society. The car is a primary enabler of personal mobility, which many people regard as an essential personal right. However, the industry recognises that there are limits to its use, and that alternative forms of mobility, or indeed alternative solutions to the need for mobility itself, can contribute to a more sustainable future.

Most of the environmental impact of vehicles comes about during their working life, rather than during manufacture and disposal. Estimates suggest that vehicle use represents 80-90 per cent of overall impact and the manufacture and disposal just 10-20 per cent. For this reason, the industry is continuously developing new vehicles that provide reduced levels of climate changing and pollutant emissions along with increasing levels of vehicle safety.

But it is equally important that motorists are encouraged to purchase the cleanest models available and to use these responsibly – driving carefully and avoiding unnecessary journeys.

## Product Labelling

The Passenger Car Regulations came into force in November 2001 and implement EU Directive 1999/94/EC. The directive aims to give consumers more information about the fuel economy and CO<sub>2</sub> emission characteristics of new cars. The label was introduced by UK manufacturers on a voluntary basis in March 2000, about one and a half years before the legislation came into force.

## Signatories Initiatives

**COMPANY TRAVEL PLANS** Company travel plans have not been widely adopted by signatories. Four out of eighteen have reported to have such a scheme formally implemented within the company. For example, one particular signatory did set up a Travel Plan Steering Group in 2001 to develop such a Travel Plan to cover all West Midlands sites. The aim is to improve the travel pattern of employees and set an example to other employers in the region. Schemes encompass:

- travel patterns of employees to and from their place of work;
- travel patterns between sites in the West Midlands;
- business travel within the UK (excluding air travel).

Establishing such a plan requires the provision of a wide range of incentives that make more sustainable forms of travel more attractive to employees. It is generally recognised that alternative forms of transport and car sharing will not suit everyone all the time, as travel needs vary from day to day and according to personal commitments.

Schemes need to consider reducing professional travel needs (e.g. meetings) by providing video conferencing facilities across sites, intranet, ability for employees to work remotely (e.g. from home), etc.

**RESPONSIBLE CAR USE SCHEMES** Eleven out of eighteen signatories have undertaken a variety of responsible car use initiatives throughout 2002. These include:

- car clubs/car sharing initiatives and policies;
- development of responsible offroad drivers guide;
- eco-driving programme;
- development of cycling facilities;
- internal driver training and RAC-sponsored driving skills training;
- arrangements with regional transport operators;
- development of 'greener' driving tip brochure.









## Comments

Every effort has been made to ensure that the content of this report was correct at the time of going to press. We hope that you have found the information in this year's publication useful and informative.

SMMT encourages the widest participation and is interested to hear from you on any aspect of this report. Should you wish to comment or be involved in the future development of the sustainability report, please contact us at [sustainability@smmt.co.uk](mailto:sustainability@smmt.co.uk). This report is also available as a downloadable PDF from our website: [www.smmt.co.uk/sustainability](http://www.smmt.co.uk/sustainability).

## Sustainability Advisors

EMAG Ltd

## Designed and Produced by

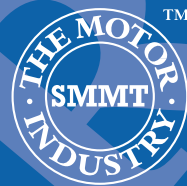
BSC Print Ltd

## Published by

The Society of Motor Manufacturers and Traders Ltd,  
October 2002

## Paper

This report was printed on 100% recycled paper certified with the Blue Angel seal of environmental quality. By-products from the pulp and paper making processes are used for producing compost and fertilisers, for cement making and for heat energy conversion.



SMMT and the SMMT logo are registered trademarks of  
SMMT Ltd

© All rights reserved 2002





100 YEARS

*Meeting the  
Challenge*

-  
*Managing  
Change*

1902-2002

